End Semester Examination, Dec. 2013
BBA (GEN) / BBA (BANKING) – First Semester
BUSINESS ORGANIZATION (bba-1001)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following:
   a) _______ and _______ are the types of economic activities.
   b) The systems approach to management can be diagrammatically represented as _______.
   c) Give any two point of difference between Private Ltd. and Public Ltd. Company.
   d) State any two functions of entrepreneurs.
   e) State any two merits of Joint Hindu family Business.
   f) FICCI stands for _______.
   g) Write down the full form of SEBI.
   h) Full form of CSR is _______.
   i) State any one objective of CII _______.
   j) _______ and _______ are the forms of business organization.

UNIT-I

Q.2 a) Discuss briefly the objectives of business. Should profit be the main objectives? 10
    b) Differentiate between industry, commerce and trade.

Q.3 Define ‘Business system’ and ‘Business environment’. Discuss the interaction between business system and its environment. 15

UNIT-II

Q.4 a) Define sole proprietorship and discuss its merits and demerits.
    b) Bring out the benefits and limitations of MNCs.

Q.5 a) What are the main features of a partnership type of business organization? Explain the rights and responsibilities of a partner.
    b) Explain the various types of a co-operative society.

UNIT-III

Q.6 a) What is meant by feasibility report? Explain the components and benefits of feasibility report.
    b) Why is a business plan necessary? Explain its main contents.

Q.7 Explain the various factors which you would consider while selecting a suitable form of a business organization. 15

UNIT-IV

Q.8 a) What do you mean by stock exchange? Discuss its functions.
    b) Discuss the objectives of SEBI.

Q.9 a) What are business combinations? Explain the main causes of such combinations.
    b) What is Chamber of Commerce? Explain the objectives and functions of FICCI.
End Semester Examination, Dec. 2013
BBA (GEN) / BBA (BANKING) – First Semester
BUSINESS MATHEMATICS (bba-1002)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 a) Find symmetric difference of the sets \( A = \{1, 2, 3\} \) and \( B = \{2, 3, 4, 5\} \).
b) Taking \( A = \{1, 2, 3\} \) and \( B = \{a, b\} \), show that \( A \times B \neq B \times A \).
c) The arithmetic mean and geometric mean between two number a and b are respectively 20 and 16. Find the numbers.
d) Given \( \log_{10}3 = 0.4771 \) and \( \log_{10}2 = 0.3010 \), find \( \log_{2}3 \).
e) Show that:
\[
\sum_{cyc} c_{1} = \sum_{cyc} c_{2} + \sum_{cyc} c_{3}
\]
f) If \( P \) is the principle and \( r\% \) is rate of compound interest per year, write down the formula for finding compound interest at the end of \( n \) years.
g) Let \( A \) and \( B \) be two square matrices of the same order. Which of the following is not true?
i) \( A + B = B + A \)
ii) \( (AB)^{-1} = B^{-1}A^{-1} \)
iii) If \( iB = 0 \), then \( A = 0 \) or \( B = 0 \)
iv) \( (AB)^T = B^{-1}A^{-1} \)
h) Define determinant of a square matrix of order \( n \).
i) Show that elements along the diagonal of a skew-symmetric matrix are all zero.
j) Differentiate \( \frac{x}{\sin x} \) with respect to \( x \).

1 1/2 x 10

UNIT-I

Q.2 a) Define Power set of a given set \( A \). If \( A \) has \( n \) elements, prove that its power set contains \( 2^n \) elements.
b) State addition principle for finite sets. A software company requires 60 engineers to perform Java programming jobs and 35 engineers to perform C++ programming jobs. Out of this requirement, 15 are expected to perform both types of jobs. How many engineers have to be appointed for the purpose?

Q.3 a) If \( A \) and \( B \) are two sets, show that \( A \setminus B = B \setminus A^c \).
b) Let \( x = \{x \in z : 100 \leq x \leq 999\} \) be a set and let \( A_i \) be the set of numbers in \( x \) whose \( i \)th digit is \( i \). Find the conditionality of the set \( A_1 \cup A_2 \cup A_3 \).
c) If \( A = \{1, 2, 3\}, B = \{2, 3, 4\}, C = \{1, 3, 4\} \) and \( D = \{2, 4, 5\} \), show that 
\[
(A \times B) \cap (C \times D) = (A \cap C) \times (B \cap D).
\]

UNIT-II

Q.4 a) If three numbers are in G.P., show that their logarithms are in A.P.
b) If \( x = \log_{10}a, y = \log_{10}2a, z = \log_{10}3a \), show that \( x + y + z = 2y \).
c) Using algorithm, evaluate:
\[
\frac{(3.142)^3 \times (0.078)^{1/3}}{(0.005)^{1/4}}
\]

P. T. O.
Q.5  
(a) Find the sum of all natural numbers between 200 and 400, which are divisible by 7.  
(b) Sum the series:  
\[0.3 + 0.33 + 0.333 + \ldots \text{ to } n \text{ terms.}\]

**UNIT-III**

Q.6  
(a) For all integers \( n \geq 2 \), show that \( np_1 + np_2 = n^2 \).  
(b) Determine the number of four-digit decimal numbers if 0 is not the leading digit in any of the four-digit number and repetition of digits is not allowed.  
(c) How many five person committee constituted from a group of 6 men and 5 women consists of at most one man.

Q.7  
(a) Find the compound interest on a sum of Rs.50,000 at the rate of 8% per annum for \( 1 \frac{1}{2} \) years when the interest is reckoned quarterly.  
(b) Divide Rs.2,522 into three parts such that their amount at 5% per annum compound interest in 4, 5 and 6 years respectively may all be equal.

**UNIT-IV**

Q.8  
(a) Find inverse of the matrix:  
\[
A = \begin{bmatrix}
1 & 3 & 3 \\
1 & 4 & 3 \\
1 & 3 & 4 
\end{bmatrix}
\]
(b) Using Cramer's rule or matrix method, solve the following system of linear equations:  
\[
\begin{align*}
3x + y + 2z &= 3 \\
2x - 3y - z &= -3 \\
x + 2y + z &= 4 
\end{align*}
\]

Q.9  
(a) If \( x\sqrt{1+y} + y\sqrt{1+x} = 0 \), show that \( (1+x)^2 \frac{dy}{dx} + 1 = 0 \).  
(b) Find the absolute maximum or minimum of the function \( f(x) = 1 + \sin 2x \).
End Semester Examination, Dec. 2013  
BBA (GEN) / BBA (BANKING) – First Semester  
FINANCIAL ACCOUNTING (bba-1003)  

Time: 3 hrs  
Max Marks: 75  
No. of pages: 3  

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.  
Q.1 is compulsory. All questions carry equal marks.

Q.1  
a) Fill in the blanks:  
i) Assets = __________________ + __________________.  
ii) Depreciation is ________________ in the value of ________________.  
iii) __________________ is the systematic record of business transactions. 1X5  
b) State whether the following statements are true or false:  
i) In a ledger, transactions are recorded in a chronological order.  
ii) Rules for recording a transaction in real account is 'debit the receiver and credit the giver'.  
iii) Cash discount is deducted from the invoice.  
iv) Cash book is a journal as well as a ledger.  
v) In purchase book, record only credit purchases. 1X5  
c) Classify the following accounts into personal, real, and nominal accounts:  
i) Machinery Accounts  
ii) Capital Accounts  
iii) Insurance  
v) Outstanding salary  
vi) Debtors 1X5

UNIT-I

Q.2  
What do you mean by the term accounting concepts and conventions? How these are important? Discuss any three concepts and conventions in brief. 15

Q.3  
a) Discuss different types of accounting. 8  
b) Give accounting equation for the following transactions:  

<table>
<thead>
<tr>
<th></th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td>50,000/-</td>
</tr>
<tr>
<td>ii)</td>
<td>10,000/-</td>
</tr>
<tr>
<td>iii)</td>
<td>5,000/-</td>
</tr>
<tr>
<td>iv)</td>
<td>1,000/-</td>
</tr>
<tr>
<td>v)</td>
<td>4,000/-</td>
</tr>
<tr>
<td>vi)</td>
<td>8,000/-</td>
</tr>
<tr>
<td>vii)</td>
<td>5,000/-</td>
</tr>
</tbody>
</table>

UNIT-II

Q.4  
a) Enter the following transactions in cash book with cash and bank columns:

<table>
<thead>
<tr>
<th>2012</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 1</td>
<td>20,000</td>
</tr>
<tr>
<td>Jan 4</td>
<td>13,200</td>
</tr>
<tr>
<td>Jan 5</td>
<td>2,500</td>
</tr>
<tr>
<td>Jan 6</td>
<td>7,500</td>
</tr>
<tr>
<td>Jan 7</td>
<td>5,000</td>
</tr>
<tr>
<td>Jan 8</td>
<td>4,200</td>
</tr>
<tr>
<td>Jan 9</td>
<td>1,000</td>
</tr>
<tr>
<td>Jan 15</td>
<td>5,000</td>
</tr>
<tr>
<td>Jan 20</td>
<td>120</td>
</tr>
<tr>
<td>Jan 30</td>
<td>2,000</td>
</tr>
</tbody>
</table>

P.T.O.
Q.5 a) Rectify the following errors assuming that a suspense account was opened. Ascertain the difference in trial balance.
   i) Credit sales to 'A' Rs.7,000 were posted to the credit side of his account.
   ii) Credit purchases from 'B' Rs.9,000 were posted to the debit of his account as Rs.6,000.
   iii) Goods returned to 'C' Rs.4,000 were posted to the credit of her account.
   iv) Goods returned from 'D' Rs. 1,000 were posted to the debit of her account as Rs.2,000.
   v) Cash sales Rs.2,000 were posted to the debit of sales account as Rs.5,000.

b) Explain the errors not disclosed by trial balance.

UNIT-III

Q.6 The following balances appear in the books of 'X' Ltd. as on 1st April 2010:

<table>
<thead>
<tr>
<th>Account</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machinery account</td>
<td>5,00,000/-</td>
</tr>
<tr>
<td>Provision for depreciation</td>
<td>2,25,000/-</td>
</tr>
</tbody>
</table>

On 1st October 2010, a machinery which was purchased on 1st July 1998 for Rs. 1,00,000 was sold for Rs. 42,000 and on the same date a new machinery was purchased for Rs. 2,00,000. Depreciation charged 10% p.a. on fixed installment method. Prepare the machinery account and provision for depreciation account for the year 2010-11.

Q.7 a) Prepare a bank reconciliation statement from the following statement:

<table>
<thead>
<tr>
<th>Description</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favourable balance of cash book</td>
<td>25,000/-</td>
</tr>
<tr>
<td>Cheque deposited into bank but not yet cleared</td>
<td>2,000/-</td>
</tr>
<tr>
<td>Bank charges</td>
<td>200/-</td>
</tr>
<tr>
<td>Cheque issued but not deposited into bank</td>
<td>1,000/-</td>
</tr>
<tr>
<td>Interest credited by bank</td>
<td>100/-</td>
</tr>
<tr>
<td>Cheque dishonored</td>
<td>500/-</td>
</tr>
</tbody>
</table>

b) Write the objective of bank reconciliation statement.

UNIT-IV

Q.8 Differentiate between Receipt and Payment Account and Income and Expenditure Account. Why and how Income and Expenditure Account are prepared?

Q.9 Prepare final account for the year ended 31st Dec 2012 from the following balances:

<table>
<thead>
<tr>
<th>Account</th>
<th>Dr. (Rs.)</th>
<th>Cr. (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Cash and bank overdraft</td>
<td>1,500</td>
<td>2,000</td>
</tr>
<tr>
<td>Purchase and sales</td>
<td>12,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Returns</td>
<td>1,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Establishment expenses</td>
<td>2,200</td>
<td></td>
</tr>
<tr>
<td>Taxes and insurance</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Bad debts and bad-debt provision</td>
<td>500</td>
<td>700</td>
</tr>
<tr>
<td>Debtors and Creditors</td>
<td>5,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Commission</td>
<td></td>
<td>500</td>
</tr>
<tr>
<td>Deposits</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>Opening Stock</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Drawings</td>
<td>1,400</td>
<td></td>
</tr>
<tr>
<td>Furniture</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>B/R and B/P</td>
<td>3,000</td>
<td>2,500</td>
</tr>
</tbody>
</table>
Adjustments:

i) Salaries Rs.100 and Taxes Rs.200 are outstanding but insurance Rs.50 is prepaid.

ii) Commission Rs.100 is received in advance.

iii) Interest Rs 210 is to be received on deposits and interest on bank overdraft Rs 300 is to paid.

iv) Depreciate furniture by 10%.

v) Bad debts provision is to be maintained at Rs 1,000 on debtors.

vi) Stock on 31st Dec. 2012 was valued at Rs 4,500.
End Semester Examination, Dec. 2013
BBA (GEN) / BBA (Banking) – First Semester
COMPUTER FUNDAMENTALS (bba-1004)

Time: 3 hrs
Max Marks: 50
No. of pages: 2
Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1
a) The fifth generation computers uses _______ for circuitry.
b) _______ and _______ are the main memory.
c) Floppy disk comes in two basic sizes _______ inch and _______ inch.
d) Resolution of printer is measured in _______.
e) An application where MICR is commonly used is _______?
f) For binary subtraction we use _______ method.
g) _______ is command based operating system.
h) EBCDIC is the abbreviation of _______ code.
i) 1 terabyte (TB) = _______ GB = _______ KB.
j) _______ memory chip is used for main memory. 1x10

UNIT-I

Q.2 Compare in detail the five generations of computers based on the
a) Hardware.
b) Software.
c) Computing characteristics.
d) Physical appearance.
e) Their applications.
Also give at least one example of each generation of computer. 2x5

Q.3
a) Give two examples of microcomputers.
b) Give two examples of super computers.
c) Give two examples of fourth generation computers.
d) Name two components of a digital computer.
e) List two areas where computers are used? 2x5

UNIT-II

Q.4 How will you perform addition and subtraction of binary number? Discuss with the help of suitable examples. 10

Q.5
a) Convert the following binary into hexadecimal:
i) 110000111111
   ii) 1100110011
b) Convert the following octal into binary:
i) 25
   ii) 267
c) Convert the following hexadecimal into binary:
i) A1
   ii) AAA
d) Convert the following binary into octal:
i) 110011
   ii) 1010101
e) Convert the following octal into hexadecimal:
i) 71
   ii) 150 2x5

P. T. O.
UNIT-III

Q.6   a) What are the advantage of an inkjet printer in comparison of a dot matrix printer?  
      b) Discuss the working of following input devices:  
          i) Mouse                          ii) Scanner

Q.7   Write short notes on:  
      a) Objective of operating system.  
      b) Types of operating system.  
      c) Functions of operating system.  
      d) Virtual memory.

UNIT-IV

Q.8   Explain briefly the use of computers in the following areas:  
      a) Education.  
      b) Advertising.  
      c) Government.

Q.9   Discuss desktop publishing system in detail.
End Semester Examination, Dec. 2013
BBA (GEN)/ BBA (BANKING) – First Semester
BUSINESS COMMUNICATION (bba-1005)

Time: 3 hrs  Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1  a) Fill in the blanks:
    i) The science of maintaining space between the speaker and the listener is known as _________.
    ii) ________ and ________ are among the fastest types of reading.
    iii) Reaction or response to any type of communication is called _________.
    iv) Another name for gossip is _________.
    v) The ability to recall or grasp the information heard is called _________.
    vi) A list of the candidates’ qualification and experience to be produced before an interview is called _________.
    vii) Body language is also known as _________.
    viii) Two merits of written communication are _________.

b) Define the following in one or two sentences:
   i) Empathetic listening
   ii) Perceptual barriers
   iii) Intimate band
   iv) Reading efficiency
   v) Decoding

   UNIT-I

Q.2  What do you understand by ‘communication’? Highlight the role played by communication skills in making a business successful.  15

Q.3  As the manager of a multinational company, discuss the communication functions which you need to use in your everyday working? Also define and explain the different directions in which communication flows?  15

   UNIT-II

Q.4  “Body language plays a significant role in assessing the personality of an individual”. Explain the above statement by highlighting the different components of body language.  15

Q.5  Write a speech for a farewell function of your boss, who is leaving the organization. Highlight his contribution to the organization.  15

   UNIT-III

Q.6  Write short notes on the following:
   a) Claim letters
   b) Minutes of a meeting
   c) Memo

   UNIT-IV

Q.7  Write a circular to all the employees of your organization calling them for an ‘emergency meeting’ to discuss the dipping sales of the company. Design an agenda of the points to be discussed in the meeting (to be attached with circular).  15

Q.8  Design a brochure of your “college festival” to be organized in Feb, 2014. Give an attractive name to the festival.  15

Q.9  Discuss the points to be kept in mind while writing a business report. Highlight the 5 Ws and 1 H and their importance to write a highly focused report.  15
Q.1 Answer the following questions in one or two sentence:
   a) Define producer’s equilibrium.
   b) What is demand?
   c) Explain law of supply.
   d) Show the diagram of perfectly elastic demand.
   e) Define the term Monopoly Power.
   
   Fill in the blanks:
   f) ___________ is the father of modern economics.
   g) In micro economics, we study ___________ units.
   h) In ___________ goods, demand curve sloping upward.
   i) $E_d=0$ is a situation of ___________ demand.
   j) ___________ is the power of goods to satisfy human wants.

**UNIT-I**

Q.2 Define elasticity of supply. How is it measured? Explain the factors which influence the elasticity of supply.

Q.3 a) Discuss briefly the subject matter of economics.
   b) Explain the importance of price elasticity of demand.

**UNIT-II**

Q.4 Explain the equilibrium condition of a firm that aims at output maximisation. What are the main characteristics of ISO-grants curve?

Q.5 Explain the concept of consumer equilibrium with the help of IC analysis. Discuss the properties of indifference curve.

**UNIT-III**

Q.6 Explain the law of variable proportions. How is it important for business decisions?

Q.7 Distinguish between internal and external economics of scale. Discuss the relation of these economics with the law of increasing returns to a scale.

**UNIT-IV**

Q.8 Discuss the marginal productivity theory of distribution. How factor price is determined under imperfect competition?

Q.9 Define various types of markets. How monopoly market is different from monopolistic and perfect competitive market?
End Semester Examination, Dec. 2013
BBA (GEN)/ BBA (BANKING) – Second Semester
PRINCIPLES OF MANAGEMENT (bba-2001)

Time: 3 hrs  Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following question:
   a) What is management?
   b) Name the two types of modern approaches of management.
   c) The ______ model is a framework for analyzing organization and their effectiveness.
   d) There are four hard S in the 7’s Model. (True / False)
   e) Give any one difference between administration and management.
   f) ______ is a process of selection from a set of alternative courses of action.
   g) Maslow’s need hierarchy theory is the theory of motivation. (True / False)
   h) If you are a highly skilled team leader, it does not matter who is in your team? (True / False)
   i) Write any two barriers of communication.
   j) Leadership is the willingness of people to follow that make a person a ______.
   k) What do you mean by co-ordination?
   l) What does PERT stand for?
   m) Define business ethics.
   n) ______ refers to the managerial function of employing and developing HR.
   o) What are the two sources of recruitment? 1x15

UNIT-I

Q.2 Discuss in detail the basic functions of management. 15

Q.3 Briefly describe the evolution of management through from early days to modern times. 15

UNIT-II

Q.4 Is planning a primary function of management? Explain the prerequisites of a good plan. 15

Q.5 Write notes on the following:
   a) Management by objectives. 7
   b) Goal setting. 8

UNIT-III

Q.6 Define a formal and an informal organization. Discuss the managerial implications of informal organization. 15

Q.7 What is centralization? How does it differ from decentralization? 15

UNIT-IV

Q.8 Define controlling. Describe the prerequisites of effective control system. 15

Q.9 Write notes on:
   a) Social audit. 7
   b) Resistance to control. 8
End Semester Examination, Dec. 2013  
BBA (GEN) / BBA (BANKING) – Second Semester  
MACRO ECONOMIC ANALYSIS AND POLICY (bba-2002)  

Time: 3 hrs  
Max Marks: 75  
No. of pages: 1  

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.  
Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer in brief:  

a) Define monetary flow of income.  
b) Explain any two functional areas of macro economics.  
c) Write any two examples of stock and flow.  
d) Discuss personal disposable income.  
e) Explain the term: investment multiplier.  
f) Write any two differences in public and private debts.  
g) Give any two examples of direct taxes.  
h) Macro economics is the study of economic problems as a ________  

UNIT-I

Q.2 Define the term: macro economics. How is it different from micro economics? Explain the importance of macro-analysis of an economy.  

Q.3 Define national income. What are the different methods of measuring national income in India? What are the difficulties in its measurement?  

UNIT-II

Q.4 Distinguish between:  

a) Secular and cyclical consumption function.  
b) Relative and permanent income hypothesis.  

Q.5 Explain the Keynes’s Psychological law of consumption. Discuss various factors which determine the consumption function.  

UNIT-III

Q.6 Discuss the tools, objectives and limitations of fiscal policy in the developing countries.  

Q.7 Write short notes on:  

a) Nature of public debts.  
b) Merits and demerits of direct and indirect taxes.  

UNIT-IV

Q.8 What is meant by monetary policy? Explain the objective and role of monetary policy in India. How far has RBI achieved these objectives?  

Q.9 Write short notes on:  

a) Process of credit creation.  
b) Money multiplier.
End Semester Examination, Dec. 2013
BBA (GEN) / BBA (BANKING) – Second Semester
COMPANY ACCOUNTS (bba-2003)

Time: 3 hrs  Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1  a) Answer the following in brief:
   i) Define the term: Goodwill.
   ii) What is a debenture?
   iii) Define firm underwriting.
   iv) Write any two duties of an underwriter.
   v) Enlist various types of shares. 2x5

b) Fill in the blank:
   i) A debenture of Rs 20,000 are issued at par but payable at a premium of 5%. The premium payable will be debited to _________.
   ii) Capital reserve is created out of _________.
   iii) The balance of forfeited shares account is transferred to _________.
   iv) The liability of every share holder of a company is _________.
   v) A debenture holder gets ________ from the Company. 1x5

UNIT-I

Q.2  Write short notes on:
   i) Redemption of preference shares. 8
   ii) Method of alteration of share capital. 7

Q.3  Z Ltd. issued 6,00,000 Equity shares of Rs. 10 each at a discount of 20% payable as to Rs. 2.50 on application, Rs. 2.50 per share on allotment and the balance on the first and final call to be made after allotment. The issue was fully subscribed for.
   Call on 800 shares was not received. These shares were forfeited. Half of the shares were reissued as fully paid up @ Rs. 8.00 per share. Pass journal entries for the above mentioned transactions and prepare balance sheet. 15

UNIT-II

Q.4  Explain the sources and various methods for the redemption of debentures with suitable illustrations. 15

Q.5  N Ltd. issued 40,000 equity shares of Rs. 10 each at 5% premium. The issue was underwritten by 'A' 75% and 'B' 25%. The public applied for 32,000 shares which included marked application of 'A' 15,000 shares and 'B' 3,000 Shares. It was agreed that underwriters be paid commission at 2% on the issue prices. Determine the liability of 'A' and 'B' and give necessary journal entries in the book of company. 15

UNIT-III

Q.6  Write short notes on:
   a) Provisions regarding preferential creditor. 7½x2
   b) Discuss the Accounting standard 18 (AS-18). P. T. O.
Q.7 Taking imaginary figures, prepared in a summarized form the final accounts of a company as per Companies Act, 1956.

UNIT-IV

Q.8 Discuss the methods which are used for goodwill valuation. Explain the capitalization method with the help of a suitable example.

Q.9 The following is the Balance sheet of X Ltd as on 30th June 2005:

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Rs.</th>
<th>Assets</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Capital 20,000 shares @ 10 each</td>
<td>2,00,000</td>
<td>Goodwill</td>
<td>40,000</td>
</tr>
<tr>
<td>Reserve</td>
<td>1,45,000</td>
<td>Land &amp; Building</td>
<td>2,10,000</td>
</tr>
<tr>
<td>Taxation provision</td>
<td>12,000</td>
<td>P&amp;M</td>
<td>70,000</td>
</tr>
<tr>
<td>Workmen Saving a/c</td>
<td>28,000</td>
<td>Investment (M.V.30,000)</td>
<td>20,000</td>
</tr>
<tr>
<td>Employee's Provident Fund</td>
<td>15,000</td>
<td>Stock</td>
<td>60,000</td>
</tr>
<tr>
<td>Profit and Loss a/c</td>
<td>32,000</td>
<td>Debtors</td>
<td>80,000</td>
</tr>
<tr>
<td>Creditors</td>
<td>86,000</td>
<td>Cash at bank</td>
<td>30,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preliminary Expenses</td>
<td>8,000</td>
</tr>
<tr>
<td></td>
<td>5,18,000</td>
<td></td>
<td>5,18,000</td>
</tr>
</tbody>
</table>

Land and building have been valued at Rs. 3,00,000/- and plant and machinery (P&M) is Rs. 60,000/-. Rs. 5,000/- of the debtors are bad. Goodwill may be taken at Rs. 70,000/-. Find out the value of shares by Net Assets Method.
End Semester Examination, Dec. 2013  
BBA (GEN) / BBA (BANKING) – Second Semester  
INTRODUCTION TO MS OFFICE AND MULTIMEDIA (bba-2004)

Time: 3 hrs  
Max Marks: 50

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.  
Q.1 IS compulsory. All questions carry equal marks.

Q.1  
a) Which of the following is the Word Processor in MS Office?  
i) Word Star.  
ii) Word Pad.  
iii) Word.  
iv) Word Perfect.  
b) What is the gutter margin?  
i) Margin that is added to the left margin when printing.  
ii) Margin that is added to the right margin when printing.  
iii) Margin that is added to the binding side of page when printing.  
iv) Margin that is added to the outside of the page when printing.  
c) Which of the following is not a font style?  
i) Bold.  
ii) Italic.  
iii) Regular. iv) Superscript.  
d) Which area in an Excel Windows allows entering values and formulas?  
i) Title Bar.  
ii) Menu Bar.  
e) An Excel Workbook is a collection of______.  
i) Workbooks.  
ii) Charts.  
iii) Workbooks.  
iv) Worksheet and charts.  
f) The boxes that are displayed to indicate the text, pictures or objects are placed in it is called______.  
i) Placeholder.  
ii) Auto Text. iii) Text Box.  
iv) Word Art.  
g) Power Point can display data from which of the following adds-in software of MS Office?  
i) Equation Editor  
ii) Organization Chart  
iii) Photo Album  
v) All of these  
h) To Insert new slide in the current Presentation, we can choose:  
i) CTRL+M  
ii) CTRL+N  
iii) CTRL+O  
v) CTRL+F  
i) AIFF stands for.  
i) Audio Interchange file format.  
ii) Audio interchange file folder.  
iii) ASCII Interchange file format. iv) None of these.  
j) Concatenation of text can be done using.  
i) Apostrophe (')  
ii) Exclamation (!)  
iii) Hash (#)  
v) Ampersand (&)  

UNIT-I

Q.2  
a) Write steps in MS Word to perform the following:  
i) Formatting a selected text and paragraph in a document.  
ii) Insert a break in a document and number it.  
b) What is a Word Processor? Explain their features and advantages.

P. T. O.
Q.3 Create a list of ten best friends. Create a thank you letter. Use mail merge feature of MS Word to create a thank you letter for each of your friend from the above files.

UNIT-II

Q.4 What is MS-Power Point? Explain the following feature of MS Power Point: Slides, Animation and Organization charts.

Q.5 Write a step-by step procedure to create a simple presentation using the PowerPoint package whose slides include a title page (slide), a figure, bulleted text, a bar graph and an organization chart.

UNIT-III

Q.6 a) Write the use of macro in MS Excel and explain the working of goalseek.
    b) Explain the following feature of MS Excel: Auto Filter, functions and formulas.

Q.7 a) What is a graph? Describe various types of graphs.
    b) Specify the various steps to design a graph for result analysis of BBA.

UNIT-IV

Q.8 What do you understand by Multimedia? What are the important Multimedia components? Discuss the role of each component.

Q.9 Explain Multimedia application in the following areas:
    a) Education
    b) Medical
    c) Business
    d) Manufacturing
End Semester Examination, Dec. 2013
BBA (GEN) / BBA (BANKING) – Second Semester
ORGANIZATIONAL BEHAVIOR (bba-2005)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. 
Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer briefly:
   a) Define organizational behavior. 3
   b) Describe some of the inherited characteristics of behavior. 2
   c) What do you mean by contingency approach to management? 2
   d) What are the specific traits that constitute the concept of personality? 2
   e) Differentiate between centralization and decentralization. 2
   f) Explain different types of teams operating in an organization. 2
   g) Differentiate between mechanistic and organic structures. 2

UNIT-I

Q.2 a) What is the importance of organizational behavior in an organization? 7½X2
     b) Discuss the elements of organizational behavior.

Q.3 Write in detail about Hawthorne studies. 15

UNIT-II

Q.4 Define the term: motivation. Discuss the need hierarchy theory of motivation 
   along with its implications for human behavior at work. 15

Q.5 a) Explain the importance of study of attitudes to the organization. 7½X2
     b) Describe how the basic perceptual process works.

UNIT-III

Q.6 a) Explain the concept of power, politics and conflicts. 7½X2
     b) What is the structural approach of conflict management?

Q.7 What do you mean by decision making? Explain the process of brainstorming for 
   making effective decisions. 15

UNIT-IV

Q.8 What do you understand by planned change? Why do people resist change in an 
   organizational setting? 15

Q.9 Write short notes on:
   a) Departmentation. 7½X2
   b) Characteristics of organizational culture.
End Semester Examination, Dec. 2013
BBA (GEN) / BBA (BANKING) – Second Semester
QUANTITATIVE ANALYSIS (bba-2006)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blanks using appropriate word(s):
   a) After collection and editing of data .......... is the grouping of related facts into different classes.
   b) A .......... chart is used to show the relative proportion of figure that go to make up single total.
   c) .................. is the measure of central tendency that is not affected by extreme values?
   d) ............. is the best tool to compare the stability of different variables.
   e) If two variables are not related, value of r is equal to ........
   f) The statistical tool which is used to predict the unknown value of a variable from known value of other variable is called ...............
   g) Two uses regression analysis for business manager are ...........
   h) One use of mode for business managers is ............... 2x7 1

UNIT-I

Q.2 Differentiate between classification and tabulation with the help of suitable examples. Create a table to represent the calculation of subject-wise internal assessment marks obtained in I and II semester. 15

Q.3 Given below is the distribution of marks obtained by students of BBA I semester. Represent this information using suitable diagram:

   Internal marks (25): 10 12 21 18 10 11 19 10
   External marks (75): 30 31 40 42 30 30 36 30

   15

UNIT-II

Q.4 Given below the distribution of marks obtained by students of BBA III semester. Calculate the Mean, Median and Mode marks.

   Marks: 20-30 30-40 40-50 50-60 60-70 70-80 80-90 90-100
   No. of students: 02 12 15 20 18 10 9 4

   15

Q.5 The scores of two batsmen A and B for 20 innings are tabulated below. Calculate the coefficient of variation. Which of the two may be regarded as the more consistent batsman?

   Score: 50 51 52 53 54 55 56 57
   No. of inning: A 1 0 0 4 3 6 3 3
   B 1 2 2 6 3 4 2 0

   15

P. T. O.
UNIT-II

Q.6 The data given below relate to the score obtained by 9 salesmen in an intelligence test and their weekly sales in lacs of rupees:

<table>
<thead>
<tr>
<th>Test Score</th>
<th>50</th>
<th>60</th>
<th>50</th>
<th>60</th>
<th>80</th>
<th>50</th>
<th>80</th>
<th>40</th>
<th>70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (Rs. lacs)</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>7</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

Obtain regression equation of sales on the intelligence test scores. If a salesman has obtained a score of 65, what would be his expected weekly sales? 15

Q.7 Obtained the correlation coefficient between x and y from the following pair of observed values:

<table>
<thead>
<tr>
<th>X</th>
<th>50</th>
<th>55</th>
<th>65</th>
<th>50</th>
<th>55</th>
<th>60</th>
<th>50</th>
<th>65</th>
<th>70</th>
<th>55</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>110</td>
<td>110</td>
<td>115</td>
<td>125</td>
<td>140</td>
<td>115</td>
<td>130</td>
<td>120</td>
<td>115</td>
<td>160</td>
</tr>
</tbody>
</table>

UNIT-IV

Q.8 a) Fit a straight line trend by the method of least squares to the following data:

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>80</td>
<td>90</td>
<td>92</td>
<td>83</td>
<td>84</td>
<td>99</td>
<td>92</td>
<td>104</td>
</tr>
</tbody>
</table>

Calculate the trend value of sales from 2005 to 2012 and forecast the sales for the year 2014. 10

b) Discuss the application of time series in business decisions. 5

Q.9 a) Discuss the use of index numbers in business. What precautions should be taken while constructing an index number? 5

b) Calculate Index numbers by i) Laspeyere's ii) Paasche's & iii) Fischer's Method:

<table>
<thead>
<tr>
<th>Commodity</th>
<th>q₀</th>
<th>q₁</th>
<th>p₀</th>
<th>p₁</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>562</td>
<td>632</td>
<td>170</td>
<td>172</td>
</tr>
<tr>
<td>B</td>
<td>535</td>
<td>756</td>
<td>192</td>
<td>170</td>
</tr>
<tr>
<td>C</td>
<td>639</td>
<td>926</td>
<td>185</td>
<td>175</td>
</tr>
<tr>
<td>D</td>
<td>128</td>
<td>255</td>
<td>187</td>
<td>190</td>
</tr>
<tr>
<td>E</td>
<td>542</td>
<td>632</td>
<td>185</td>
<td>180</td>
</tr>
<tr>
<td>F</td>
<td>217</td>
<td>314</td>
<td>150</td>
<td>170</td>
</tr>
</tbody>
</table>
End Semester Examination, Dec. 2013
BBA (GEN) / BBA (Banking) – Third Semester
COST AND MANAGEMENT ACCOUNTING (bba-3001)

Time: 3 hrs
Max Marks: 75

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 a) True or false:
   i) Marginal cost increases with increase in production.
   ii) Power cost is normally distributed on the basis of value of machinery.
   iii) Abnormal idle time wages are included in cost of production.
   iv) Contribution margin = Sales x P/V ratio. 1x4

b) Fill in the blanks:
   i) Actual cost is compared with ___________ to find deviations and evaluate performance.
   ii) The budgeting system designed to change in relation to level of activity actually attained is called ________.
   iii) Contribution is equal to fixed cost when a firm earns ________? 1x3

c) Write two or three sentences about:
   i) Semi-variable costs.
   ii) Time-keeping.
   iii) Prime-cost.
   iv) Variance analysis. 2x4

UNIT-I

Q.2 Distinguish between 'cost accounting' and 'management accounting'. What are the essentials of a good cost accounting system? 15

Q.3 Explain briefly:
   a) Explicit and implicit costs.
   b) Product cost and period costs.
   c) Controllable cost and uncontrollable costs. 15

UNIT-II

Q.4 What do you mean by 'labour turnover'? What are the costs associated with it? How would you treat these costs in cost accounting? 15

Q.5 Calculate machine hour rate on the basis of 13 week period which is equal to 3 calendar months using following particulars:

<table>
<thead>
<tr>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total working hours per week</td>
<td>48</td>
</tr>
<tr>
<td>Maintenance time included in above</td>
<td>2</td>
</tr>
<tr>
<td>Setting up time included in above</td>
<td>2</td>
</tr>
<tr>
<td>Operators wages p.m.</td>
<td>Rs.650/-</td>
</tr>
<tr>
<td>Supervisor salary (for 3 machines)</td>
<td>Rs.1500/-</td>
</tr>
<tr>
<td>Value of machine (depreciation@10%)</td>
<td>Rs.1,80,000/-</td>
</tr>
<tr>
<td>Repairs and maintenance (per annum)</td>
<td>Rs.16,000/-</td>
</tr>
<tr>
<td>Consumable stores per annum</td>
<td>Rs.30,000/-</td>
</tr>
<tr>
<td>Rent, rates and taxes</td>
<td>Rs.5,000/-</td>
</tr>
</tbody>
</table>

P. T. O.
Power is consumed @ 40 paisa per unit and 15 units per hour. Power is required only at time of production. The operation and supervisor are permanent and repairs, maintenance, consumable stores are variable.

**UNIT-III**

Q.6 A company is producing a product which is sold at Rs.50 per unit. Variable cost is Rs.35 per unit and fixed costs amount to Rs.12 lakhs per annum. You are required to calculate:
   a) P/V ratio and break-even sales.
   b) New break even sales if variable cost increase by Rs.3 per unit.
   c) Increase in sales required with original information to increase the profit by Rs. 2,00,000.

Q.7 a) Define marginal cost. What are the advantages of using marginal costing technique?
   b) Discuss in brief margin of safety.

**UNIT-IV**

Q.8 The following information is available for the month of October, 2013.
   Material purchased 20,000 units costing Rs.88,000/-
   Material consumed 19,000 units.
   Unit produced 1800 units.
   Standard direct material rate is Rs.4/- per unit and standard input is 10 units for production of 1 unit.
   You are required to calculate material variances.

Q.9 Define flexible budget. Bring out its importance as a budgeting technique. Also differentiate it from fixed budget.
End Semester Examination, Dec. 2013
BBA (GEN) / BBA (BANKING) – Third Semester
HUMAN RESOURCE MANAGEMENT (bba-3002)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following (in brief):
   a) Define human capital.
   b) Differentiate between job description and job specification.
   c) Explain the scope of human resource management.
   d) Differentiate between fringe benefits and incentives.
   e) What is succession planning?
   f) What is golden handshake?
   g) What is downsizing?

UNIT-I

Q.2 Discuss the role of human resource management in corporate strategic management.

UNIT-II

Q.3 Write short notes on:
   a) Human resource information system.
   b) The emerging challenges before HR managers in future.

Q.4 Discuss the various kinds of tests used for the selection of employees. What precautions should be taken while deciding on the kind of tests to be used as selection tools?

UNIT-III

Q.5 a) Discuss the concept and uses of reference check.
   b) Summarize the policy on promotions.

Q.6 Describe major sources for identifying training and development needs of an individual. Discuss various techniques of training and approaches for developing managers.

Q.7 Evaluate the importance of performance appraisal in an industrial organization. Critically discuss the various modern techniques of performance appraisal.

UNIT-IV

Q.8 a) What are the advantages of fair compensation system?
   b) Discuss the organization wide incentive plan.

Q.9 What are the obligations of an employer in respect of health and welfare of workers under the Factories Act, 1948?
End Semester Examination, Dec. 2013  
BBA (GEN) / BBA (BANKING) – Third Semester  
PRODUCTION MANAGEMENT (bba-3003)

Time: 3 hrs  
Max Marks: 75  
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.  
Q.1 is compulsory. All questions carry equal marks.

Q.1  Answer the following briefly:  
a) Write two important features of production management.  
b) State few material handling equipments used in the organization.  
c) Give two examples of batch production system.  
d) Define inspection.  
e) State any two factors affecting plant layout.  
State whether the followings are true or false.  
f) Product layout is also called as straight –line layout.  
g) Job order is a type of continuous production system.  
h) Locational break-even analysis is one of the methods of evaluating plant location.  
i) Process charts are useful for recording techniques used in method study.  
j) ABC analysis is one of the technique of inventory control.  

UNIT-I

Q.2  What is production management? Discuss the objectives and activities of production management.  

Q.3  a) Discuss the long-term and short-term decisions of production management.  
b) Bring out the difference between goods and services from POM viewpoint.  

UNIT-II

Q.4  Define production system. Differentiate between production to order and production to stock systems. Under what conditions production to stock system is more appropriate?  

Q.5  a) Discuss various factors affecting plant location decision if you want to establish a sugar manufacturing plant in Haryana.  
b) Evaluate the advantages and disadvantages of an urban site and a rural site.  

UNIT-III

Q.6  a) Explain the term PPC. Discuss the various elements of production planning and control (PPC).  
b) What do you mean by the term: work study? State its objectives.  

Q.7  Eight jobs go first over M₁ and then on M₂. The order of completion of jobs has no significance. The following table gives the machine times in minutes for eight jobs and two machines:

<table>
<thead>
<tr>
<th>Job No:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>M₁</td>
<td>10</td>
<td>8</td>
<td>12</td>
<td>9</td>
<td>7</td>
<td>13</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>M₂</td>
<td>6</td>
<td>10</td>
<td>7</td>
<td>15</td>
<td>10</td>
<td>8</td>
<td>16</td>
<td>12</td>
</tr>
</tbody>
</table>

Find the sequence of jobs that minimize the total elapsed time to complete the jobs. Also calculate the idle time on both the machines.  

UNIT-IV

Q.8  What are control charts? Discuss various control charts for variable and attributes.  

Q.9  Write notes on:  
a) EOQ model  
b) Types of maintenance  

7½x2
End Semester Examination, Dec. 2013
BBA (GEN) / BBA (Banking) – Third Semester
DATABASE MANAGEMENT SYSTEM (bba-3004)

Time: 3 hrs
Max Marks: 50
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1  a) Define information.
      b) Name the operators used in database language.
      c) Give names of any four clauses used in SQL.
      d) RMAN stands for _______.
      e) E-R diagram stands for _______.
      f) How many rules of Codd should be followed by a database?
      g) Give name of any two types of viruses.
      h) Define distributed database.
      i) What is an Instance?
      j) DML stands for _______.

UNIT-I

Q.2  a) What do you understand by a constraint? Give any four names of constraints with a proper example.
      b) Who is DBA? Explain its roles and responsibilities.

Q.3  What is structured query language? Explain atleast four languages which come under structured query language.

UNIT-II

Q.4  What do you understand by an E-R diagram? Explain an E-R diagram for human resource management system.

Q.5  What do you mean by data models? Explain all the data models in detail.

UNIT-III

Q.6  a) What is a Network firewall? Explain a firewall system in detail.
      b) What do you mean by backup of database? Explain its types and tools.

Q.7  Explain the following:
      a) Security issues in databases.
      b) Distributed databases.

UNIT-IV

Q.8  What is datamining? Explain emerging database technologies for day-to-day scenario.

Q.9  Write short notes on the following:
      a) Digital libraries.
      b) Internet database.
End Semester Examination, Dec. 2013
BBA (GEN) / BBA (Banking) – Third Semester
WORKSHOP ON ENVIRONMENTAL STUDIES (bba-3005)

Time: 3 hrs
Max Marks: 50
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following:
   a) Name one example of producers.
   b) Which day is celebrated as the ‘World Environment Day’?
   c) Name one source of soil pollution.
   d) Name the biotic component of an ecosystem.
   e) What is ‘ten-percent law’ of energy flow in the ecosystem?
   Expand the following:
   f) U-V radiations
   g) NGOs
   h) DDT
   i) CFC
   j) NO₂

   UNIT-I

   Q.2 a) Discuss the scope and importance of environmental studies.
   b) What are non-renewable resources? What method can be opted to control the over-utilization of these resources?

   Q.3 Write explanatory note on the following:
   a) Equitable use of resources for sustainable lifestyles.
   b) Need for public awareness about environment studies.

   UNIT-II

   Q.4 a) How is the food web better than a food chain?
   b) What is the structure of an ecosystem? Explain with examples.

   Q.5 a) Discuss the desert ecosystem.
   b) Why do the food chains have 3-4 trophic levels? Explain.

   UNIT-III

   Q.6 Write explanatory notes on:
   a) Wasteland reclamation
   b) Climate change

   Q.7 Explain the acid rain. Also describe the causes and effects of acid rain.

   UNIT-IV

   Q.8 What is meant by the term ‘Environmental Legislation’? Explain various issues involved in the enforcement of Environmental Legislation.

   Q.9 Enlist the main guidelines of the ‘Wildlife Protection Act’.
End Semester Examination, Dec. 2013
BBA (GEN) / BBA (Banking) – Third Semester
WORKSHOP ON PRESENTATION SKILLS (bba-3006)

Time: 3 hrs

Max Marks: 50
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Define the following in one or two sentences:
   a) Skills
   b) Open ended questions
   c) Brainstorming
   d) Role-play
   e) Closed questions
   f) Objective of a presentation
   g) Seminar
   h) Voice modulation
   i) Role of presenter
   j) Motivation

   UNIT-I

   Q.2 What do you understand by the term ‘presentation’? Discuss the process of preparing for a presentation. 10

   Q.3 How can a presentation be made effective? Discuss the dos and don'ts a presenter should follow so that his/her presentation is a success. 10

   UNIT-II

   Q.4 Highlight the points which need to be kept in mind while planning a presentation. 10

   Q.5 What do you understand by a lesson plan? Explain clearly with the help of an example. 10

   UNIT-III

   Q.6 Write short notes on:
      a) Fish bowl method of presentation
      b) Conference

   Q.7 "Presentation is an effective tool to motivate people". Discuss by drafting a motivational presentation. 10

   UNIT-IV

   Q.8 Give an inspiring presentation to your students so that they look upon you as a role-model. 10

   Q.9 "Sometimes difficult decisions can be taken after a presentation". Write a presentation which facilitates decision making? 10
End Semester Examination, Dec. 2013
BBA (GEN) – Fourth Semester
INDIAN BUSINESS ENVIRONMENT (bba-4001)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following briefly:
   a) Define business environment.
   b) Is, Indian economy a mixed economy?
   c) What does GATT stand for?
   d) Write the name of two committees of licensing system.
   e) Name three pillars of economic reforms.
   f) Define social audit.
   g) The scope of social responsibilities of business is very ______.
   h) The International Bank for Reconstruction and Development (IBRD) is popularly known as ______.
   i) Write three channels of globalization.
   j) Multinational corporation should respect ______ rights.
   k) Define public sector companies.
   l) BOP composed of how many sectors?
   m) Balance of Trade = ______-Import of Visible goods.
   n) Write full form of SEBI.
   o) The Head office of Stock Exchange is situated in ______. 1x15

UNIT-I

Q.2 Explain the various components of business environment with special reference to India. 15

Q.3 What do you understand by an economic system? Can Indian economy be called a mixed economy? 15

UNIT-II

Q.4 Write notes on the following:
   a) Critically examine the main features of Industrial Policy of 1991. 8
   b) Point out salient features of the new Industrial Licencing Policy of 1991. 7

Q.5 Define industrial sickness? Explain the internal and external causes of industrial sickness. 15

UNIT-III

Q.6 What do you understand by Balance of Payment? Give suggestions for improving the balance of payment position of India. 15

Q.7 What is a stock exchange? Discuss in detail the capital issues guidelines of SEBI. 15

UNIT-IV

Q.8 What is a Multinational Corporation? Write in detail the Code of Conduct and challenges before MNCs in India. 15

Q.9 Discuss the objects and functions of IMF (International Monetary Fund). How does it maintain stability to exchange rates? 15
End Semester Examination, Dec. 2013
BBA (GEN) – Fourth Semester
FINANCIAL MANAGEMENT (bba-4002)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blank:
   a) Investing Rs. 100 for 3 year @ 10% will amount to Rs._______.  
   b) Net working capital = _______ assets - _______ liabilities.  
   c) Earnings per share = _______ / _______.  
   d) Cost of preference share capital is _______ than cost of debt.  

State whether the statement are: True / False
   e) Financial management deals with two major decisions, namely investment and financing decision.  
   f) Share capital is the best source of internal finance.  
   g) To retain control over management, a firm would prefer use of more equity.  
   h) In case of independent investment projects, if the NPV of the project is zero, IRR is equal to cost of capital.  

UNIT-I

Q.2 Discuss the functions to be performed by a finance manager in any manufacturing firm.  

Q.3 Define wealth maximization as a decision criterion. How is it better than profit maximization?  

UNIT-II

Q.4 a) Explain the term: discount. How does it affect the process of capital budgeting? Explain with help of a suitable example.  
   b) Define Internal rate of return (IRR). How does it differ from average rate of return (ARR)?  

Q.5 As a finance manager, compare two competing projects that require an equal investment of Rs. 100000/- and are expected to generate net cash flows as under: (discount rate 10%)

<table>
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Which project should be chosen?  

UNIT-III

Q.6 Define the term: leverage. Explain the impact of financial leverages on the EPS of any firm?  

Q.7 Discuss in detail Modigliani and Miller (MM) theory of capital structure.  

UNIT-IV

Q.8 Explain dividend policy. Discuss various factors to be considered while determining the dividend policy.  

Q.9 a) You are operating a departmental store. How will you calculate the working capital employed in the business? Assume hypothetical figures.  
   b) Why do we need inventory control? Explain ABC techniques of inventory control with relative merit and demerits.
End Semester Examination, Dec. 2013
BBA (GEN) – Fourth Semester
MARKETING MANAGEMENT (bba-4003)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following:
a) Define marketing. 2
b) What are the steps in marketing research process? 2
c) State 4 Ps of marketing mix. 2
d) Design suitable distribution channel for:
   i) Fruits. 2
   ii) Furniture. 2
e) State different methods of promotion of a product. 2
f) State the elements of advertising. 2
g) Is market penetration one of the techniques of pricing a product? (True /False) 1
h) Is Packaging 5th P in marketing mix? (True /False) 1
i) Culture is not one of the determinants of consumer behavior. (True /False) 1

UNIT-I

Q.2 a) Discuss the points of difference between marketing and selling. 5
b) Discuss the controllable and uncontrollable factors affecting marketing environment. 10

Q.3 a) Discuss the functions and objectives of marketing. 6
b) Explain various concept of marketing in detail. 9

UNIT-II

Q.4 a) Explain the various factors which affect consumer behavior. 7
b) What are the major stages in consumer buying decision process? Explain. 8

Q.5 a) What are the basis for market segmentation? Discuss. 10
b) Suggest a suitable way to segment market for following products:
   i) TV 5
   ii) Washing machine

UNIT-III

Q.6 What do you understand by a product? Explain different pricing strategies used by the marketer to price a product. 15

Q.7 a) What is branding? Discuss different branding challenges. 8
b) Discuss the strategies used by the marketer during each stage of product life cycle. 7

UNIT-IV

Q.8 a) Name the various advertising media. Discuss their advantages and disadvantages. 8
b) What do you understand by retailing? Explain the various decisions and trends in retailing. 7

Q.9 What do you meant by sales promotion? Describe briefly various methods of sales promotion. 15
End Semester Examination, Dec. 2013
BBA (GEN) – Fourth Semester
BUSINESS RESEARCH METHODS (bba-4004)

Time: 3 hrs Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blank:
   a) ______ is very first step of any research process. 2
   b) ______ is a blue print like a map of a house required before its construction. 2
   c) ______ scales are designed to measure the qualitative variable. 1
   d) ______ data is more authentic than ______ data. 2

State whether statement are: True / False:
   e) C.R design is used in experimental design. 2
   f) Cluster sampling is one of the multi-stage sampling procedures. 2
   g) Hypothesis testing is an essential process before the data collected. 2
   h) Parametric tests are used when population follows any distribution and parameters are known. 2

UNIT-I

Q.2 Define research. Discuss its implications for business managers. 15

Q.3 a) "Identification and formulation of a problem is the perquisite for sound research”. Comment. 7
   b) Discuss the standard format of a research proposal. 8

UNIT-II

Q.4 a) What is research design? Discuss various types of research design. 7
   b) Explain the followings:
      i) Ordinal scale
      ii) Likert type of scale 4x2

Q.5 As a HR manager of Z Ltd, prepare a research design to carry out a study to identify the sources to recruit the competent workforce in Faridabad. 15

UNIT-III

Q.6 Discuss properties of a good sample. How would you select a sample from the populations? Explain with an example. 15

Q.7 a) Differentiate between primary and secondary data. Mention various techniques of collecting primary data. 7½
   b) Enumerate the points to be considered while preparing a good questionnaire. 7½

UNIT-IV

Q.8 a) Define data analysis. Discuss the nature of descriptive analysis. 7
   b) Discuss in brief the various statistical tools used in analyzing the data. 8

Q.9 Discuss in detail the procedure of preparing a research report. Suggest some precautionary measures to avoid mistakes in writing a report. 15
End Semester Examination, Dec. 2013
BBA (GEN) – Fourth Semester
BUSINESS LAW (bba-4005)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following questions in one or two sentence:
a) Define voidable contract.
b) What do you mean by irrevocable agency?
c) What are the main responsibilities of finder of goods?
d) Explain essential elements of fraud.
e) When offer can be revoked?
f) What is continuing guarantee?
g) Define certifying authority under sec. 2 (l)(g).
h) Give main contents of digital signature certificate.
i) Give doctrine of caveat emptor.
j) What do you mean by power of attorney?

UNIT-I

Q.2 Write short notes on the following:
a) Contract
b) Breach of a contract
c) Mistake

Q.3 What do you understand by capacity of parties? Explain the position of a minor in this respect.

UNIT-II

Q.4 Distinguish between ‘Holder’ and ‘Holder in due course’. Explain the privileges of a holder in due course under Negotiable Instrument Act.

Q.5 What do you understand by dishonour of negotiable instruments? Discuss modes and effects of dishonour.

UNIT-III

Q.6 a) What is agency by ratification? State the requisites of valued ratification.
b) Who is sub-agent? Under what circumstances is his appointment justified?

Q.7 What is the meaning of the terms ‘condition’ and ‘warranty’? Distinguish between both and also describe the various implied conditions and warranties under the Sales of Goods Act, 1930.

UNIT-IV

Q.8 Explain the surety’s right against the principal debtor and the creditor and discuss the extent of surety’s liability.

Q.9 a) Explain the duties of ‘certifying authority’ under the Information Technology Act, 2000.
b) Write a short note on digital signature certificate.

1½x10
End Semester Examination, Dec. 2013
BBA (GEN) – Fourth Semester
INFORMATION SYSTEM IN MANAGEMENT (bba-4006)

Time: 3 hrs
Max Marks: 50

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 a) Information systems that monitor the elementary activities and transaction of the organization are:
   i) Management level systems.
   ii) Operational level systems.
   iii) Knowledge level systems.
   iv) Strategic level systems.

b) Identifying customers and markets using data on demographics, markets, consumer behavior and trends is an example of 
   i) Operational level sales and marketing information system.
   ii) Knowledge level sales and marketing information system.
   iii) Management level sales and marketing information system.
   iv) Strategic level sales and marketing information system.

c) Good information systems like those of the delivery company in the book help create a competitive advantage by:
   i) Enhancing existing services.
   ii) Differentiating the users from competitors.
   iii) Creating systems that will lock in customers.
   iv) Raising barriers to market entry.
   v) All of the above.

d) The _______ accurate the information, the _______ its quality and the _______ managers can rely on it.
   i) Less; higher; less.
   ii) More; higher; more.
   iii) Less; higher; more.
   iv) More; lower; less.

e) Which of these statements best describes a computer-based information system?
   i) It consists of the people and procedures who interact with the system.
   ii) It consists of the people, procedures and technology a company uses to collect, transform and distribute data and information.
   iii) It consists of the data or information that people put into the system.
   iv) It consists of the hardware and the software which the company has acquired.

f) In any organization, end users rely on many types of information systems like:
   i) Simple manual (paper-and-pencil) information systems.
   ii) Formal (written procedures) and informal (word-of-mouth) systems.
   iii) Computer-based information systems.
   iv) All of the choices are correct.

g) E-business is defined as:
   i) The use of technology to work and empower business people.
   ii) The use of information technology to work and empower business processes.
   iii) The use of information technology to work and empower business processes, electronic commerce and enterprise collaboration.
   iv) The use of technology to empower people.

P. T. O.
h) Effective security management within an organization can:
   i) Minimize errors, losses and fraud.
   ii) Eliminate general e-mail abuses.
   iii) Eliminate all errors, fraud and losses.
   iv) None of the choices are correct.

i) Data by itself is not useful unless:
   i) It is massive.
   ii) It is processed to obtain information.
   iii) It is collected from diverse sources.
   iv) It is properly stated.

j) The following can be considered to measure quality:
   i) Customer satisfaction.
   ii) Defects.
   iii) Rework.
   iv) All of the above.

UNIT-I

Q.2 Explain various attributes of information and its relevance to decision making and also discuss the various types of information. 10

Q.3 "Every information is processed data but the reverse is not true". Justify this statement. 10

UNIT-II

Q.4 Explain MIS structure based on management activity. 10

Q.5 What are the different types of information systems? How does an information system relate to different levels of information requirement in an organization? 10

UNIT-III

Q.6 Describe the various mechanisms for controlling the quality in any information system. 10

Q.7 Lucidly explain the role of information systems in planning, decision-making and controlling operations of an organization. 10

UNIT-IV

Q.8 What are the threats of information system security? What preventive measures will you take? 10

Q.9 What are the characteristics of E-Business? Describe in detail. 10
End Semester Examination, Dec. 2013
BBA (GEN) – Fifth Semester
PURCHASE AND MATERIALS MANAGEMENT (bba-5001)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer in brief of the followings:
   a) State 5 R's of purchasing.
   b) State any two functions of a purchase manager.
   c) Draw the format of a purchase order.
   d) Write any two objectives of stores management.
   e) Mention any two important factors to be considered in vendor selection. 2x5
   State whether the following statements are True or False:
   f) Irreparable parts of the equipment are not considered as scrap.
   g) "Distance Covered" is one of the factors to select the mode of transporting goods.
   h) Elevators are also used in material handling in some production units.
   i) "Credit terms" should not affect the Vendor Rating.
   j) Bonded is also one of the types of Warehouse. 1x5

UNIT-I

Q.2 Define the term "Purchasing". Discuss the objectives and functions of purchasing. 15

Q.3 Explain various forms of purchase organization. Also discuss the organizational matters to be considered in purchasing. 15

UNIT-II

Q.4 Explain the concept "Determination of Material Quality". Discuss various factors that determine the quality of any material. 15

Q.5 a) When should we favour buying an item from outside instead of producing in house? Explain. 8
   b) Discuss various methods of price determination. Also mention various factors that influence price determination. 7

UNIT-III

Q.6 a) Define material management. State the objectives of material management. 8
   b) Explain the use of computers in various functions of material management. 7

Q.7 a) Define standardization and variety reduction. Also discuss the benefits of standardization. 8
   b) Mention the steps in value engineering process. 7

UNIT-IV

Q.8 What is meant by layout of a store? Discuss various types of stores layouts. 15

Q.9 a) Define codification. Discuss the system of codification used now-a-days in manufacturing firms. 8
   b) Explain how spare parts are classified? 7
End Semester Examination, Dec. 2013
BBA (GEN) – Fifth Semester
INDIAN FINANCIAL SYSTEM (bba-5002)

Time: 3 hrs   Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer in brief of the following:
a) What is a financial asset?
b) Which Act gives regulatory jurisdiction over Contracts in Securities?
c) What is a derivative?
d) Write two examples of debt securities.
e) What is an IPO?
f) What are e-securities?
g) How many shares are included in BSE-Sensex and NSE Nifty?
h) Define Gilt Securities.
i) Define primary dealers.
j) Write the participants of wholesale debt market. 1½x10

UNIT-I

Q.2 Define a financial system. How does it contribute towards an economic development? Discuss the financial system existing in India. 15

Q.3 Discuss the role of capital market in Indian economy. How does it differ from Money Market? Also describe the components of Indian Capital Market. 15

UNIT-II

Q.4 Define stock exchange and its functions. Discuss various securities and the procedure of trading these securities in stock exchanges. 15

Q.5 Explain in detail the regulatory regime for capital market in India. Also mention the role and functions of SEBI. 15

UNIT-III

Q.6 Define dematerialisation. Explain its process along with the role of various components of any depository system. 15

Q.7 Discuss the significance of debt securities in the Indian financial market. Explain in detail the process of issuing bonds in primary market. 15

UNIT-IV

Q.8 What is merchant banking? Discuss various activities to be performed by any merchant banker. 15

Q.9 Explain the following:
a) Factoring. 8
b) Venture Capital. 7
End Semester Examination, Dec. 2013
BBA (GEN) – Fifth Semester
COMPANY LAW (bba-5003)

Time: 3 hrs Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 a) Fill in the blanks:
   i) Minimum number of members of a company which is not a private company are ____________.
   ii) The famous case of Solomon Vs Solomon and Co. Ltd. judicially recognized the principle of _______ of a company.
   iii) A company incorporated outside India but having a place of business in India is known as ________.

b) True or false:
   i) A partnership firm can become the member of a company.
   ii) On dissolution a company ceases to exist while after winding up the legal entity of company remains.
   iii) A whole time director is just an ordinary employee of the company having no discretionary powers.
   iv) Every year at least two meetings of Board of Directors must be held in a company.

   1x3

c) Write two-three sentences about:
   i) Meaning of winding up of company.
   ii) Special resolution.
   iii) Company limited by guarantee.
   iv) Object clause of memorandum.
   2x4

UNIT-I

Q.2 “A company is a legal entity distinct from its members”. Do you agree with this statement? In what cases do the courts ignore this principle?

Q.3 Write explanatory notes on:
   a) Doctrine of ultra virus.
   b) Doctrine of indoor management.

UNIT-II

Q.4 “A prospectus must state truth and nothing but truth”. Explain the statement. What remedies are available to the shareholders in the case of issue of prospectus containing false statement?

Q.5 Write short notes on:
   a) Difference between ordinary resolution and special resolution.
   b) Provisions with regard to proxies.
   c) Extra ordinary general meeting.

   5x3

UNIT-III

Q.6 Briefly state the provisions of Companies Act, 1956, regarding the mode of appointment and removal of directors of a company.

Q.7 Explain in detail rights and duties of auditors of a company.

UNIT-IV

Q.8 Under what circumstances a company can be wound up by the court? What are the consequences of it?

Q.9 Write short notes on:
   a) Declaration of solvency.
   b) Liquidation of defunct company.
   c) Grounds for voluntary winding up.

   5x3
Q.1 Multiple choice questions:
   a) A firewall is:
      i) used to protect a computer room from fires and floods.
      ii) a form of virus.
      iii) a screen saver program.
      iv) None of the above.
   b) Which protocol is used to transfer web pages?
      i) TCP/IP
      ii) SMTP
      iii) POP3
      iv) HTTP
   c) The network layer in reference to the OSI model, provide:
      i) Data link procedure for the exchange of data via frames that can be sent and received.
      ii) The interface between the X.25 network and packet mode service.
      iii) The virtual circuit interface to packet switched service.
      iv) All of the above.
   d) Which topology requires a central controller or hub?
      i) Mesh
      ii) Star
      iii) Bus
      iv) Ring.
   e) ________ is the protocol suite for the current internet.
      i) TCP/IP
      ii) NCP
      iii) UNIX
      iv) ACM
   f) HTTP refers to:
      i) Hyper text transfer protocol
      ii) Hyper text transmission protocol
      iii) Hyper text file protocol
      iv) None of these
   g) The ________ is the physical path over which a message travels.
      i) Protocol
      ii) Medium
      iii) Signal
      iv) All of the above.
   h) Data flow between two devices can occur in a ________ way:
      i) Simplex
      ii) Half duplex
      iii) Full duplex
      iv) All of the above
   i) Which of the following website is used to search other website by typing a keyword?
      i) Search engine
      ii) Routers.
      iii) Social networks
      iv) None of these
   j) To design a webpage we need to use:
      i) Server
      ii) Browser
      iii) XML
      iv) HTML

UNIT-I

Q.2 What is HTML body section? Discuss some tags used in the HTML body section. 10

Q.3 What is a network? Explain the characteristics of LAN, WAN and MAN. 10

P.T. O.
Q.4 Discuss briefly about the layers present in OSI model.

Q.5 What is cryptography? How does it help in countering digital network security threats?

UNIT-III

Q.6 Explain the background and history of Internet. Explain the ways of accessing the internet.

Q.7 Write short notes on:
   a) Search engine
   b) Frames of HTML

UNIT-IV

Q.8 What are the issues related to intranet security design? Discuss the future of intranet.

Q.9 a) Explain the steps required for building a corporate website.
   b) Discuss intranet as a business tools.
End Semester Examination, Dec. 2013
BBA (GEN) – Fifth Semester
WORKSHOP ON PERSONALITY AND SOFT SKILLS DEVELOPMENT
(bba-5005)

Time: 3 hrs
Max Marks: 50

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1  a) Fill in the blanks:
   i) Personality is derived from the Latin word ________.
   ii) ________ refers to the uniqueness of each person.
   iii) Everyone wants to create a good first ________ through his personality.
   iv) ________ refers to personality patterns that show basic similarities.
   v) The moral behavior of an individual is known as ________.

   b) Give one word for the following:
      i) Others’ judgment of you: ________.
      ii) Very strict child training method: ________.
      iii) Best child training method: ________.
      iv) Learning by imitation: ________.
      v) People having tall thin body are known as: ________.

   1x5

UNIT-I

Q.2  What do you understand by personality? What role does personality play in creating first impressions?

10

Q.3  Discuss the different types of personality syndromes. What influence does each have on the personality of an individual?

10

UNIT-II

Q.4  Highlight the factors which determine personality? Can the absence or presence of these factors influence personality of an individual? Discuss with the help of examples.

10

Q.5  Write notes on:
   a) Repression
   b) Stress.

5x2

UNIT-III

Q.6  What according to you are the attributes of a healthy personality? What part do body language and etiquettes play in enhancing the overall personality of an individual?

10

Q.7  "Time management is an important tool to take you up the ladder of success". Discuss the above statement from the point of view of a corporate executive.

10

UNIT-IV

Q.8  "Interview skills can be effectively mastered with proper preparation and practice". Discuss the above statement by highlighting the do's and don'ts before appearing for an interview.

10

Q.9  Write short notes on the following:
   a) Positive relationships
   b) Team building
   c) Gaining power.
   d) Motivational environment.

2½x4
End Semester Examination, Dec. 2013
BBA (GEN) – Sixth Semester
TAXATION LAWS (bba-6001)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blank:
   a) The Previous year is the in which ________.
   b) T.D.S. Stands for ________.
   c) Incidence of tax establishes the relationship between ________ and ________.
   d) Current Services tax rate applicable in India is ________.
   e) Exempted incomes are not included in ________.

State True or False:
   f) The incomes in India are taxable at a flat rate.
   g) Deductions reduce the tax liability of assesses.
   h) Due date for payment of service tax for the last quarter is 5th April.
   i) Service tax is charged on the payment received for the services.
   j) No Input Credit is available on capital goods.

Write one sentences about:
   k) Rebate
   l) Perquisites
   m) Salary of directors
   n) Zero rated sale
   o) Interest income

UNIT-I

Q.2 Write short notes on:
   a) Agriculture income
   b) Gross total income
   c) Meaning of income

UNIT-II

Q.3 “Assesses have been divided into three categories on the basis of their residential Status”. Explain how these categories are defined and how they affect the taxability of an individual assesses?

Q.4 Explain:
   a) Basis of charge under the head: house property.
   b) Taxability of H.R.A.
   c) Meaning of capital assets.

UNIT-III


Q.6 What is VAT? Explain merits and demerits of VAT in the Indian Contest.

UNIT-IV

Q.7 What is input tax credit? Explain provisions in relation to input tax credit.

Q.8 What are taxable services? Explain the valuation of taxable services.

Q.9 Explain in relation to services tax:
   a) Invoice.
   b) Services tax return.
   c) General exemptions from service tax.
End Semester Examination, Dec 2013
BBA (GEN) – Sixth Semester
SYSTEM ANALYSIS AND DESIGN (BBA-6002)

Time: 3 hrs
Max Marks: 75
Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following:
   a) Define prototyping.
   b) Give name of phases of SDLC.
   c) Give name of quality standard used in the Indian manufacturing industry.
   d) What do you mean by backup?
   e) Give names of two types of system testing.
   f) The step by step instruction that solve a problem is called:
      i) An algorithm.
      ii) A list.
      iii) A Plan.
      iv) A sequential structure.
   g) Metadata is __________.
   h) Data dictionary contains __________.
   i) In E-R model an entity stands for __________.
   j) Feasibility study comes under ________ phase of SDLC. 2x5

UNIT-I

Q.2  a) Explain waterfall model with its advantages and disadvantages. 7
     b) What is a CASE TOOL? Explain the functions performed by each. 8

Q.3  Explain ER model by taking a suitable example. 15

UNIT-II

Q.4  a) Data flow Diagram.
     b) Explain economic and technical feasibility study. 6

Q.5  How would you select a project? Write down the preliminary investigations used in selecting a project. 15

UNIT-III

Q.6  a) Hardware and software selection for system development.
     b) Structured chart. 10

Q.7  What is benchmarking? Explain each term in detail. 5

UNIT-IV

Q.8  Why conversion is used in system implementation? Explain all conversion methods with advantages and disadvantages. 15

Q.9  Discuss the following:
     a) Testing and verification. 9
     b) Training review plan. 6
End Semester Examination, Dec 2013
BBA (GEN) – Sixth Semester
FOUNDATIONS OF INTERNATIONAL BUSINESS (BBA-6003)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blank:
   a) ECGC refers to __________. 2
   b) BOP a/c has three components _______ official, reserve and _______. 2
   c) _____ Duty protects the domestic companies against price competition. 2
   d) Foreign investment increases the _______ of domestic currency. 2

State whether the statement is True or False:
   e) Foreign exchange market is a place to exchange the currencies of different countries. 2
   f) Import duty is an effective non-tariff barrier. 2
   g) Family branding is always better for an MNC to control the advertising cost. 2
   h) WTO facilitates the cross border trade through easy finance/loan facility. 1

Q.2 a) Discuss the challenges that affect the international business but do not impact the domestic business. 8
   b) Explain various components of business environment to an Indian Oil and Gas company planning to expand its operation in South Asian countries. 7

Q.3 Differentiate between direct and portfolio investment. How does FDI affect the economy of a country? 15

UNIT-II
Q.4 a) Why do nations trade with each other? Discuss the gains and losses from free trade to the nations involved. 7
   b) “As products mature, both location of sales and location of optimal production change.” Justify with help of international PLC theory of international business. 8

Q.5 Writes notes on:
   a) Letter of Credit. 8
   b) Certificate of origin. 7

UNIT-III
Q.6 Define BOP Disequilibrium. How does BOP affect the economic condition of any country? 15

Q.7 a) Discuss the participants of foreign exchange market. Also explain the functioning of foreign exchange market. 8
   b) Explain the role of IMF and World Bank in economic development of member countries. 7

UNIT-IV
Q.8 a) Under what circumstances is it appropriate for a firm to modify its products when selling in foreign markets. 7
   b) Explain major considerations in branding decision in international market. 8

Q.9 Give a brief account of the important international pricing and promotional strategies. 15
End Semester Examination, Dec. 2013
BBA (GEN) – Sixth Semester
E-COMMERCE (bba-6004)

Time: 3 hrs
Max Marks: 75

Note: Attempt FIVE questions in all; taking at least ONE question from Each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1 Choose the correct alternative:
a) Which segment focuses on consumers dealing with each other?
   i) B2B. 
   ii) B2C.
   iii) C2B. 
   iv) C2C.
b) The best products to sell in B2C e-commerce are:
   i) Small products.
   ii) Digital products.
   iii) Specialty products.
   iv) Fresh products.
c) Which term represents a count of the number of people who visit one site, click on an ad, and are taken to the site of the advertiser?
   i) Affiliate programs.
   ii) Click-throughs.
   iii) Spam.
   iv) All of the above.
d) What are plastic cards the size of a credit card that contains an embedded chip on which digital information can be stored?
   i) Customer relationship management systems cards.
   ii) E-government identity cards.
   iii) FEDI.
   iv) Smart cards.
e) Which of the following statements accurately reflect the impact of technology?
   i) Technology has caused buyer power to increase.
   ii) Technology has lessened the entry barriers for many industries.
   iii) Technology has increased the threat of substitute products and services.
   iv) All of the above.

f) What is the name given to an interactive business providing a centralized market where many buyers and suppliers can come together for e-commerce or commerce related activities?
   i) Direct marketplace.
   ii) B2B.
   iii) B2C.
   iv) Electronic marketplace.

g) A combination of software and information designed to provide security and information for payment is called what?
   i) Digital wallet.
   ii) Pop up ad.
   iii) Shopping cart.
   iv) Encryption.

h) An ATM card is an example of which form of biometric security?
   i) What you know?
   ii) Who you are?
   iii) What you have
   iv) What you can do.

i) When a transaction is processed online, how can the merchant verify the customer's identity?
   i) Use secure sockets layers.
   ii) Use secure electronic transactions.
   iii) Use electronic data interchange.
   iv) Use financial electronic data interchange.

P. T. O.
j) Which of the following is a reason why digital cash has turned out to be extremely difficult?
   i) If your system crashes you don't lose your money.
   ii) There is only one standard.
   iii) Digital cash makes money laundering very difficult.
   iv) Digital cash travels across the vast internet and is susceptible to being stolen.

UNIT-I

Q.2 What are the major limitations on the growth of e-commerce? Which is potentially
   the toughest to overcome? 15

Q.3 Discuss:
   a) Brick and click business.
   b) Categories of e-commerce. 7½x2

UNIT-II

Q.4 Explain how cash transactions take place in e-commerce? What special precautions should be taken by a bank to ensure that a customer does not double spend the same electronic coins issued to him/her? 15

Q.5 What are the main differences between electronic cheque payment and credit card payment in e-commerce? Explain the mechanism of making payment through internet. 15

UNIT-III

Q.6 Explain how internet security measures can actually create opportunities for criminals to steal, rather than prevent them? 15

Q.7 Discuss e-commerce applications in the retail and service sector. 15

UNIT-IV

Q.8 How will you design an e-commerce model for a middle level organization? Justify your answer with the help of an example. 15

Q.9 Discuss the concept of virtual existence along with its advantages and pitfalls. 15
End Semester Examination, Dec. 2013
BBA (CAM) – First Semester
CONCEPTUAL FOUNDATIONS OF MANAGEMENT (BCAM-101)

Time: 3 hrs
Max Marks: 70
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blanks:
   a) Communication is ____________ in the formal groups.
   b) The top-level management decides about the ____________ for the organization as a whole.
   c) There are ____________ levels of management.
   d) Departmentation can be based on ____________.
   e) Responsibility is the duty to which a person is bound of his status or task.
   f) Distribution of authority cannot be design or plan.
   g) Communication is a part of the directing function of management.
   h) Every manager is not responsible for co-ordination of activities.
   i) Human needs many be classified into two categories.
   j) ‘Management by objectives’ is the essential part of the decision making process.
   k) What is strategy?
   l) Enlist types of organization.
   m) Define authority.
   n) What is the basic motive of management? 1x14

UNIT-I

Q.2 Discuss the main characteristics of an effective manager. How does effectiveness differ from efficiency? 14

Q.3 Write short notes on the following:
   a) System approach 7
   b) Levels of management 7

UNIT-II

Q.4 What is the concept of planning as an element of management process? Discuss its role in present-day business organizations. 14

Q.5 Briefly describe the following:
   a) Business forecasting 7
   b) Essential features of a good plan 7

UNIT-III

Q.6 Differentiate between the following:
   a) Formal and Informal organization 7
   b) Authority and Power 7

Q.7 What do you mean by ‘Span of Control’? As a manager, do you prefer wide or narrow span? Give reasons. 14

UNIT-IV

Q.8 What are the basic elements of ‘decision-making’? Explain the crucial role of diagnosis in decision-making process. 14

Q.9 Write short notes on:
   a) Effective managerial control 7
   b) Management by objectives (MBO) 7
End Semester Examination, Dec. 2013
BBA (CAM) – First Semester
BUSINESS ECONOMICS (BCAM-102)

Time: 3 hrs
Max Marks: 70
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 a) Answer the following questions in one or two sentences:
   i) Define Giffen goods.
   ii) Explain law of supply.
   iii) Write any two assumptions of the law of demand.
   iv) Explain meaning of consumer equilibrium.
   2x4
   b) Fill in the blanks:
   v)  E_d=(-)___________.
   vi) ___________ in prices is known as inflation.
   vii) Average cost is known as _________ cost.
   viii) Utility is the ___________ of goods to satisfy human wants.
   ix) The main aim of the firm is to earn ___________.
   x) ___________ is a compulsory payment to the government.
   1x6

UNIT-I

Q.2 Define the term: Consumer’s equilibrium. Explain its determination with the help of utility analysis.
   14

Q.3 Explain the concept of price elasticity of demand and its degree. What is its importance in business?
   14

UNIT-II

Q.4 Explain the law of variable proportions with the help of a suitable diagram. How is it important for a business firm?
   14

Q.5 a) Explain the relationship between average cost and marginal cost curves.
    8
   b) Explain the concept of total revenue, average revenue and marginal revenue.
    6

UNIT-III

Q.6 Define the various forms of a market. Discuss the main features of a monopoly competitive market.
   14

Q.7 a) Can monopoly earn super normal profit in the long run?
    6
   b) Explain the price determination under monopolistic competition.
    8

UNIT-IV

Q.8 How macro economics is different from micro economics? Explain the importance of macro analysis of an economy.
   14

Q.9 a) Discuss the main objectives of fiscal policy.
    8
   b) Distinguish between real flow and money flow.
    6
Q.1
a) Explain inclusive and exclusive series.
b) Write the minimum value of coefficient of correlation (r).
c) Give any two limitation of index numbers.
d) What do you mean by seasonal indices?
e) Write the concept of probability.
f) What is coefficient of determination?
g) What do you mean by \( P_r \)?
h) Define absolute value.
i) Write down the formula for standard deviation.
j) Find median: 5, 8, 7, 3, 4, 6, 2, 9, 1.
k) Define coefficient of variation.
l) State the two types of index numbers.
m) Define degree of freedom.
n) What do you mean by average? 1x14

UNIT-I
Q.2
Batsmen A and B score following runs indifferent innings they played in a test series. Which of the two is a better scorer? Who is more consistent?

<table>
<thead>
<tr>
<th>A</th>
<th>12</th>
<th>115</th>
<th>6</th>
<th>73</th>
<th>7</th>
<th>19</th>
<th>119</th>
<th>36</th>
<th>84</th>
<th>29</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>47</td>
<td>12</td>
<td>76</td>
<td>42</td>
<td>4</td>
<td>51</td>
<td>37</td>
<td>48</td>
<td>13</td>
<td>0</td>
</tr>
</tbody>
</table>

14

Q.3
a) Explain the different measures of central tendency.
b) Calculate median and mode of the following distribution:

<table>
<thead>
<tr>
<th>Class Interval</th>
<th>0-5</th>
<th>5-10</th>
<th>10-15</th>
<th>15-20</th>
<th>20-25</th>
<th>25-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>20</td>
<td>24</td>
<td>32</td>
<td>28</td>
<td>20</td>
<td>26</td>
</tr>
</tbody>
</table>

9

UNIT-II
Q.4
a) What are the properties of regression lines?
b) Calculate Karl Pearson's coefficient for the following data:

<table>
<thead>
<tr>
<th>X</th>
<th>20</th>
<th>23</th>
<th>27</th>
<th>31</th>
<th>35</th>
<th>38</th>
<th>40</th>
<th>42</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>18</td>
<td>20</td>
<td>24</td>
<td>30</td>
<td>32</td>
<td>34</td>
<td>36</td>
<td>38</td>
</tr>
</tbody>
</table>

4

Q.5
a) Determine the regression line of sales on purchase using following data:

<table>
<thead>
<tr>
<th>Sales</th>
<th>30</th>
<th>50</th>
<th>20</th>
<th>80</th>
<th>10</th>
<th>20</th>
<th>20</th>
<th>40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase</td>
<td>50</td>
<td>80</td>
<td>30</td>
<td>110</td>
<td>20</td>
<td>20</td>
<td>40</td>
<td>50</td>
</tr>
</tbody>
</table>

b) Define correlation. Distinguish between correlation and regression. 9

P. T. O.
UNIT-III

Q.6  a) Describe main problems which are faced in the construction of index number of prices.  

b) Calculate Laspeyre's and Paasche's index numbers from the following data:

<table>
<thead>
<tr>
<th>Items</th>
<th>2004 Price</th>
<th>2012 Price</th>
<th>2004 Quantity</th>
<th>2012 Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>30</td>
<td>15</td>
<td>18</td>
<td>40</td>
</tr>
<tr>
<td>B</td>
<td>16</td>
<td>44</td>
<td>54</td>
<td>30</td>
</tr>
<tr>
<td>C</td>
<td>40</td>
<td>50</td>
<td>25</td>
<td>40</td>
</tr>
<tr>
<td>D</td>
<td>18</td>
<td>30</td>
<td>22</td>
<td>40</td>
</tr>
<tr>
<td>E</td>
<td>40</td>
<td>45</td>
<td>20</td>
<td>30</td>
</tr>
</tbody>
</table>

Q.7 Calculate trend values by the method of least squares from the data given below and estimate the sales for the year 2013.

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (In lacs)</td>
<td>12</td>
<td>18</td>
<td>20</td>
<td>23</td>
<td>27</td>
</tr>
</tbody>
</table>

UNIT-IV

Q.8  a) A problem is given to five students: A, B, C, D and E. Their chances of solving it are \( \frac{1}{2} \), \( \frac{1}{3} \), \( \frac{1}{4} \), \( \frac{1}{5} \) and \( \frac{1}{6} \). What is the probability that the problem will be solved?

b) Explain the properties of normal distribution curve. Discuss its utility for managers.

Q.9  a) State the qualities of a good sample.

b) Use chi-square test to know independence of the two attributes:

<table>
<thead>
<tr>
<th>Training</th>
<th>Intensive</th>
<th>Good</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above average</td>
<td>100</td>
<td>150</td>
<td>40</td>
</tr>
<tr>
<td>Average</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Poor</td>
<td>50</td>
<td>80</td>
<td>150</td>
</tr>
</tbody>
</table>
End Semester Examination, Dec. 2013
BBA (CAM) – First Semester
FINANCIAL ACCOUNTING (BCAM-104)

Time: 3 hrs
Max Marks: 70
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in blanks:
   a) Journal is sub-divided into a number of sub-journals known as ________.
   b) The accounts which relate to an individual, firm, company or institution are called ________ accounts.
   c) The permanent and continuing decrease in the value of an asset, an account of wear and tear, passage of time is called ________.
   d) Cash book is the book of ________ entry.
   e) A book which contains all accounts of business enterprise whether real personal or nominal is called ________.
   f) Profit on sale of assets is shown on the ________ of assets A/c.
   g) Capital = ________ - ________
   h) Not recording of any transaction is ________ sided error.

   Write in brief about:
   i) Two features of accounting.
   j) LIFO.
   k) Purchase return book.

   1x8

UNIT-I

Q.2 Explain the concept of accounting. Discuss the advantages and limitations of accounting. 14

Q.3 Explain the following with help of suitable examples:
   a) Money measurement concept.
   b) Convention of full disclosure.
   c) Going concur concept. 14

UNIT-II

Q.4 Differentiate between:
   a) Journal and ledger.
   b) Cash book and cash account.
   c) One sided error and two sided error.

   4

Q.5 Record the following transactions in a cash book with cash and bank columns:
   Sept., 1 Balance of cash in hand Rs.15,000
   Bank overdraft Rs.40,000
   Sept., 2 Received cheque for goods sold Rs.25,000
   This cheque was deposited into bank the next day.
   Sept., 4 Received a cheque from Suresh for Rs.3000 and allowed him discount Rs.120.
   Sept., 6 Endorsed Suresh cheque in favour of Gopal
   Sept., 10 Got a draft issued for Rs.10,000 in favour of Anil. Bank charges

P. T. O.
Sept., 16  Discount a B/R of Rs.5000@1%.
Sept., 20  Received bank draft of Rs.8500 from Manish in full settlement of
          his account of Rs.9000.
Sept., 21  Deposited Rs.20,000 into bank.
Sept., 26  Paid by cheque for expenses Rs.400.
Sept., 29  Dinesh owed Rs.10,000 and become insolvent paid 60 paisa in Rs.
Sept., 30  Interest on overdraft Rs.2000.

UNIT-III

Q.6  What is bank reconciliation statement? Discuss its need and causes of difference
      between bank and cash balances.

Q.7  Explain how will you deal with the following in final accounts of a sole trader?
      a) Provision for bad debts.
      b) Interest on drawings.
      c) Unearned income.
      d) Prepaid expenses.

UNIT-IV

Q.8  What is depreciation? Discuss its need and significance. Also differentiate with
      suitable examples, between straight line method and diminishing balance method
      of charging depreciation.

Q.9  What are the various types of errors that arise in the preparation of financial
      accounts? How are they rectified? Explain with examples.
End Semester Examination, Dec. 2013
BBA (CAM) – First Semester
INTRODUCTION TO COMPUTERS AND INFORMATION SYSTEMS
(BCAM-105)

Time: 3 hrs
Max Marks: 50
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1 Multiple choice questions:

a) The output quality of printer is measured by:
i) Dot per inch.
   ii) Dot per sq. inch.
ii) Dots printed per unit time.
   iv) All of the above.
b) EBCDIC stands for:
i) Extended Binary coded decimal interchange code.
   ii) Extended bit code decimal interchange code.
   iii) Extended bit case decimal interchange code.
   iv) Extended binary case decimal interchange code.
c) Machine language is:
i) Machine dependent.
   ii) Difficult to program.
   iii) Error prone.
   iv) All of the above.
d) An ________ is a set of process and procedures that transform data into
   information and knowledge:
i) Information system.
   ii) Knowledge system.
   iii) Database system.
   iv) Computer system.
e) Information systems that monitor the elementary activities and translations of
   the organizations are:
i) Management level system.
   ii) Operational level system.
   iii) Knowledge level system.
   iv) Strategic level system.
f) The tracks on a disk which can be accessed without repositioning the R/W
   head is:
i) Surface.
   ii) Cylinder.
   iii) Cluster.
   iv) All of the above.
g) The number system that we use in our daily life is called as:
i) Octal.
   ii) Binary.
   iii) Hexadecimal.
   iv) Decimal.
h) Modem stands for:
i) A type of secondary memory.
   ii) Modulator demodulator.
   iii) Mainframe operating device memory.
   iv) None of the above.
i) Operational information is needed for:
i) - Day to day operations.
   ii) Meet government requirements.
   iii) Long range planning.
   iv) Short range planning.
j) Information is:
i) Data.
   ii) Processed data.
   iii) Manipulated input.
   iv) Computer output.

1x10

UNIT-I

Q.2 What is meant by computer generations? List out the various generations in
computer technologies along with their characteristics.

10

P. T. O.
Q.3 Convert the following:
   a) \((11101101)_2\) to decimal, octal and hexadecimal.  
   b) \((738.87)_{10}\) to binary, octal and hexadecimal.  

**UNIT-II**

Q.4 Discuss briefly about secondary storage devices.

Q.5 a) What is the role of computer peripherals in business applications? 
   b) Write short notes on: 
      i) Voice recognition system. 
      ii) Optical scanning.

**UNIT-III**

Q.6 What do you mean by feedback and control system? Explain the characteristic of each.

Q.7 Explain the activities related to information system in detail.

**UNIT-IV**

Q.8 Explain the current trends in telecommunication keeping in view of their business uses.

Q.9 How security is essential in IT industry? Explain with examples.
End Semester Examination, Dec. 2013
BBA (CAM) – Second Semester
BUSINESS ENVIRONMENT (BCAM-201)

Time: 3 hrs
Max Marks: 70
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following question:
   a) Explain the meaning of business.
   b) The ______ is the most detailed attempt to organize the conduct of international monetary affairs.
   c) In which year was industrial licensing policy established?
   d) What are the three kinds of balance of payment?
   e) What is industrial sickness?
   f) What does SIDBI stand for?
   g) Mention three main characteristics of New Industrial Policy, 1991.
   h) _______ and rationalization are urgently required in small scale industries.
   i) Privatisation helps the state to trim the size of the administrative machinery. (True / False)
   j) Name three compulsory licensing industries in India.
   k) Give two features of liberalization.
   l) There are ______ PSU in the Navratnas category.
   m) What are the two objectives of social audit?
   n) Name the economic system where there is a co-existence of both the public sector and private sector.

UNIT-I

Q.2 Define the term: Business environment. Describe the internal and external factors of business environment.

Q.3 What is social responsibility of business? Discuss the social responsibilities of business towards customer and employees.

UNIT-II

Q.4 Write a note on the role and performance of small scale industries.

Q.5 What is Industrial policy 1991? Critically examine the industrial development in India.

UNIT-III

Q.6 Explain the product and services of the following Development Banks:
   a) NABARD
   b) IDBI

Q.7 How are stock exchanges in India regulated? What are the guidelines of SEBI?

UNIT-IV

Q.8 Discuss the beneficial and harmful effects of Multinational Corporation on Indian economy.

Q.9 Write notes on the following:
   a) Achievement and failure of IMF
   b) Objectives of WTO.
End Semester Examination, Dec. 2013  
BBA (CAM) – Second Semester  
HUMAN RESOURCE MANAGEMENT (BCAM-202)

Time: 3 hrs  
Max Marks: 70

Note: Attempt any FIVE questions in all; taking at least ONE question from each Unit. All questions carry equal marks.

Q.1 Answer briefly:
   a) What do you mean by Human Resource?
   b) Distinguish between wage and salary.
   c) What is meant by City Compensatory Allowance (CCA)?
   d) What are the causes of transfer?
   e) Enlist measures for making induction successful.
   f) Distinguish among terms: education, training and development.
   g) Differentiate between mediation and arbitration.

UNIT-I

Q.2 Define Human Resource Management. Highlight various functions of an HR Manager plays in a business organization. Also discuss various challenges being faced by a present day Human Resource Management.

Q.3 What is Recruitment? Explain the various sources of recruitment of employees. Which source is the best and why it is so in your opinion?

UNIT-II

Q.4 Write short notes on:
   a) Incentive payments
   b) Fringe benefit

Q.5 Discuss the objectives of wage and salary administration. Which wage methods are more suitable for a textile industry?

UNIT-III

Q.6 What are different provisions of Factory Act 1948 towards?
   a) Cleanliness
   b) Disposal of Waste and Effluents
   c) Dust and fumes

Q.7 Write short notes on:
   a) Fatigue and boredom.
   b) Welfare activities for employees

UNIT-IV

Q.8 What is meant by Industrial Relations? What are the different causes of Industrial Disputes?

Q.9 Define the concept of collective bargaining. Discuss the importance of collective bargaining from:
   a) Trade Union
   b) Management
   c) Government point of view
End Semester Examination, Dec. 2013  
BBA (CAM) – Second Semester  
MATHEMATICS FOR MANAGERS (BCAM-203)  

Time: 3 hrs  
Max Marks: 70  
No. of pages: 2  

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.  
Q.1 is compulsory. All questions carry equal marks.  

Q.1  
a) Differentiate \( a^x \) w.r.t. \( x \).  
b) Find 20th term of the series, 7+4+1-2-5............  
c) Find the value of \( (\log 2 + 1) \).  
d) If \( A = \{1, 2, 3, 4\} \) and \( B = \{3, 4, 5, 6\} \). Find \( A \cap B \) and \( B \cap A \).  
e) \( A = \begin{bmatrix} x + 3 & 20 \\ 19 - y & 21 \end{bmatrix}, B = \begin{bmatrix} y + 20 & z \\ y + x & 17 + w \end{bmatrix} \), then find the matrix \( A + B \).  
f) What do you mean by equal sets?  
g) Write the following set in set-builder form: \( A = \{14, 21, 28, 35, 42, \ldots \ldots \ldots, 98\} \).  

UNIT-I  

Q.2  
a) Find the least number of years for which an ordinary annuity of Rs.800 per annum must run in order that its amount just exceeds Rs.20,000 at 16% p.a. compounded annually.  
b) In how many years will Rs.4,000 amount to Rs.5,324 at 10% p.a. compounded annually?  

Q.3  
a) The difference between compound interest and simple interest of a certain sum of money is Rs.50 at 10% p.a. for 2 years. Find the principal.  
b) Find the compound interest on Rs.5000 at 12% p.a. for 1\( \frac{1}{2} \) years, if the interest is compounded semi-annually.  

UNIT-II  

Q.4  
a) If \( 3^x = 5^y = 15^z \); prove that \( z = \frac{xy}{x + y} \).  
b) If one of the roots of the quadratic equation \( x^2 + mx + 24 = 0 \) is 1.5, then what is the value of \( m \)?  
c) The 5th term of an A.P. is 10 and the 10th term is zero. Find the sum of 20 terms.  

Q.5  
a) Sum the series:.3+.33+.333+......to \( n \) terms.  
b) If the sum of \( n \), \( 2n \), \( 3n \) terms of an A.P. are \( S_1 \), \( S_2 \), \( S_3 \) respectively, prove that \( S_3 = 3(S_2 - S_1) \).  

UNIT-III  

Q.6  
a) Solve the following system of linear equation:  
\( x + 3y + 4z = 7 \)  
\( 4x + 2y + 3z = 10 \)  
\( x + y + z = 3 \)  
b) If \( A = \{4, 5, 8, 12\} \), \( B = \{1, 4, 6, 9\} \) and \( C = \{1, 2, 3, 4\} \); then find:  
\( i) \ A \cap (B - A) \)  
\( ii) \ A \Delta B \)  

P. T. O.
Q.7  a) If \( A = \begin{bmatrix} -2 & 3 & -1 \\ -1 & 2 & -1 \\ -6 & 9 & -4 \end{bmatrix} \) and \( B = \begin{bmatrix} 1 & 3 & -1 \\ 2 & 2 & -1 \\ 3 & 0 & -1 \end{bmatrix} \) verify that \( AB = BA \).

b) In a survey of 25 students, it was found that 15 had taken Sanskrit, 12 had taken Hindi and 11 had taken English; 5 had taken Sanskrit and English, 9 had taken Sanskrit and Hindi; 4 had taken Hindi and English and 3 had taken all three subjects.

Find the number of students who had:

i) Sanskrit and Hindi but not English.

ii) At least one of the three subjects.

iii) Exactly one of the three subjects.

---

UNIT-IV

Q.8  a) Evaluate: \( \int \frac{1}{\sqrt{5x+3} + \sqrt{5x+2}} \, dx \).

b) If \( y = \sqrt{x} + \frac{1}{\sqrt{x}} \); Show that \( 2x \frac{dy}{dx} + y = 2\sqrt{x} \).

c) Evaluate: \( \lim_{x \to 0} \frac{\sqrt{x} - \sqrt{1-x}}{2x} \).

Q.9  a) Discuss the continuity of the function \( f(x) \) at \( x=1 \), where:

\[
f(x) = \begin{cases} 
\frac{3}{2} - x, & 0 \leq x < 1 \\
\frac{3}{2}, & x = 1 \\
\frac{3}{2} + x, & 1 < x \leq 2 
\end{cases}
\]

b) Differentiate w.r.t. \( x \):

\[
\log \left( \frac{\sqrt{x+1} + \sqrt{x-1}}{\sqrt{x+1} - \sqrt{x-1}} \right)
\]
End Semester Examination, Dec. 2013
BBA (CAM) – Second Semester
OPERATING SYSTEMS AND NETWORKING (BCAM-205)

Time: 3 hrs  Max Marks: 50
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following:
   a) What is context switch and context switch time?
   b) What is backing store?
   c) Write down the brain stain condition for deadlock.
   d) Write down four advantages of computer network.
   e) Differentiate between guided and unguided media. 2x5

UNIT-I

Q.2 Explain the following commands with their syntax:
   a) CAL   b) WHO   c) UNAME   d) CAT   e) MKDIR 2x5

Q.3 What do you understand by an operating system? Describe the role of operating system as resource manager and discuss major functions performed by an operating system. 10

UNIT-II

Q.4 Consider the following set of process:

<table>
<thead>
<tr>
<th>Process</th>
<th>Priority</th>
<th>Burst Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>P2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>P3</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>P4</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>P5</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

a) Illustrate the execution of process using FCFS and priority scheduling.
b) Calculate the waiting time for all the processes and also calculate the average waiting time.
c) Calculate the turnaround time for all the processes and also calculate the average turnaround time. 10

Q.5 Write short notes on:
   a) Deadlock
   b) Fragmentation 5x2

UNIT-III

Q.6 a) What do you mean by network transmission? Explain various transmission modes.
   b) Discuss any five applications of computer network. 5x2

Q.7 Discuss the following:
   a) Transmission medias
   b) Types of networks 5x2

UNIT-IV

Q.8 Explain TCP/IP reference model in context to internet. 10

Q.9 What do you mean by network security? How could you resolve the security issues in a communication network? 10
End Semester Examination, Dec. 2013
BBA (CAM) – Third Semester
ORGANIZATIONAL BEHAVIOURS (BCAM-301)

Time: 3 hrs
Max Marks: 70
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following briefly,
   a) Define organizational behavior.
   b) What is contingency approach to management?
   c) Where was Hawthorne experiment conducted?
   d) Enumerate the guidelines for effective decision making.
   e) What is perceptual selectivity?
   f) What is free-reign leadership?
   g) What are the different types of change agents? 2x7

UNIT-I

Q.2 Briefly trace the evolution of organizational behavior. 14

Q.3 How does perception affect organizational processes? What type of perceptual processes would be detrimental to the efficient operations of an organization? 14

UNIT-II

Q.4 a) Explain in detail some of the reasons for group formation. 14
   b) Provide guidelines to practicing managers for effective utilization of informal groups. 14

Q.5 Write short notes on the following:
   a) Group cohesiveness.
   b) Team building. 7x2

UNIT-III

Q.6 Are there any circumstances where a moderate degree of conflict is actually beneficial to the individuals and the organization? If so, what can the management do to maintain such degree of conflict? 14

Q.7 Write short notes on:
   a) Strategies to manage change.
   b) Change agent’s role in bringing change. 7x2

UNIT-IV

Q.8 What is the concept of motivation? How does it affect behavior and performance? 14

Q.9 a) Explain the three ego states of transactional analysis.
   b) What are the various leadership styles identified by Jannenbaum and Schmidt? 7x2
End Semester Examination, Dec. 2013
BBA (CAM) – Third Semester
FINANCIAL MANAGEMENT (BCAM-302)

Time: 3 hrs Max Marks: 70
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following in brief:
a) Define working capital.
b) Write any two functions of a finance manager.
c) What is leverage?
d) Explain any two method of inventory management.

Fill in the blanks:
e) The main objective of financial management is to _________.
f) The discounting technique helps in finding out ________ of a future sum.
g) ________ is the technique of making decisions for investment in long term assets.
h) Cost of capital of a firm is the minimum ________ expected by its investors.
i) The cost of debt is ________, when Rs. 1,00,000/- 9% debenture issued at a discount of 6%.

UNIT-I

Q.2 “It has been traditionally argued that the objective of a firm is to earn profit; hence the objective of financial management is also profit making”. Comment. 14

Q.3 Explain the nature and scope of financial management. 14

UNIT-II

Q.4 A limited Company is considering investment in a project requiring a capital outlay of Rs. 2, 00,000. Annual income after depreciation but before tax is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rs.</td>
<td>1,00,000</td>
<td>1,00,000</td>
<td>80,000</td>
<td>80,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Discount factors at 10%</td>
<td>0.909</td>
<td>0.826</td>
<td>0.751</td>
<td>0.683</td>
<td>0.621</td>
</tr>
</tbody>
</table>
Depreciation may be taken as 20% and taxation at 50% of net income. Evaluate the project according to:
a) Payback period  b) Average rate of return  c) NPV at 10% 14

Q.5 a) Discuss the purpose of capital budgeting.
b) What is meant by weighted average cost of capital? 7x2

UNIT-III

Q.6 What is an optimum capital structure? Bring out the qualities of an optimum capital structure. 14

Q.7 Differentiate between the business risk and financing risk of a firm. How are they measured by the leverage? 14

UNIT-IV

Q.8 Write short notes on:
a) Factors affecting dividend policy.
b) Cash management. 7x2

P. T. O.
Q.9 From the following particular of ABC Ltd., you are required to determine the working capital required by the company:

a) Average amount of stock

<table>
<thead>
<tr>
<th>Item</th>
<th>Per annum (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock of raw material</td>
<td>20,000/-</td>
</tr>
<tr>
<td>Work in progress</td>
<td>4,000/-</td>
</tr>
<tr>
<td>Stock of finished goods</td>
<td>30,000/-</td>
</tr>
</tbody>
</table>

b) Average credit given:

<table>
<thead>
<tr>
<th>Market</th>
<th>Credit Period</th>
<th>Credit Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home market</td>
<td>2 weeks</td>
<td>2,60,000/-</td>
</tr>
<tr>
<td>Foreign market</td>
<td>6 weeks</td>
<td>6,24,000/-</td>
</tr>
</tbody>
</table>

c) Time available for payment:

<table>
<thead>
<tr>
<th>Item</th>
<th>Credit Period</th>
<th>Credit Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>For purchases</td>
<td>4 weeks</td>
<td>1,56,000/-</td>
</tr>
<tr>
<td>For wages</td>
<td>2 weeks</td>
<td>2,08,000/-</td>
</tr>
<tr>
<td>For expenses</td>
<td></td>
<td>78,000/-</td>
</tr>
</tbody>
</table>
End Semester Examination, Dec. 2013
BBA (CAM) – Third Semester
MARKETING MANAGEMENT (BCAM-303)

Time: 3 hrs  Max Marks: 70
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following briefly:
   a) State 4 P's of marketing mix.
   b) Give two benefits of packaging.
   c) State the stages of new product development.
   d) Design distribution channel for:
      i) Vegetables
      ii) Cars
   e) What is the difference between advertising and publicity?
   f) State the methods of sales forecasting.
   g) State two benefits of branding. 2x7

   UNIT-I

Q.2 a) What are the major stages in the consumer buying decision process? Are all these stages used in all consumer purchase decisions? 7
   b) What are the bases for market segmentation? Discuss a suitable base for marketing of television. 7

Q.3 a) What is a product life cycle? Suggest appropriate marketing strategies for each of the stages of a product life cycle. 7
   b) What pricing strategies would you suggest for a large company planning to introduce a new consumer product? 7

   UNIT-II

Q.4 What do you understand by channels of distribution? What are factors affecting channels? 14

Q.5 Discuss the selection and training of sales force in an organization. 14

   UNIT-III

Q.6 What is meant by sales promotion? Describe briefly the various methods of sales promotion. 14

Q.7 Define advertising. Explain its objectives. Discuss the merits and demerits of the various advertising media used by the organizations. 14

   UNIT-IV

Q.8 a) What is marketing research? Elaborate its steps. 8
   b) Explain the nature and purpose of marketing information system. 6

Q.9 Write notes on:
   a) International marketing
   b) Marketing audit 7x2
End Semester Examination, Dec. 2013
BBA (CAM) – Third Semester
MIS AND DBMS (BCAM-304)

Time: 3 hrs  Max Marks: 50
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blanks:
   a) A system is a set of _______ joined together for a common purpose.
   b) MIS transform data into _______.
   c) _______ is a specialized MIS designed to support managers in semi-structured and unstructured decision.
   d) Digital signature make use of _______ and private keys.
   e) _______ dependency is used at the 3NF stage in the process of normalization.
   f) Database rules were given by _______.
   g) Full form of DDL is _______.
   h) A _______ is a plastic card issued to users as a system of payment which allows its holder to buy goods and services based on holder’s promise to pay for these goods and services at the end of a period.
   i) Information system is a set of people, procedures and _______ that collects, transforms and disseminates information in an organization.
   j) _______ is an advanced data model which is used in database management system.

UNIT-I

Q.2 What is Management Information System? Briefly explain the application of MIS in the following functional areas:
   a) Marketing
   b) Finance

Q.3 a) ‘MIS helps in developing product right while a DSS helps in developing right product’. Comment on this.
   b) ‘Every information is a processed data but reverse is not true’. Justify.

UNIT-II

Q.4 What do you understand by a critical success factor? Discuss the role of critical success factor in implementation of information technology.

Q.5 Discuss the various methods used in the security of information systems.

UNIT-III

Q.6 a) Illustrate the architecture of DBMS.
   b) What are the languages of DBMS? Give two examples of each.

Q.7 What are the various database models? List down the merits and demerits of all database models. Which database model is generally used and why?

UNIT-IV

Q.8 Discuss the process of normalization up to 3NF with the help of suitable examples.

Q.9 What are the important features of visual FoxPro? Explain them by giving suitable examples.
End Semester Examination, Dec. 2013  
BBA (CAM) – Third Semester  
MULTIMEDIA TECHNOLOGY (BCAM-305)

Time: 3 hrs  
Max Marks: 50  
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.  
Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blanks:
   a) _______ allows an end user to control what and when the elements are delivered?
   b) VR stands for ________.
   c) WYSIWYG means ________.
   d) ________ is spacing between character pairs.
   e) PELS stands for ________.
   f) The study of movements and motion of structures that have joints is called ________.
   g) MIDI is acronym for ________.
   h) The first and last frame of an action are called ________.
   i) ________ is the effect in which one image transforms to another?
   j) When digital audio sample is rounded off to the nearest integer it is ________.

UNIT-I

Q.2 What is multimedia? How might multimedia be used to improve the lives of its users?

10

Q.3 Discuss the components used in multimedia.

UNIT-II

Q.4 Explain fonts and faces of text used in multimedia. Discuss how and when you choose a text font?

10

Q.5 What is MIDI audio? Explain its features. Explain how MIDI audio is different from digital audio?

10

UNIT-III

Q.6 Explain the concept of morphing and 3-D animation.

10

Q.7 Write short notes on:
   a) Extruding and lathing of Image.
   b) Analog video.

5x2

UNIT-IV

Q.8 Discuss the process of making a multimedia project.

10

Q.9 Explain how you deliver a multimedia project?

10
End Semester Examination, Dec. 2013
BBA (CAM) – Fourth Semester
BUSINESS POLICY AND STRATEGIC MANAGEMENT (BCAM-401)

Time: 3 hrs  Max Marks: 70
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following briefly:
   a) What do you mean by strategic management?
   b) Differentiate between strategy and policy.
   c) What is SWOT analysis?
   d) Give example of ten types of basic business strategies.
   e) Differentiate between problem solving and decision making.
   f) What is synergy?
   g) Give the reasons for merger of organizations. 2x7

UNIT-I

Q.2 What is strategic decision making? Discuss the various approaches to decision making broadly classified by the management experts. 14

Q.3 Write short notes on:
   a) Strategic management process
   b) Importance of business policy 7x2

UNIT-II

Q.4 The value system cherished by the CEO of the company is reflected in the objectives. Comment on this statement. 14

Q.5 Write short notes on:
   a) Classification of objectives
   b) Qualities of long term objectives 7x2

UNIT-III

Q.6 Explain the relevance of environment scanning to strategic planning. 14

Q.7 Explain the different corporate level strategies in detail. 14

UNIT-IV

Q.8 Discuss the basic nature of strategy evaluation. Why is strategy evaluation important? 14

Q.9 Write short notes on:
   a) Case study
   b) Leadership 7x2
End Semester Examination, Dec. 2013
BBA (CAM) – Fourth Semester
MANAGEMENT AND COST ACCOUNTING (BCAM-402)

Time: 3 hrs
Max Marks: 70
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following questions in one or two sentences:
   a) Write any two limitations of management accounting.
   b) Explain the term P/N ratio.
   c) Define budget.
   d) What is social accounting?
   e) Working capital is ______________ minus ______________.
   f) A budget which is designed to change as volume of output changes is termed as ______________.
   g) B.E.P. is the point at which ______________.
   h) State (True or False) the following statements:
   i) A fixed budget is concerned with budgeting of fixed assets.
   j) Profit volume ratio is difference between cost and sales of a firm.

   Fill in the blanks: ____________________________

UNIT-I

Q.2 Define management accounting. How does it differ from cost accounting and financial accounting?

Q.3 Write short notes on:
   a) Techniques of management accounting.
   b) Scope and significance of management accounting.

UNIT-II

Q.4 The profit and loss account of an 'X' Ltd. as follows:
Rs.
Net sales 1,00,000/-
Cost of good sold:
Variable 40,000/-
Fixed 10,000/-
Gross profit 50,000/-
Selling cost:
Variable 10,000/-
Fixed 5,000/-
Net Profit 35,000/-
You are required to calculate:
   a) Break even point [B.E.P.]
   b) Forecast the profits for the sale volume of Rs.1,60,000/- and Rs.70,000
   c) What would be the sales volume to earn a net profit of Rs.55,000/-?

Q.5 a) A firm has a current ratio of 3:1. Its working capital is Rs.2,00,000/-. You are required to determine:
   i) Current assets
   ii) Current liabilities
   iii) Liquid assets assuming inventory of Rs.2,20,000/-.
   b) Differentiate between cash flow and fund flow statement.

P. T. O.
UNIT-III

Q.6 Draw up a flexible budget for overhead expenses on the basis of the following data at 70%, 80% and 90% plant capacity levels:

<table>
<thead>
<tr>
<th></th>
<th>At 80% capacity (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Variable overheads</td>
<td></td>
</tr>
<tr>
<td>Labour</td>
<td>12,000/-</td>
</tr>
<tr>
<td>Material</td>
<td>4,000/-</td>
</tr>
<tr>
<td>2. Semi variable overheads</td>
<td></td>
</tr>
<tr>
<td>Power (30% fixed)</td>
<td>20,000/-</td>
</tr>
<tr>
<td>Repair (40% variable)</td>
<td>2,000/-</td>
</tr>
<tr>
<td>3. Fixed overheads</td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>11,000/-</td>
</tr>
<tr>
<td>Insurance</td>
<td>3,000/-</td>
</tr>
<tr>
<td>Others</td>
<td>10,000/-</td>
</tr>
<tr>
<td><strong>Total overheads</strong></td>
<td><strong>62,000/-</strong></td>
</tr>
</tbody>
</table>

Q.7 Discuss the essentials of a good budgetary control system. Explain briefly the steps in setting up a budgetary control system so that its working efficiency is ensured.

UNIT-IV

Q.8 a) Explain different types of responsibility centres.
   b) Discuss the advantages of standard costing.

Q.9 The standard mix to produce one unit of product is as follows:
    Material A  -  60 units @ Rs. 15 per unit = Rs. 900/-
    Material B  -  80 units @ Rs. 20 per unit = Rs. 1,600/-
    Material C  - 100 units @ Rs. 25 per unit = Rs. 2,500/-
                   240
                   Rs. 5,000/-

    During the month of July, 10 units were actually produced and consumption as follows:
    Material A  -  640 units @ Rs. 17.50 per unit = Rs. 11,200/-
    Material B  -  950 units @ Rs. 16.00 per unit = Rs. 15,200/-
    Material C  - 870 units @ Rs. 27.50 per unit = Rs. 22,225/-
                   2460 units
                   Rs. 52,225/-

    Calculate all material variances.
End Semester Examination, Dec. 2013
BBA (CAM) – Fourth Semester
QUANTITATIVE APPLICATIONS TO MANAGERIAL DECISION MAKING (BCAM-403)

Time: 3 hrs
Max Marks: 70
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blanks:
   a) If minimax=minimax, it means there is a ______________.
   b) Formula for finding opportunity cost is ______________.
   c) Loop is drawn in MODI method, when ______________.
   d) Maximisation can be converted into minimisation by ______________.
   State whether the given statements is TRUE/FALSE:
   e) If there are in rows and n columns then the total number of allocations (transportation) are m+n-1.
   f) If supply and demand (run conditions) are satisfied the solution obtained is ______________.
   g) In a mixed strategy game, there is always a saddle point. 2x7

UNIT-I

Q.2 a) Use graphical method to solve the given LP problem:
    Maximize Z = 15x₁ + 10x₂
    Subject to
    \[ 4x₁ + 6x₂ \leq 360 \]
    \[ 3x₁ + 0x₂ \leq 180 \]
    \[ 0x₁ + 5x₂ \leq 200 \]
    \[ x₁, x₂ \geq 0 \]

   b) State the basic assumptions of linear programming. 4

Q.3 a) A small scale manufacturer employs five skilled men and 10 semi-skilled men. He makes an article in two quantities; a deluxe model and an ordinary model. The making of deluxe model requires 2 hours of work by a semi-skilled and skilled worker each. Ordinary model requires 3 hours of work by semi-skilled and one hour of work by skilled worker. As per worker’s union no man can work for more than 8 hour/per day. Profile for deluxe and ordinary model are Rs. 10 and Rs. 8/- respectively. Formulate the given problem (no solution is required). 10

   b) State the limitations of graphical method. 5

UNIT-II

Q.4 Solve the following problem using simplex method:
    Maximize Z = 3x₁ + 5x₂ + 4x₃
    Subject to
    \[ 0x₁ + 2x₂ + 3x₃ \leq 18 \]
    \[ 0x₁ + 2x₂ + 5x₃ \leq 18 \]
    \[ 3x₁ + 2x₂ + 4x₃ \leq 25 \]
    \[ x₁, x₂, x₃ \geq 0 \]

   14

P. T. O.
Q.5 Solve the following transportation problem and check the optimality of the solution using MODI method:

<table>
<thead>
<tr>
<th>FACTORY</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>6</td>
<td>4</td>
<td>9</td>
<td>1</td>
<td>40</td>
</tr>
<tr>
<td>Market</td>
<td>X</td>
<td>20</td>
<td>6</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Z</td>
<td>7</td>
<td>1</td>
<td>12</td>
<td>6</td>
</tr>
</tbody>
</table>

Demand: 90 30 50 30

UNIT-III

Q.6 Explain briefly:
   a) Assignment algorithm-Hungarian method.
   b) Multiple optimal solution in an assignment problem.
   c) Maximization in an assignment problem.

Q.7 Solve the following travelling salesman problem:

<table>
<thead>
<tr>
<th>From</th>
<th>To 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>∞</td>
<td>18</td>
<td>17</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>∞</td>
<td>12</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>3</td>
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<td>11</td>
<td>∞</td>
<td>12</td>
<td>8</td>
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<tr>
<td>4</td>
<td>5</td>
<td>16</td>
<td>12</td>
<td>∞</td>
<td>3</td>
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<tr>
<td>5</td>
<td>8</td>
<td>7</td>
<td>9</td>
<td>12</td>
<td>∞</td>
</tr>
</tbody>
</table>

UNIT-IV

Q.8 Customers arrive at a box office window, being managed by single individual according to Poisson input process with mean rate of 30 per hour. The time required to serve a customer has an exponential distribution with a mean of 40 per hour. Find the following:
   a) Average number of customers in the system.
   b) Average number of customers in the queue.
   c) Average waiting time of customers in the queue.
   d) Average waiting time of customers in the system.

Q.9 Solve the following game, whose pay-off matrix is given below:

<table>
<thead>
<tr>
<th>Player B</th>
<th>A1</th>
<th>A2</th>
<th>A3</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>30</td>
<td>40</td>
<td>-80</td>
</tr>
<tr>
<td>B2</td>
<td>0</td>
<td>15</td>
<td>-20</td>
</tr>
<tr>
<td>B3</td>
<td>90</td>
<td>20</td>
<td>50</td>
</tr>
</tbody>
</table>

Player A
End Semester Examination, Dec. 2013
BBA (CAM) – Fourth Semester
RELATIONAL DATABASE MANAGEMENT SYSTEMS (BCAM-404)

Time: 3 hrs Max Marks: 50
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 a) Answer the following in about 20 words:
   i) Define primary key.
   ii) What is a tuple in a relation?
   iii) How many integrity rules are there in a relational model?
   iv) Explain DUAL table.
   v) What function is used to find the total number of rows in a relation?

b) Choose the right answer:
   i) In the ________ data model the database is represented as a group of related tables?
      a) Relational   b) Hierarchical  c) Network   d) None.
   ii) Which of the following is not a SQL keyword or SQL clause?
      a) SELECT   b) INSERT   c) UPDATE   d) INVERT.
   iii) Which of the following SQL clauses is used to enter data into a SQL table?
      a) SELECT   b) ENTER   c) INSERT INTO   d) WRITE
   iv) A significant disadvantage of the DBMS system is ________?
      a) Inconsistency   b) Inaccuracy   c) cost   d) None.
   v) The highest level of abstraction as seen by a user is called as ________?
      a) Internal   b) External   c) Both   d) None.

UNIT-I

Q.2 What do you understand by DBMS? Explain the three level architecture of DBMS with a suitable example.

Q.3 Explain relational data model in detail.

UNIT-II

Q.4 What is an ER diagram? Explain basic constructs/components used for ER modeling.

Q.5 Discuss the steps for drawing an ER diagram using a suitable example.

UNIT-III

Q.6 Explain character and numeric scalar functions in Oracle with proper syntax and example.

Q.7 Explain the following:
   i) Group by   ii) Order by   iii) Delete   iv) Drop

UNIT-IV

Q.8 Discuss the various control structures used in PL/SQL code with a suitable example.

Q.9 What is the difference between procedure and function? What is the syntax to create local and stored functions?
End Semester Examination, Dec. 2013
BBA (CAM) – Fourth Semester
SYSTEM ANALYSIS AND DESIGN (BCAM-405)

Time: 3 hrs  Max Marks: 70
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1  a) Which step of SDLC performs cost/benefit analysis?
   i) Feasibility study.
   ii) Analysis.
   iii) Design.
   iv) None of the above.

b) Which of the following strategies are adopted if information requirements are not well-defined?
   i) Rapid application development method.
   ii) Structured analysis development method.
   iii) Systems development life cycle method.
   iv) Prototyping method.
   v) Spiral method.

c) Which of the following is not a fact-finding technique?
   i) Third party enquiry.
   ii) Interview.
   iii) Questionnaire.
   iv) Record reviews.
   v) Observation.

d) Which of the following statements is false with respect to a data dictionary?
   i) It is a repository of the elements in a system.
   ii) Data dictionary and data store both are same.
   iii) It manages detail.
   iv) It communicates the common meanings for system elements and activities.
   v) It documents system features.

e) The organized process or set of steps that needs to be followed to develop an information system is known as the:
   i) Analytical cycle.
   ii) Design cycle.
   iii) Program specification.
   iv) System development life cycle.

f) The correct order of steps to solve a problem is:
   i) Analyse, design, develop, test, evaluate, implement, document.
   ii) Analyse, design, test develop, document, implement, evaluate.
   iii) Design, analyses, develop, document, implement, test evaluate.
   iv) Analyse, design, develop, test, document, implement, evaluate.

   g) Which of the following symbols are used on entity-relationship diagrams?
      i) An arrow.
      ii) A square.
      iii) A diamond.
      iv) Two parallel lines.
      v) A circle.

P. T. O.
h) Automated design tools are also called _______ tools.
   i) ACE  ii) BASE  iii) CASE  iv) CAM

i) Benchmarking is used:
   i) To select computer systems.
   ii) To maintain files in up-to-date condition.
   iii) For application proto-typing.
   iv) For system acceptance.
   v) None of the above.

j) System prototyping helps the designer in:
   i) Making the programmers understands how the system will function.
   ii) Communicating to the user quickly, how the system, when developed, will look like and get a feedback.
   iii) Giving a demo of the software, to the system manager to whom he reports.
   iv) Both i) and ii).
   v) None of the above.  

k) Define the following:

UNIT-I

Q.2  What is software development life cycle? Also discuss its various phases.  

Q.3  a) Describe reasons for using CASE tools
     b) Explain the role of system analyst. The system analyst is known as "An agent of change" Why?  

UNIT-II

Q.4  What is data dictionary? Explain with the help of an example.  

Q.5  What are the common fact finding techniques? Explain any two of them.  

UNIT-III

Q.6  Discuss the process of system design.  

Q.7  a) Explain any five criteria for vendor selection.
     b) What are the principles of good from design? Explain.  

UNIT-IV

Q.8  a) What do you mean by system maintenance? Explain with the help of a suitable example.
     b) List various factors which are responsible for the quality of a system. Also explain the different levels of quality assurance.  

Q.9  What is the need of system testing? Explain any five testing techniques and their basic objectives.  

End Semester Examination, Dec. 2013
BBA (CAM) – Fifth Semester
PUBLIC RELATIONS AND APPLIED COMMUNICATION (BCAM-501)

Time: 3 hrs
Max Marks: 70
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1 a) What is the goal of public relations?
b) Broadly classify the public relation tools used to communicate to the public.
c) What do you mean by a Newsletter?
d) List any two forms of outdoor media with examples.
e) Write the name of few PR agencies in India.
f) What do you mean by selective media?
g) Name three celebrities who you have seen endorsing products on television.  2x7

UNIT-I

Q.2 a) Explain public relations in detail.
b) Explain the present status and future scope of public relations in India.  7x2

Q.3 Explain the role of communication in public relations.  14

UNIT-II

Q.4 What are the different tools of public relations which are used for interaction between the management and employees?  14

Q.5 Write short notes on:
a) Corporate personality.
b) Advertising vs public relations.  7x2

UNIT-III

Q.6 How public opinion is formed and changed? Discuss in brief the role of public relations in formation and change of public opinion.  14

Q.7 Write short notes on:
a) Elements of public opinion process.
b) The major factors which determines public opinion.  7x2

UNIT-IV

Q.8 a) Explain the types of lobbying.
b) Explain lobbying laws.  7x2

Q.9 What is the role of public relations in a public sector organization?  14
End Semester Examination, Dec. 2013
BBA (CAM) – Fifth Semester
MERCANTILE LAW (BCAM-502)

Time: 3 hrs  
Max Marks: 70
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.  
Q.1 is compulsory. All questions carry equal marks.

Q.1  
a) State whether the following statements are True or False:  
i) No consideration is necessary to create an agency.  
ii) An agreement with or by a minor is voidable.  
iii) In a contract of guarantee two parties are necessary.  
iv) The Central Government may by notification in the official gazette, appoint a Controller of Certifying Authorities.  
v) An agent is personally liable where he acts for a foreign principal.  

b) Fill in the blanks:  
i) A specific offer can be accepted by ______.  
ii) A contract which is wholly performed by both the parties is known as ______.  

iii) The price in a contract of sale means the money consideration for sale of ______.  

1x5

1x3

c) Answer the following questions in brief:  
i) What is meant by “hacking” with a computer system?  
ii) State any two duties of an agent to the principal.  
iii) What is a contract of indemnity?  

2x3

UNIT-I

Q.2 What do you mean by breach of contract? What remedies are available to an aggrieved party on the breach of contract?  

14

Q.3 Discuss briefly expressly declared void agreements under the Indian Contract Act.  

14

UNIT-II

Q.4 What is a contract of agency? What are the different modes of creating an agency?  

14

Q.5 State surety’s rights against:  
a) The creditor  
b) The principal debtor  
c) The co-sureties  

14

UNIT-III

Q.6 Briefly explain the conditions and warranties implied by law in a contract for the sale of goods.  

14

Q.7 What is a contract of sale of goods? Discuss the essential characteristics of a contract of sale of goods.  

14

UNIT-IV

Q.8 Write short notes on:  
a) Digital signature.  
b) Electronic record.  

7x2

Q.9 How is Controller or Certifying Authority appointed? What are his functions under IT Act, 2000?  

14
End Semester Examination, Dec. 2013
BBA (CAM) – Fifth Semester
CONSUMER BEHAVIOUR (BCAM-503)

Time: 3 hrs  Max Marks: 70
Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following in briefly:
a) Why do we study consumer behavior?
b) Draw a diagram of Maslow's need hierarchy theory of motivation.
c) Write full form of AIO analysis.
d) Define VALS model.
e) Explain the term sub culture.
f) What are the various type of consumer decision-making?
g) What is selection and segmentation of target markets?
h) What are factors which affect social groups?
i) Write four forms of consumer promotion.
j) "Consumer is the king in the market". Prove the statement.
k) Define family.
l) People are divided in two classes _______ and ________.
m) Write a difference between culture and language.
n) Consumers are loyal to products or organisations (True/False) 1x14

UNIT-I

Q.2 Explain the concept of consumer behavior. Briefly discuss the motives which lead a consumer to buy a product? 14

Q.3 Write short notes on:
a) Life style and psychographics
b) Applications of consumer behavior 7x2

UNIT-II

Q.4 Why and how consumer behavior is affected by the marketing environment? 14

Q.5 What is a reference group? Why its influence is more important than that of other groups? 14

UNIT-III

Q.6 "The personality traits and attitudes are important guides of consumer behavior". Explain. 14

Q.7 What are the factors influencing the individual determinants of consumer behavior? Explain with suitable examples? 14

UNIT-IV

Q.8 Write notes on:
a) Steps of consumer decision process.
b) Differences between pre and post purchasing behavior. 7x2

Q.9 Why it is necessary to study and recognize the problem, search and evaluation of consumer behavior? 14
End Semester Examination, Dec. 2013
BBA (CAM) – Fifth Semester
PROGRAMMING IN VISUAL BASIC (BCAM-504)

Time: 3 hrs  Max Marks: 50
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blank (10 parts):
   a) IDE stands for _____.
   b) _____ is one of the data types available in VB.
   c) Frame control is also known as _____.
   d) _____ is an example of shape control.
   e) _____ is one of the important properties of Textbox.
   f) _____ and _____ are examples of container controls.
   g) OLE is used for _____.
   h) In option button we can select _____ choices at one time.
   i) The use of breakpoint in debugging is to _____.
   j) Watch window is used to _____.

UNIT-I

Q.2 a) What Visual Basic can do for you? Explain using examples.  5
   b) Explain the various elements of visual basic IDE.  5

Q.3 Explain the following VB terms:
   a) Project
   b) Variable  5x2

UNIT-II

Q.4 Explain the use of following controls in VB:
   a) Text Box  5x2
   b) List Box

Q.5 a) What is an event procedure? Explain with the help of an example.  5
   b) How the variables declared in a module are different than those declared in an event procedure? Explain briefly using an example.  5

UNIT-III

Q.6 Differentiate between the following:
   a) Static and Dynamic array  5
   b) Procedure and Function  5

Q.7 Explain the need of an MDI Form using an example in VB.  10

UNIT-IV

Q.8 What are the various graphics controls available in VB? Explain their use by giving an example.  10

Q.9 Explain the following in terms of database connectivity in VB:
   a) Use of Data control.  5
   b) Properties of a Textbox to be set for database connectivity.  5
End Semester Examination, Dec. 2013
BBA (CAM) – Fifth Semester
SOFTWARE ENGINEERING (BCAM-505)

Time: 3 hrs .................................................. Max Marks: 50
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blanks:
   a) Reducing the cost and ________ for software development are central goals of software engineering.
   b) Besides cost and schedule, the major factor driving software engineering is ________.
   c) During software development ________ factor is most crucial.
   d) Spiral model was developed by ________.
   e) ________ model is the most popular for student's small projects.
   f) SRS stands for ________.
   g) Function point can be calculated by ________.
   h) In function point analysis, number of complexity adjustment factors are ________.
   i) Software mistakes during coding are known as ________.
   j) If requirements are easily understandable and defined, ________ model is best suited. 1x10

UNIT-I

Q.2 a) Discuss the significance of software crisis with reference to software engineering discipline. 5
   b) Is software product or process? Justify your answer with an example. 5

Q.3 a) How does project risk factor affect the spiral model of software development? Discuss. 5
   b) Distinguish between generic and customized software products. 5

UNIT-II

Q.4 a) What are the crucial process steps of requirement engineering? Discuss with the help of a diagram. 5
   b) What do you mean by software metrics? Why do we use it and discuss the area of applications of software metrics? 5

Q.5 Consider a project with following parameters: Number of user inputs=50, Number of user outputs=68, Number of enquiries=32, Number of user files=8, Number of external interfaces=15. Assume all the weighting factors are at average rate and all the complexity adjustment factors are essential. Compute the function count. 10

UNIT-III

Q.6 Discuss various types of COCOMO mode. Explain phase wise distribution of effort. 10
Q.7 What do you mean by top down decomposition in the context of function oriented design and explain through an example? 10

UNIT-IV

Q.8 What is software testing? Discuss the role of software testing during software life cycle and why is it so difficult? Explain. 10

Q.9 Discuss the following:
   a) Verification and validation
   b) Functional and structural testing 5x2
End Semester Examination, Dec. 2013
BBA (CAM) – Sixth Semester
INTERNATIONAL BUSINESS (BCAM-602)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. All questions carry equal marks.

UNIT-I

Q.1 Define various components of international business environment. How can these components affect the international business of Indian companies? Explain with examples.

Q.2 Discuss in detail the factor endowment theory of international business. Use suitable examples.

UNIT-II

Q.3 What is foreign direct investment? How can it affect the economic development of a country? Discuss the current FDI scenario in India.

Q.4 Write notes on:
   a) Multinational corporations.
   b) Globalisation of economics.

UNIT-III

Q.5 Differentiate between export oriented units (EOU) and export processing zones (EPZ). Briefly discuss main objectives of setting up EOUs and EPZs.

Q.6 Write a detail note on EXIM policy in India. Also mention the contribution of EXIM policies to regulate the international trade.

UNIT-IV

Q.7 Why are non-tariff barriers becoming more important? Discuss various non tariff barriers which regulate international trade.

Q.8 Explain the following:
   a) Functions of WTO.
   b) Commodity agreements.
   c) Exchange rate regimes.

5x3
End Semester Examination, Dec. 2013
BBA (CAM) – Sixth Semester
ORGANIZATIONAL DEVELOPMENT (BCAM-604)

Time: 3 hrs
Max Marks: 70
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Answer the questions briefly:
   a) What is the significance of organizational development?
   b) What do you mean by quality circle?
   c) Differentiate between joint venture and strategic alliance.
   d) What is a T-group?
   e) What is cultural intervention in organizational development?
   f) What are the three significant dimensions of organizational development?
   g) Name the industries who are under compulsory licensing in India? 2x7

UNIT-I

Q.2 Write a brief history of evolution of organizational development. 14

Q.3 Write short notes on:
   a) Aim of organizational development.
   b) Top values associated with organizational development. 7x2

UNIT-II

Q.4 What is organizational development intervention? Discuss the nature and types of OD intervention. 14

Q.5 Explain the latest interventions which are being used by MNCs. 14

UNIT-III

Q.6 Write short notes on:
   a) Organizational development in the Indian context.
   b) Globalisation policies. 7x2

Q.7 Write short notes on:
   a) Public sector policy.
   b) MRTP Act. 7x2

UNIT-IV

Q.8 a) Explain the different types of organizations restructuring.
   b) Explain different types of mergers. 7x2

Q.9 a) Explain equity participation.
   b) Specify the conditions under which expansion strategies are adopted. 7x2
End Semester Examination, Dec. 2013

BCA -First Semester

COMPUTER FUNDAMENTALS AND PROGRAMMING IN ‘C’ (BCA-101)

Time: 3 hrs

Max Marks: 75

No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.

Q.1 is compulsory. All questions carry equal marks.

Q.1  

a) The Binary system uses the power of:
   i) 2 ii) 10
   iii) 16 iv) 8

b) The two operators && and || are:
   i) Arithmetic ii) Logical
   iii) Relational

c) The expression x=4+8% 2 evaluates.
   i) -6 ii) 6
   iii) 4 iv) 0

d) When we use the case control structure, we have to:
   i) choose one from multiple alternatives.
   ii) switch from one instruction to other.
   iii) make the execution fast.
   iv) None of the above.

e) The symbol shown in figure in flow chart represents:

   [diagram]

   i) Output ii) End
   iii) Decision iv) None of the above.

Fill in the blanks:

f) _______ is the octal equivalence of 1110101.

g) A _______ is a pictorial representation of an algorithm.

h) Structured Programming employs _______.

i) Before a disk can be used to store the data, it must be _______.

j) _______ printer is very commonly used for desktop publishing. 1½x10

UNIT-I

Q.2  

a) Explain the need of Input and Output devices. Discuss any two input and
   output devices commonly used in PC’s. 10

b) Differentiate between compiler and interpreter. 5

Q.3  

a) Define the terms:
   Bit, Byte, Nibble.

b) Convert the following:
   (10101.011)2 = (?)_16 = (?)_8 = (?)_{10} 12

UNIT-II

Q.4  

a) Explain the concept of Top-Down approach. 5

b) What are the basic programming construct? Explain them with help of an
   example. 10

P. T. O.
Q.5 Differentiate between the following:
   a) Flowchart and Algorithm.
   b) Hard Disk and Floppy Disk.
   c) Ram and ROM.

UNIT-III

Q.6 Write the syntax, purpose and example of the following:
   a) for loop.
   b) switch statement.
   c) else if ladder.

Q.7 a) Write a program in C language to find the factorial of n number.
    b) What is constant? Explain different types of constants available in C.

UNIT-IV

Q.8 a) Define Array. What is the need for Arrays? How are arrays declared and initialized?
    b) Write short note on Recursion.

Q.9 a) What is a Structure? Why is it used? Explain with the help of an example how a structure is declared?
    b) Highlight the differences between union and structure.
End Semester Examination, Dec 2013
BCA - First Semester
ELEMENTS OF MATHEMATICS (BCA-102)

Time: 3 hrs
Max Marks: 75
Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1  a) Let \( A = \{x, y, z\} \), \( B = \{v, w, x\} \). Which of the following statements is correct?
   i) \( A \cup B = \{v, w, x, y, z\} \)
   ii) \( A \cap B = \{v, x\} \)
   iii) \( A \cup B = \{v, w, x, y, z\} \)
   iv) \( A \cup B = \{x, w, y, z\} \)

b) What does shaded in the Venn diagram below?

   \[ \text{Diagram} \]

   i) \( A \cup B \)    ii) \( A \cap B \)    iii) A    iv) B

c) If \( A = \{1, 2, 3, 4, 5\} \), then the number of proper subset is.
   i) 120    ii) 30    iii) 31    iv) 32

d) If the 5\(^{th}\) term of G.P is 2, then the product of first terms is.
   i) 512    ii) 256    iii) 128    iv) 18    v) Can not be determined.

e) Solve \( \log \frac{\sqrt{8}}{8} \) is the same as.
   i) \( \frac{1}{4} \)    ii) \( \frac{1}{2} \)    iii) \( \frac{1}{\sqrt{2}} \)    iv) None of these.

f) A coin is tossed. Find the probability that the result is head.
   i) 0.5    ii) 0.1    iii) 0.9    iv) 1

g) The expression \( \frac{\tan \theta}{\sec \theta} \) is equivalent to:
   i) \( \cos^2 \theta \)    ii) \( \frac{\sin \theta}{\cos \theta} \)    iii) \( \cos \theta \)    iv) \( \sin \theta \)

h) Given that \( y = ax^n \). Select the correct form for the differential \( \frac{dy}{dx} \) from the list
   below:
   i) \( \frac{dy}{dx} = nx^{n-1} \)    ii) \( \frac{dy}{dx} = ax^{n-1} \)    iii) \( \frac{dy}{dx} = a nx^{n-1} \)    iv) \( \frac{dy}{dx} = a nx^{n-1} \)

i) A scalar quantity has _____.
   i) Magnitude    ii) Direction    iii) both i) and ii)    iv) None of these.

j) Determine the limit \( \lim_{{x \to 1}} (x^2 - 3x)^x \).
   i) 0    ii) 1    iii) 256    iv) Does not exist. 1½x10

UNIT-I

Q.2  a) If \( R \) is a relation "is greater than" from A=\{1,2,3,4,5\} to B=\{1,3,4\}. Write R as the set of ordered pair. Also find \( R^{-1} \).

P.T.O.
b) If the map \( f : R \to R \) is given by \( f(x) = x^2 \) and the map \( g : R \to R \) is given by \( g(x) = x + 1 \) find \((gof)x, (fog)x)\) and show that \((gof)x \neq (fog)x\).

5

c) If \( T_n = n^2 \), when \( n \) is odd and \( T_n = 2n \), when \( n \) is even, then write down the first 5 terms.

5

Q.3  
a) Find 3 numbers in A.P. whose sum is 15 and their product is 105. Find the numbers.

5

b) In a class of 25 students, 12 students have taken economics; 8 have taken economics but not math's. Find:

i) The no. of students who have taken economics and maths.

ii) Those who have taken math's but not economics.

10

UNIT-II

Q.4  
a) Prove that:
\[ \sin^4 \theta + \cos^4 \theta = 1 - 2 \sin^2 \theta \cos^2 \theta. \]

6

b) A Natural no. is chosen at random from among the first 500. What is the probability that the number so chosen is divisible by 3 or 5?

9

Q.5  
a) Prove that:
\[ \log \frac{3 \times 5}{2^4} - \log \left( \frac{5}{9} \right)^{\frac{1}{3}} + \log \frac{32}{243} = \log 2. \]

7

b) Prove that:
\[ \frac{\sin \theta}{1 + \cos \theta} = \frac{1 + \cos \theta}{\sin \theta} = 2 \cot \theta. \]

8

UNIT-III

Q.6  
a) If \( \lim_{x \to 1} \frac{x^4 - 1}{x - 1} = \lim_{x \to k} \frac{x^3 - k^3}{x - k} \), find the value of \( k \).

5

b) If \( y = x + \sqrt{x^2 - 1} \), prove that \( (y - x) \frac{dy}{dx} = y \).

10

Q.7  
a) If \( y = (x^2 + 1)^{\frac{1}{2}} \); find \( \frac{dy}{dx} \).

10

b) Evaluate \( \lim_{x \to \infty} \left( \frac{2x^2 - 5x + 7}{3x^2 + 2x - 5} \right) \).

5

UNIT-IV

Q.8  
a) Define group with suitable example.

8

b) Evaluate \( \int \left( x + \frac{1}{x} \right)^3 \, dx \).

7

Q.9  
a) Solve the differential equation.
\[ \frac{dy}{dx} = \frac{y - x}{x + y} \]

10

b) Evaluate \( \int \frac{1}{x \log x} \, dx \).

5
End Semester Examination, Dec. 2013  
BCA -First Semester  
BUSINESS COMMUNICATION-I (BCA-103)

Time: 3 hrs  
Max Marks: 75  
No. of pages: 3

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.  
Q.1 is compulsory. All questions carry equal marks.

Q.1 Do as directed:
  a) Eyes, tongue, smile, ears (pick odd one out).
  b) The cat killed the mouse (convert to passive voice).
  c) Wealthy (what is the degree of comparison).
  d) Author (feminine gender).
  e) Calf (Plural form).
  f) Christmas comes once _________ year. (Fill an article)
  g) She _________ (go) to the park every Friday. (Correct form of tense)
  h) Ritu is tall _________ Kamal is the tallest. (Conjunction)
  i) k) The full form of PFA while writing email is _________.
  j) As acting: Theater :: Gambling::___?  

UNIT-I

Q.2 a) Fill in the blanks with abstract nouns formed from the words in brackets:
   i) We should always speak the ________. (True)
   ii) Books give us lot of ________. (Know)
   iii) The new job is a ________. (Promote) for him.
   iv) She refuses to face ________. (Real)
   v) In his ________ (excite), he dropped his glass.  

b) Rewrite the following sentences as guided in brackets:
   i) Avani was packing her school bag when I saw her? (Change to negative)
   ii) Someone was knocking at the door. (Change to question form)
   iii) The driver drove the car rashly (to past continuous)
   iv) He comes home by 4 O'clock (to past perfect)
   v) Where I (meet) them? (to simple future)  

c) Give the comparative and superlative form of
   i) bad  ii) simple  iii) tall  iv) happy  v) intelligent  

Q.3 a) Choose the correct conjunction from bracket:
   i) Ravi is tall _______ his brother. (as, so)
   ii) Death comes _______ to poor _______ to the rich. (neither, nor, both, and)
   iii) You can pay by cash _______ through credit card. (either, or, but)
   iv) I have not seen him _______ Friday (for, since)  

b) Choose the correct prepositions from the words given in brackets:
   Earlier when a child cried, a toy would be given i) _______ (to/for) him. If the
   child stopped crying, the purpose ii) _______ (for/of) the toy was solved. But
   today, toys have a very special role to play. They are important iii) _______
   (of/for) the development iv) _______ (for/of) a child's mental and physical
   activities. They are not meant only v) _______ (for/with) amusement.  

   c) Write the multiple meanings of the words by writing a sentence for each:
   i) Bear
   ii) Left
   iii) WHO

   d) Write the full form of
   i) NASA  ii) UNICEF  iii) WHO  

   P. T. O.
UNIT-II

Q.4  a) Given below are some conversations. Complete the dialogues by filling in the blanks with the most suitable options.
   A: Hello, (a) ________?
   B: I'm fine. Thanks. How about you? (b) ________.
   A: I haven't been keeping well.
   B: Why, what happened?
   A: (c) ________.
   B: Oh, I'm so sorry to hear that. This viral fever is a terrible thing. What did you doctor say?
   A: He said there's nothing to worry.
   B: (d) ________ medicines?
   A: Yes, indeed. He prescribed medicines to bring down the fever and to fix my bad throat. I'll be fine in five days, he said.
   B: I'm sure, you'll. Speedy recovery!

   Choose option from each multiple choice given below:
   a) i) Where were you?
      ii) Where are you?
      iii) How is you?
      iv) How are you?
   b) i) Where have you been?
      ii) Where has you been?
      iii) How you were?
      iv) Where are you?
   c) i) I am down with viral fever.
      ii) I was down with viral fever.
      iii) I will be down with viral fever.
      iv) I has been down in viral fever.
   d) i) Does he prescribed any?
      ii) Is he prescribing many?
      iii) Did he prescribe any?
      iv) Has he prescribe any?

   b) Write a conversation between you and your PCO when you came late for the 3rd consecutive day.

   Q.5  a) Complete the dialogue by filling with the most suitable options.
   Grandma: Have you, by any chance, (a) ________ anywhere? I can't find them!
   Jimmy: Your spectacles, granny? Well, (b) ________ head.
   Grandma: On really? Let me see. Well, you're right Jimmy. Here they are right on my head and (c) ________ all over the house.
   Jimmy: You're getting old, Granny. Old and forgetful.
   Grandma: Well, I am getting old but not forgetful. I remember it is your birthday today and look what I have brought for you!
   Jimmy: Wow, a pair of skates! How very thoughtful of you? I love you, granny.
   Grandma: I wish (d) ________.

   Choose option from each multiple choice given below:
   a) i) seen my spectacles lying.
      ii) saw my spectacles lying.
      iii) see my spectacles lied.
      iv) seen my spectacles lying.
   b) i) they sit on your.
      ii) they are sitting on your.
      iii) they sat on your.
      iv) it sits on your.
c) i) I have look for them.
    ii) I has been looking for them.
    iii) I have looked at them.
    iv) I have been looking for them

d) i) I will be learning to skate.
    ii) I am learning to skate.
    iii) I could learn to skate.
    iv) I could learn to skate.

b) Write a paragraph along with dialogues when you had gone for a pleasure trip from the college?

UNIT-III

Q.6 a) Have you set a goal in your life? Explain advantages of setting up a goal and then chasing it.
     b) People with good negotiation skills are always preferred for sales or marketing jobs. Explain.

Q.7 a) Who is a facilitator? Explain his/her role and skills required to carry out a meeting.
     b) Mention various benefits of effective listening. Explain the model of listening.

UNIT-IV

Q.8 a) Why does a company/organization need to conduct interviews? What are the different types of interviews?
     b) Write a cover letter along the your resume for the post of "director-IT" in IBM, Bangalore.

Q.9 a) How has the changing role of communication technology affected the workplace? Illustrate.
     b) What are the do's and don't that you have to follow when you go for an interview?
End Semester Examination, Dec. 2013
BCA - First Semester
PC SOFTWARE (BCA-104)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 a) Make the following as True or False:
   i) DOS does not include any command to control the mouse.
   ii) The capacity of recycle bin is limited.
   iii) While forwarding a received message we cannot alter the message.
   iv) The word contains only two toolbars standard and formatting.
   v) To close the word program, select quit command from file menu.
   vi) Del and backspace keys have the same function and effect in word.
   vii) By default excel left align data in cells.
   viii) To move a chart, select the chart and drag it with the mouse.
   ix) The various fonts can use in a worksheet depends on the fonts installed in windows.
   x) An excel workbook file can have more than one sheet. 1x10

b) Fill in the blanks:
   i) The fifth column of the worksheet is numbered as ________.
   ii) The area formed by intersection of row and column is called as ________.
   iii) The spell check feature can be initiated by pressing the function key ________.
   iv) Time New Roman is the name of a ________.
   v) The start button is located on ________. 1x5

UNIT-I

Q.2 What do you understand by internals and externals commands in DOS? Explain any five internal commands with proper syntax and suitable examples. 15

Q.3 What are the various components of a window screen? Give a brief description of each component. 15

UNIT-II

Q.4 What do you understand by effective text format of a word document? Describe the various ways for text formatting for a word document. 15

Q.5 Define MS-Word? Discuss the various areas of application of MS-Word. 15

UNIT-III

Q.6 What are the advantages of various of built-in functions in excel? Explain all the mathematical functions with proper syntax and suitable examples. 15

Q.7 Explain the following terms:
   a) Filters
   b) Cell address
   c) Goal seek 5x3

UNIT-IV

Q.8 a) Differentiate between manual slides and PowerPoint slides. 9
   b) What do you understand by slide transition? Discuss. 6

Q.9 Discuss the various views available in PowerPoint presentation slides. 15
End Semester Examination, Dec. 2013  
BCA -Second Semester  
DATA STRUCTURES (BCA-201)  

Time: 3 hrs  
Max Marks:  
No. of pages: 2  

Note: Attempt FIVE questions in all: taking at least ONE question from each Unit.  
Q.1 is compulsory. All questions carry equal marks.

Q.1  
a) On which principle does a stack work?  
i) FILO  
ii) LIFO  
iii) FIFO  
iv) None of the above.
b) Which of the following statements hold true for binary trees?  
i) The left sub tree of a node contains nodes with keys less than node's key.  
ii) The right sub tree of a node contains nodes with keys less than node's key.  
iii) Both of the above.  
iv) None of the above.
c) The time required in best case for search operation in binary tree is:  
i) O(n)  
ii) O(log n)  
iii) O(2n)  
iv) O(log 2n).
d) Which data structure utilizes the memory in the best way?  
i) Link list  
ii) Arrays  
iii) Both of the above  
iv) None of the above.
e) An empty list is one which has no:  
i) Nodes  
ii) Data  
iii) Address  
iv) Both i) and ii).  

f) What do you understand by the base address of an array?  
g) What do you mean by sparse matrix?  
h) Convert the expression \((a + b + c + (d - e))\) into its postfix form.  
i) What are the applications of a binary search tree?  
j) What do you mean by variable length records?  
k) How will you differentiate a graph from a tree?  

Q.2  
a) What do you understand by a linear queue? Write a program to implement linear queue. What are the various applications of a queue?  
b) Differentiate between the concepts LIFO and FIFO with an example.  

Q.3  
a) Explain different types of data structures in details.  
b) Write an algorithm to convert infix notation to its postfix notation.  

UNIT-I  

Q.4  
a) Is use of a link list is better than that of an array? Justify your answer with an example.  
b) Construct a binary search tree with following node values:  
\{34, 12, 78, 56, 32, 10, 18, 67, 35, 28\}  
c) What do you mean by a B tree?  

Q.5  
a) What do you understand by traversing of a tree? Explain different types of traversing schemes by taking an example.  
b) Write an algorithm to insert an element in a linear link list at following position:  
i) in the beginning  
ii) in the middle  
iii) in the end  

P. T. O.
UNIT-III

Q.6 Write an algorithm for insertion sort and sort:
(11, 34, 26, 78, 45, 10, 32, 48, 79 and 56) using insertion sort.  

Q.7 a) Sort the following number:
(23, 21, 67, 45, 32, 89, 67, 97, 54, 38, 65, 27 and 37) using heap sort.  
b) Write the concept of binary search in brief.  

UNIT-IV

Q.8 What do you mean by hashing? Explain any four hashing functions with an example.  

Q.9 Write short notes:  
a) Indirect sequential file organization  
b) Collision  
c) Constituents of a file  

P.T.O.
End Semester Examination, Dec. 2013
BCA - Second Semester
MATHEMATICAL FOUNDATIONS OF COMPUTER SCIENCE (BCA-202)
Time: 3 hrs
Max Marks: 75
No. of pages: 3

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 a) Hasse diagrams are drawn for:
   i) Partially ordered sets
   ii) Lattices
   iii) Boolean algebra
   iv) None of these
b) In an undirected graph, the number of nodes with odd degree must be:
   i) Zero
   ii) Odd
   iii) Prime
   iv) Even
c) Find the equation of the line parallel to the line whose equation is \( y = 6x + 7 \)
   and whose \( y \) intercept is 8.
   i) \( y = -6x + 8 \)
   ii) \( y = \frac{-1}{6}x + 8 \)
   iii) \( y = (1/6)x + 8 \)
   iv) \( y = 6x + 8 \)
d) A tour of \( G \) is a closed walk of graph \( G \) which includes every edge \( G \) at least once? A_________ tour of \( G \) is a tour which includes every edge of \( G \) exactly once?
   i) Hamiltonian
   ii) Planar
   iii) Isomorphic
   iv) Euler
e) Which of the following relations is not a function?
   
   ![Diagram]

   ![Diagram]

   ![Diagram]

   ![Diagram]
f) A graph with one vertex and no edges is ________________.
   i) Multi graph
   ii) Digraph
   iii) Isolated
   iv) Trivial graph
g) From the truth table below, determine the standard SOP expression:

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>A  B  C</td>
<td>X</td>
</tr>
<tr>
<td>0  0  0</td>
<td>0</td>
</tr>
<tr>
<td>0  0  1</td>
<td>1</td>
</tr>
<tr>
<td>0  1  0</td>
<td>0</td>
</tr>
<tr>
<td>0  1  1</td>
<td>1</td>
</tr>
<tr>
<td>1  0  0</td>
<td>0</td>
</tr>
<tr>
<td>1  0  1</td>
<td>1</td>
</tr>
<tr>
<td>1  1  0</td>
<td>0</td>
</tr>
<tr>
<td>1  1  1</td>
<td>1</td>
</tr>
</tbody>
</table>

   i) \( X = A'B'C + ABC + AB'C \)
   ii) \( X = ABC + ABC + ABC \)
   iii) \( X = A'B'C + A'B + ABC' \)
   iv) \( X = A'B'C + A'B + ABC' \)

P. T. O.
h) If \( f(x) = x^2 + 1 \) and \( g(x) = 2x + 1 \), then \( f(g(a)) = \):
   i) \( 4a^2 + 4a + 1 \)
   ii) \( 4a \)
   iii) \( 4a^2 + 4a + 2 \)
   iv) \( 4a^2 + 1 \)
   v) \( 2a^2 + 1 \)

i) Select the Boolean expression that is not equivalent to \( x \cdot x + x \cdot x' \):
   i) \( x \cdot (x + x') \)
   ii) \( (x + x') \cdot x \)
   iii) \( x' \)
   iv) \( x \)

j) Find the range of the relation \( f(x) = 2x^2 \), if the domain is \((-2, -1, 0, 3, 4)\).
   i) \((-8, 2, 0, 18, 32)\)
   ii) \((-8, -2, 0, 18, 32)\)
   iii) \((-4, -2, 0, 6, 8)\)

k) If \( R \) is a relation "less than" from \( A = \{1, 2, 3, 4\} \) to \( B = \{1, 3, 5\} \) then \( \text{RoR}^3 \) is ____________.

l) If \( f \) is a function for which the rule is \( f(x) = \frac{7}{8} x \), where \( x \) is real, the rule for the inverse function \( f^{-1} \) is ____________.

m) Define principle of duality.

n) \( M \) is the midpoint of \( \overline{AB} \). The coordinates of \( A \) are \((-2, 3)\) and the coordinates of \( M \) are \((1, 0)\). Find the coordinates of \( B \).

o) Define Lattice.

**UNIT-I**

Q.2  a) If \( A \) and \( B \) are sets, show that \( A \cap B = B^c \cap A^c \).
   b) Find the gcd of 7200 and 3132. Put the gcd in the form \( 7200p + 3132q \).

Q.3  a) How many people among 200000 people are born at the same time (hour, minute, second?)
   b) Using mathematical induction, show that \( 1 + 2 + 2^2 + \cdots + 2^{n-1} + 2^n = 2^{n+1} - 1 \).

**UNIT-II**

Q.4  a) Use a Karnaugh map to simplify Boolean expression:
   \[ F(A, B, C) = \sum (2, 4, 5, 6) \]
   b) Simplify the Boolean expressions \( z = (a' + a)(b' + c) + ab'c + ab(c' + c) \) using Boolean postulates and laws of Boolean algebra.

Q.5  a) Simplify the Boolean expressions \( z = d' b' c' + b' c + ab'c' + abc \) using Boolean postulates and laws of Boolean algebra.
   b) Is the lattice D72 a Boolean algebra? Give reason.

**UNIT-III**

Q.6  a) Without using Pythagoras theorem, show that \((4, 4), (3, 5)\) and \((-1, -1)\) are the vertices of a right angled triangle.
   b) Solve the recurrence relation \( a_n = 4a_{n-1} - 4a_{n-2} \), where \( a_0 = 1, a_1 = 1 \).

Q.7  a) If \((3, 5), (5, 3)\) and \((7, 7)\) are the vertices of a triangle, find the length of its median.
   b) Solve the recurrence relation \( f_n = f_{n-1} - f_{n-2} \) for \( n \geq 2 \), where \( f_0 = 1, f_1 = 1 \).

**UNIT-IV**

Q.8  a) Explain Kruskal’s algorithm. Find minimum spanning tree for the given graph using Kruskal’s method.

![Graph Image]
b) Explain the following terms with example:
   i) Graph isomorphism
   ii) Travelling salesman problem

Q.9  a) Explain various tree traversal techniques?
   b) Use Dijkstra's algorithm to find the shortest path from A to I.
End Semester Examination, Dec. 2013
BCA -Second Semester
PROGRAMMING IN VISUAL BASIC (BCA-203)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 a) A(n) ________ is an environment that contains all of the tools and features you need to create, run, and test your programs.
   b) Full form of GUI is ________
   c) A text box control is used to ________.
   d) The major difference between radio button and check box is ________
   e) The ________ property of a label determines if the label can be seen by the user.
   f) An array is a set of variables. Each individual variable is called ________.
   g) ________ is an example of container control.
   h) A project in VB is saved with the extension, ________.
   i) ________ is an example of inbuilt function in VB.
   j) In a dynamic array we can ________.
   k) There are ________ types of procedures in VB.
   l) Give two examples of decision making statements in VB.

UNIT-I

Q.2 What do you mean by event driven language? How is it different from procedural language?

Q.3 a) Explain the advantages and disadvantages of using VB.
   b) What is IDE? Give the various components of VB IDE.

UNIT-II

Q.4 a) What do you mean by UDT? Explain its use by taking an example in VB.
   b) What are the various looping statements available in VB? Explain them briefly.

Q.5 a) Give five date inbuilt functions available in VB with examples showing their use.
   b) Give various forms of ‘do’ statement available in VB.

UNIT-III

Q.6 Explain the difference between the following:
   a) List box and combo box
   b) Static and dynamic array
   c) Array and control array

Q.7 Explain the various ways through which you can format the ‘message box’ to make it more interactive.

UNIT-IV

Q.8 Explain all the steps required to connect a text box on a VB form to a field in a table in a database in MS-Access.

Q.9 Explain the process required to do the following:
   a) Adding code to menus
   b) Accessing data in data grid control
   c) Handling errors in VB
End Semester Examination, Dec. 2013
BCA -Second Semester
DIGITAL DESIGN AND COMPUTER ORGANISATION (BCA-204)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1
a) The simplified form of Boolean expression \((x + y'z)(z + y' + z')\) is:
   i) \(x'y + z\)
   ii) \(x + y'z\)
   iii) \(x\)
   iv) \(xy' + z'\)

b) Solving \(-11 + (-2)\) will yield which two's-complement answer:
   i) \(1110 1101\)
   ii) \(1111 1001\)
   iii) \(1111 0011\)
   iv) \(1110 1001\)

c) The output of an OR gate with three inputs, A, B, and C, is LOW when:
   i) A=0, B=0, C=0
   ii) A=0, B=0, C=1
   iii) A=0, B=1, C=1
   iv) All of the above

d) Convert the fractional binary number 0000.1010 to decimal.
   i) 0.625
   ii) 0.50
   iii) 0.55
   iv) 0.10

e) Assign the proper odd parity bit to the code 111001.
   i) \(1111011\)
   ii) \(1111001\)
   iii) \(0111111\)
   iv) \(0011111\)

f) Which statement below best describes a Karnaugh map?
   i) A Karnaugh map can be used to replace Boolean rules.
   ii) The Karnaugh map eliminates the need for using NAND and NOR gates.
   iii) Variable complements can be eliminated by using Karnaugh maps.
   iv) Karnaugh maps provide a cookbook approach to simplifying Boolean expressions.

g) Memory mapped I/O involves:
   i) transferring information between memory locations.
   ii) transferring information between registers and memory.
   iii) transferring information between the CPU and I/O devices in the same way as between the CPU and memory.
   iv) transferring information between I/O devices and memory.

h) The Hamming code is a method of:
   i) Error detection
   ii) Error correction
   iii) Error encapsulation
   iv) Both i) and ii)

i) How many address lines are needed to address each memory locations in a 2048 X 4 memory chip?
   i) 10
   ii) 11
   iii) 8
   iv) 12

j) Which of the following registers is used to keep track of address of the memory location where the next instruction is located?
   i) Memory address register
   ii) Memory data register
   iii) Instruction register
   iv) Program counter

k) Fastest small memory is:
   i) RAM
   ii) ROM
   iii) Cache
   iv) Virtual

P. T. O.
l) A basic instruction that can be interpreted by a computer generally has:
   i) An operand and an address
   ii) A decoder and an accumulator
   iii) Sequence register and decoder
   iv) None of these
m) Interrupts which are initiated by an I/O device are:
   i) Internal
   ii) External
   iii) Software
   iv) All of above
n) ________ is the sequence of operations performed by CPU in processing an
   instruction.
   i) Execute cycle
   ii) Fetch cycle
   iii) Decode
   iv) Instruction cycle
o) What is the BCD for a decimal number 559:
   i) [0101 0101 1001]  
   ii) [0101 0001 1010]  
   iii) [0101 1001 1001]  
   iv) [1001 1010 0101]  

**UNIT-I**

Q.2
a) Why 2's complement arithmetic is preferred over 1's complement arithmetic?
   Justify with a suitable example.
   b) Write short notes on:
      i) Excess 3 codes
      ii) Hamming code

**UNIT-II**

Q.3
a) What is a number system? State the utility of number system.
   b) Convert the following:
      i) (5) _10 = (________) _2 = (________) _8
      ii) (5) _16 = (AAB) _16

Q.4
Implement the following using NAND gates only:
   i) Y=A'B'C'+A'C
   ii) Z=XY+Y'Z+X'Z
   iii) F=ABC+AB'C'+AB'C

Q.5
a) Find the canonical forms for the Boolean expressions F=AB+A'B'+AC+A'C'.
   b) Simplify the following using KMaps:
      i) \( F(A,B,C) = \sum(0,2,3,5) \)
      ii) \( F(X,Y,Z) = \sum(1,2,4,5) \)

**UNIT-III**

Q.6
What are the various types of addressing modes available in a computer? Explain
with the help of a diagram.

Q.7
What are the types of instruction? Explain an instruction cycle.

**UNIT-IV**

Q.8
Explain the following modes of data transfer:
   a) Synchronous and Asynchronous
   b) Programmed I/O and Interrupt Initiated I/O

Q.9
What do you mean by direct memory access (DMA)? Why does DMA have priority
over the CPU when both are used for memory transfer? Explain a DMA
controller.
End Semester Examination, Dec. 2013
BCA - Second Semester
ENVIRONMENTAL STUDIES (BCA-206)

Time: 3 hrs
Max Marks: 50
Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1 a) Name the gas that causes damage to ozone layer.
b) Name a few fossil fuels.
c) What is soil erosion?
d) Who are the consumers in an ecosystem? Give two examples.
e) Which pyramid is always erect and why?
f) What is hotspot?
g) Name two National Parks in India.
h) World AIDS day is celebrated on______.
i) Development of botanical garden is what type of conservation:
   i) Ex-situ ii) A common
   iii) An easy iv) In-situ
j) Ex-situ conservation is carried out in:
   i) Sanctuary. ii) National park.
   iii) Biosphere reserve. iv) Zoo. 1x10

UNIT-I

Q.2 a) Define environmental studies. Write a short note on the Indian view of
   environment. 5
   b) Write briefly on any four alternative sources of energy. 5

Q.3 Explain renewable and non-renewable energy resources with examples. 10

UNIT-II

Q.4 What is meant by value of biodiversity? Explain different values of biodiversity. 10

Q.5 Define ecological pyramids and explain different types of ecological pyramids. 10

UNIT-III

Q.6 a) Write a note on watershed management. Write briefly Bhopal disaster. 6
   b) What are the major sources of soil pollution? What are the measures to be
      taken to prevent soil pollution? 4

Q.7 Write explanatory notes on:
   a) Global warming
   b) Acid rain 5x2

UNIT-IV

Q.8 Write notes on the following in relation to human population and environment.
   a) Woman child welfare 5x2
   b) Human rights

Q.9 Write briefly on:
   a) Population momentum
   b) Population profile 5x2
End Semester Examination, Dec. 2013
BCA - Third Semester
MATHMATICS-II (BCA-301)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blanks:
   a) $A^n$ is the notation of ____________________.
   b) A matrix having only one row is called _______________.
   c) A matrix of order $m \times n$ is said to be a rectangular matrix if _______________.
   d) Triangular matrices are of _______________ and types.
   e) The number of permutations of $(n)$ different things taken $(r)$ at a time is denoted by _______________.
   f) If $C(18,r) = C(18,r + 2)$; evaluate $C(r,5)$.
   g) What are the Binomial Coefficients?
   h) Give the expansion of $(1 + x)^n$.
   i) Write the formula to find the middle term if $(n)$ is odd.
   j) What is greatest lower bound of set?

UNIT-I

Q.2 a) Find the rank of the matrix $A$:
   
   $A = \begin{bmatrix} 2 & 1 & -1 \\ 0 & 3 & -2 \\ 2 & 4 & -3 \end{bmatrix}$.
   
   b) Verify Cayley – Hamilton theorem for the given matrix:
      
      $A = \begin{bmatrix} 1 & 0 & 2 \\ 0 & 2 & 1 \\ 2 & 0 & 3 \end{bmatrix}$.

Q.3 a) Find the middle terms in the expansion of $\left(2x - \frac{x^2}{4}\right)^6$.
   
   b) In how many ways can 4 ladies and 6 gentlemen be seated in a line, so that number two ladies may be together?

UNIT-II

Q.4 a) Find the least upper bound and the greatest lower bound if exist, of the following: $\left\{1 - \frac{1}{n}; n \in \mathbb{N}\right\}$.
   
   b) Define a countable set. Prove that the set of all rational numbers is countable.

Q.5 a) Discuss the concept of neighbourhood of a point and show that the set $(N)$ cannot be neighbourhood of any of its points.
   
   b) State the 'BOLZANO -- WEIERSTRASS' theorem on sets.

P. T. O.
UNIT-III

Q.6 a) What is a convergent sequence? Prove that every convergent sequence converges to a unique limit. 10
   b) By definition, show that \( \lim_{n \to \infty} \frac{n^2 + 1}{2n^2 + 3} = \frac{1}{2} \). 5

Q.7 a) State and prove the 'SECOND FORM' of comparison test of two series. 10
   b) Show that the series:
   \[ \sum_{n=1}^{\infty} \frac{n}{n+1} \]
   is divergent. 5

UNIT-IV

Q.8 a) Expand \( \cos(x) \) in power of \( x \) and hence find \( \cos(18^\circ) \) upto four decimal places. 7
   b) What is Taylor's infinite series? What are the working rule of the Taylor's theorem? 8

Q.9 a) If \( f(x) = x^3 - 6x^2 + 7 \), find the value of \( f\left(\frac{21}{20}\right) \) by the application of Taylor's series upto four places of decimals. 8
   b) Evaluate: \( \lim_{x \to 0} \frac{e^x - e^{-x} - 2 \log(1 + x)}{x \times \sin x} \). 7
End Semester Examination, Dec. 2013
BCA - Third Semester
OBJECT ORIENTED DESIGN AND PROGRAMMING (BCA-302)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Multiple choice questions:
   a) To hide a data member from the program, you must declare the data member
      in the _______ section of the class.
      i) Concealed      ii) Confidential         iii) Hidden
      iv) Private       v) Restricted
   b) Identify the user defined data types from the following:
      i) Enumeration    ii) Classes
      iii) Both i) and ii)            iv) Int
   c) A function that is called automatically each time an object is destroyed is a:
      i) Destructor     ii) Destroyer
      iii) Remover      iv) Terminator
   d) What is meant by polymorphism?
      i) Class having many forms ii) Class having only single form
      iii) Class having two forms iv) None of the above
   e) Which of the following is user defined data type?
      i) Public          ii) Private
      iii) Class          iv) i) and ii) both
   f) An array element is accessed using:
      i) a first in first out approach ii) the dot operator
      iii) a member name               iv) an index number
   g) Which of the following statement is correct with respect to the use of friend
      keyword inside a class?
      i) a private data member can be declared as a friend
      ii) a class may be declared as a friend
      iii) An object may be declared as a friend
      iv) We can use friend keyword as a class name
   h) Which of the following term is used for a function defined inside a class?
      i) Member variable    ii) Member function
      iii) Class function   iv) Classic function
   i) The content of two pointers that point to adjacent of type float differ by:
      i) One byte         ii) Two bytes
      iii) Three bytes    iv) Four bytes
   j) Which keyword is used to handle the exception?
      i) “Try”             ii) “Throw”
      iii) “Catch”         iv) None of the above

UNIT-I

Q.2 Compare and contrast procedure oriented programming language with object oriented programming language. 15

Q.3 Distinguish between the following terms:
   a) Objects and classes
   b) Data abstraction and data encapsulation
   c) Inheritance and polymorphism 5x3

P. T. O.
UNIT-II
Q.4 a) List some of the special properties of friend function.
    b) What are the characteristics of static data members and member functions?
       Explain.
Q.5 a) Define manipulators and also mention the manipulators that are used in C++.
    b) What is function overloading?

UNIT-III
Q.6 Explain explicit constructors, parameterized constructors, and multiple constructors
    with suitable examples.
Q.7 Define a class string. Use overload== operator to compare two strings.

UNIT-IV
Q.8 What are the different forms of inheritance supported by C++?
Q.9 a) What is a virtual function? Write rules for virtual function. Explain with an
    example.
    b) List out the keywords used for exception handling in C++.
End Semester Examination, Dec. 2013  
BCA -Third Semester  
DATABASE SYSTEM (BCA-303)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1  
a) A ________ is a key that identifies each entity uniquely. Its functionality determines all of the entity’s attributes.  
i) Super key  
ii) Primary key  
iii) Foreign key  
iv) Common key  
b) Selection operator yields:  
i) Horizontal subset  
ii) Vertical subset  
iii) Joining of tables  
iv) None  
c) Self join:  
i) Joins two copies of same table  
ii) Joins two copies of different tables  
iii) Joins multiple copies of tables  
iv) Joins any copies of the tables  
d) In a relational model, the number of rows in a table is termed as:  
i) Cardinality  
ii) Degree  
iii) Domain  
iv) Range  
e) The network model is based on ________ structure.  
i) Graph  
ii) Linked list  
iii) Tree  
iv) None  
f) Normalization is used:  
i) to remove insertion and deletion anomalies  
ii) to replace data  
iii) to add new data  
iv) to introduce dependencies  
g) Security measures can be taken at:  
i) Physical level  
ii) Human level  
iii) Operating system level  
iv) All of the above  
h) RAID is used for:  
i) Unstable storage  
ii) Stable storage  
iii) Redundancy  
iv) Log based storage  
i) A distributed DBMS is characterized by number and replication of fragments.  
j) A database schema refers to:  
i) Information at particular moment  
ii) Overall design of database  
iii) Query language  
iv) Validation issues

UNIT-I

Q.2 Draw the E-R diagram for hotel management system. Clearly indicate the entities and relationship between them.  

Q.3  
a) Explain with the help of an example that why navigation is simpler in the relational data model than in any other model.  
b) Discuss the main responsibilities of DBA.

P. T. O.
UNIT-II

Q.4 Discuss any ten SQL functions with the syntax and give examples using the SQL functions. 15

Q.5 a) Which of the relation operations are associative and commutative in nature? Justify your answer. 10
      b) Discuss the concept of domain. How can an attribute define a domain? 5

UNIT-III

Q.6 a) What are the anomalies occurred due to unnormalized data? Discuss it through an example. 10
      b) Discuss the transitive dependency with the help of an example. 5

Q.7 "Non loss decomposition is an aid to relational databases". Is it true? If yes, then justify it through an example. 15

UNIT-IV

Q.8 What do you mean by security of a database? Explain the various ways of database security and recovery procedures. 15

Q.9 What is a transaction? What are the properties of a transaction? How is transaction recovered when a system failure occurs? 15
End Semester Examination, Dec. 2013
BCA -Third Semester
BUSINESS ORGANIZATION AND PRINCIPLES OF MANAGEMENT
(BCA-304)

Time: 3 hrs  Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blanks:
   a) Industry, commerce and trade are ________ to each other.
   b) Business organization refers to the assembling of various ________ of business.
   c) The formal organization is ________.
   d) Delegation is distribution of ________.
   e) ________ level of management includes foremen and supervisor.

State the following (True or False):
   f) Induction is not required for human resource in an organization.
   g) Management is a science as well as an art.
   h) Distribution of authority cannot be design or plan.
   i) What is a genetic industry?
   j) Enlist forms of organization's structures. 1½x10

UNIT-I

Q.2 a) What do you understand by the term business? Describe its various components. 7
   b) Define business. How does it differ from profession and employment? 8

Q.3 Write notes on the following:
   a) Social responsibility of business. 7
   b) Different types of objectives of a business. 8

UNIT-II

Q.4 a) What are the basic characteristics of formal and informal organization? 7
   b) The term organization is used in different ways and therefore it is difficult to derive its exact meaning". Elaborate this statement. 8

Q.5 Write short notes on the following:
   a) Delegation of authority. 7
   b) Matrix organization. 8

UNIT-III

Q.6 a) Can management be treated as a process? Give reasons for your answer. 7
   b) Describe the role of a manager in an organization. 8

Q.7 Assess the various principles of management given by Henry Fayol to the management thoughts. 15

UNIT-IV

Q.8 Differentiate between the following:
   a) off-the-job training and on-the-job training. 7
   b) Training and development. 8

Q.9 Define 'human resource management'. Briefly describe the various components of human resource management. 15
End Semester Examination, Dec. 2013
BCA - Fourth Semester
E-COMMERCE (BCA-401)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blanks:
   a) Web hosting often includes ________ registration.
   b) ________ is simply defined as e-commerce between businesses to customers.
   c) ________ provides for electronic payments and collections.
   d) Authorization is the process of determining what type of activities are ________.
   e) The internet is a global ________ of computer networks.
   f) Competitive analysis explains in detail the ________ and ________ of competitors.
   g) Cyber stalking refers to the activity of users sending ________ e-mail to other users.
   h) The ________ is used to describe a network of independent firms that join together, often temporarily, to produce a service or product.
   i) ________ analysis is a framework for industry analysis and business strategy.
   j) The volume of ________ transactions is much higher than the volume of B2C transactions. 1x10
   k) Expands the following:
      i) EDI ii) HTTP iii) SSL iv) EFT v) ACH. 1x5

   UNIT-I

Q.2 a) Do you think the advantages outweigh the limitations of e-commerce and discuss various advantages and limitations of e-commerce? 8
    b) Describe a competitive strategy. Explain the Porter’s model of competitive strategy. 7

Q.3 Distinguish between:
   a) E-commerce and traditional commerce.
   b) Business strategy and competitive strategy.
   c) Intranet and Internet. 5x3

    UNIT-II

Q.4 What are the nuts and bolts of EDI? What are the requirements of EDI standard in e-commerce? 15

Q.5 Write short notes on the following:
   a) Internet based auctions.
   b) Characteristics of B2B EC.
   c) Managerial issues in B2B. 5x3

    UNIT-III

Q.6 Briefly explain the requirements for Internet-based payments. Also explain the unique features and uses of smart cards. 15

Q.7 Elaborate on some of the ethical issues surrounding the Internet. 15

    UNIT-IV

Q.8 a) Explain various hardware and software requirements for connectivity of a computer with internet. 7
    b) Distinguish between:
       i) Routers and hubs. ii) UDP and TCP. 4x2

Q.9 Write short notes on the following:
   a) Global electronic commerce.
   b) Managerial issues in digital economy.
   c) Electronic commerce in small companies. 5x3
End Semester Examination, Dec. 2013
BCA -Fourth Semester
OPERATING SYSTEMS (BCA-402)

Time: 3 hrs  Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1  a) CPU switching from one process to another requires saving the state of the current process and loading the latest state of the next process.
   iii) Operating system.  iv) None of the above.
   b) The time taken by the dispatcher to stop one process and start another running is known as ________________.
   i) Dispatch latency.  ii) Latency.
   iii) Scheduler.  iv) Critical.
   c) __________ algorithm requires each process to make in advance the maximum number of resources of each type that it may need.
   i) Deadlock avoidance.  ii) Deadlock.
   iii) Banker's.  iv) None of the above.
   d) An address generated by the CPU is referred to as a ____________.
   i) Logical address.  ii) Physical address.
   iii) Virtual address.  iv) Conceptual address.
   e) Which is not the state of the process?
   i) Blocked.  ii) Running.
   iii) Ready.  iv) Privileged.
   f) A tree structured file directory system:
   i) Allows easy storage and retrieval of file names.
   ii) Is a much debated unnecessary features.
   iii) Is not essential when we have millions of files.
   iv) None of the above.
   g) The scheduling in which CPU is allocated to the process with least CPU burst time is called.
   i) Priority scheduling.  ii) Shortest job first scheduling.
   iii) Round robin scheduling.  iv) Multilevel queue scheduling.
   h) The 'turn-around' time of a user job is the ___
   i) time since its submission to the time its results become available.
   ii) time duration for which the CPU is allot to the job.
   iii) Total time taken to execute the job.
   iv) Time taken for the job to move from assembly phase to completion phase.
   i) What are the two types of semaphores?
   i) Digital semaphores and binary semaphores.
   ii) Analog semaphores and octal semaphores.
   iii) Counting semaphores and binary semaphores.
   iv) Critical semaphores and system semaphores.
   j) What does Belady's Anomaly relate to?
   k) A critical section is a program segment.
   i) Which should run in a certain specified amount of time?
   ii) Which avoids deadlocks?
   iii) Where shared resources are accessed?
   iv) Which must be enclosed by a pair of semaphore operations, P and V.
   l) Copying a process from memory to disk to allow space for other processes is called.
   i) Swapping.  ii) Deadlock.
   iii) Demand paging.  iv) Page fault.

P. T. O.
m) _____ scheduler selects the jobs from the pool of jobs and loads into the ready queue.
   i) Long term.       ii) Short term.
   iii) Medium term.   iv) None of the above.

n) MBR stands for
   i) Memory buffer register.       ii) Memory bounded register.
   iii) Memory buffer register.     iv) None of these.

o) The necessary conditions needed before deadlock can occur is:
   i) No mutual exclusion, hold and wait, preemption, circular wait.
   ii) Mutual exclusion, hold and wait, preemption, circular wait.
   iii) Mutual exclusion, hold and wait, no preemption, circular wait.
   iv) Mutual exclusion, hold and wait, preemption, no circular wait.

Q.2 a) Give example of at least two applications which in your opinion are real time applications. Support your example with appropriate rationale.
    b) What is an operating system? What are the functions of an operating system?

Q.3 a) Write a note on parallel computing system.
b) Explain the features of a time-sharing system.
c) What is a system call? Give example of two system calls.

Q.4 a) What is a process? Draw various states of a process with the help of a process state transition diagram.
b) State and explain various scheduling criteria. Explain the scheduling algorithms by giving an example of shortest job first scheduling.

Q.5 Write and illustrate the Banker's algorithm for the following snapshot.

<table>
<thead>
<tr>
<th>Allocation</th>
<th>Max</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>ABC</td>
<td>ABC</td>
</tr>
<tr>
<td>P_0</td>
<td>010</td>
<td>753</td>
</tr>
<tr>
<td>P_1</td>
<td>200</td>
<td>322</td>
</tr>
<tr>
<td>P_2</td>
<td>302</td>
<td>902</td>
</tr>
<tr>
<td>P_3</td>
<td>211</td>
<td>222</td>
</tr>
<tr>
<td>P_4</td>
<td>002</td>
<td>433</td>
</tr>
</tbody>
</table>

Q.6 Consider the following page reference string:
   1,2,3,4,1,2,5,1,2,3,4,5 for a memory with three frames.
   How many page faults would occur for the following replacement algorithms?
   ➢ LRU replacement.
   ➢ FIFO replacement.
   ➢ Optimal replacement.

Q.7 Discuss the following:
   a) Swapping.
b) Segmentation.
c) Virtual memory.

Q.8 What is disk storage? Explain seek latency, rotational latency and transfer latency.

Q.9 Suppose the head of moving-head disk with 200 tracks, numbered 0 to 199 is currently serving a request at track 143 and has just finished a request at track 125. The queue of requests is kept in the FIFO order 86, 147, 91, 177, 94, 150, 100, 175, 130, and 130.
   What is total head movement to satisfy these requests for the following disk scheduling algorithms?
   a) FCFS
   b) SSTF.
End Semester Examination, Dec. 2013
BCA -Fourth Semester
WEB DESIGNING AND INTERNET APPLICATIONS (BCA-403)

Q.1 a) Each list item in an ordered or unordered list has which tag?
   i) List tag
   ii) Li tag
   iii) Ul tag
   iv) Ol tag
b) What is the <br> tag for?
   i) Space
   ii) Paragraph break
   iii) Line break
   iv) Word break
c) What is the attribute for <image> tag?
   i) pt
   ii) Url
   iii) Path
   iv) Src
d) Is .htm and .html the same?
   i) No
   ii) Yes
e) Can I play audios in HTML?
   i) No
   ii) Yes
f) How can we resize the image?
   i) Using resize attribute
   ii) Using height and width
   iii) Using size attribute
   iv) Using rs attribute
g) A web page is located using a:
   i) Universal record linking
   ii) Uniform resource locator
   iii) Universal record locator
   iv) Uniformly reachable links
h)bgcolor is an attribute of body tag:
   i) True
   ii) False
i) The title of web page is usually written within ______ tags.
   i) <Title>
   ii) <Heading>
   iii) <Head>
   iv) <Body>
j) Web is a collection of:
   i) Websites
   ii) Images
   iii) Applets
   iv) Documents

Q.2 Write short notes on the following:
   i) Usenet
   ii) Email
   iii) Gopher

Q.3 a) What is World Wide Web? Is it different from internet?
   b) What is domain name system? Discuss how DNS is used to represent information of online services.
UNIT-II

Q.4  a) Explain the basic structure of HTML document with an example.  
     b) What are hyperlinks and why they are used? What are different types of  
        hyperlinks? How can hyperlinks are created in an HTML document?  

Q.5  a) Explain how tables can be inserted and formatted in HTML documents.  
     b) Differentiate between HTML and DHTML.  

UNIT-III

Q.6  a) Design a registration form in HTML that shows personal details, area of  
     interest, year of passing, marks of various subjects and total marks as result.  
     b) Explain some text formatting tags that can be used in HTML.  

Q.7  a) Explain the following:  
     i) Address  
     ii) CITE  
     iii) HR  
     iv) nbsp  
     v) BR  
     b) Differentiate <FRAME>, <IFRAME> and <NO FRAME>.  

UNIT-IV

Q.8  What are various properties of CSS? Differentiate external, internal and inline  
     cascading style-sheets.  

Q.9  What are objects and properties in JavaScript? Explain objects with at least two  
     methods and two properties.
End Semester Examination, Dec. 2013  
BCA -Fourth Semester  
BUSINESS COMMUNICATION-II (BCA-404)  

Time: 3 hrs  
Max Marks: 75  
No. of pages: 3  

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.  
Q.1 is compulsory. All questions carry equal marks.

Q.1 Choose the correct option:
   a) Group communication can best be defined as:
      i) The relationship level of communication.
      ii) The building of relationships using computers and the Internet.
      iii) Communication designed to inform or persuade audience members.
      iv) Communication with the self.
      v) None of the above.
   b) Public communication can best be defined as:
      i) Communication designed to inform or persuade audience members.
      ii) The relationship level of communication.
      iii) Interactions with a limited number of persons.
      iv) Communication with yourself.
      v) None of the above.
   c) Feedback, one of the more important parts of the communication process, comes in many varieties. Of those listed below, which is a behavior enhancing response?
      i) Positive feedback.
      ii) Negative feedback.
      iii) Internal feedback.
      iv) External feedback.
   d) Which of the following is an example of an internal document?
      i) A quotation.
      ii) A job description.
      iii) A claims adjustment.
      iv) A policy bulletin.
   e) As more people compete for fewer jobs, the ones who build successful careers are:
      i) Those who communicate well with customers and colleagues.
      ii) Those who arrive for appointment on time.
      iii) Those who are adept at multitasking.
      iv) Those who adapt to change.
   f) Better writing skills helps you to do all of the following EXCEPT:
      i) Increase disagreements.
      ii) Make your efforts more effective.
      iii) Communicate your points more clearly.
      iv) Save time.
   g) An Example of external communication would be:
      i) Talking on a cell phone to a vendor.
      ii) An e-mail with an attachment sent from a sales person to his manager.
      iii) A memo from a manager at the corporate office to a manager at a retail location in another province.
      iv) A teleconference among company sales representative in several locations, led by a regional manager.
   h) All of the following are criteria for effective business writing EXCEPT:
      i) The message is clear.
      ii) The message is accurate.
      iii) The message is what the reader wants to hear.
      iv) The message builds goodwill.

P. T. O.
i) Some students think that they will never have to write on the job for all of the following reasons EXCEPT:
   i) Secretaries will do all writing required in my job.
   ii) I will use the phone for all of my verbal communication needs.
   iii) I am being hired as an accountant, not a writer.
   iv) Nobody pays any attention to written communication anymore.

j) Which of the following is NOT an example of nonverbal communication?
   i) Pictures.
   iii) Company logos.
   iv) An email message from a CEO to shareholders.

k) Which of the following is not an example of one way communication?
   i) Face to face discussion.
   ii) Public Announcement System.
   iii) Notice on a board.
   iv) "No Smoking" notice on a table.

l) Which one of the following is an important tip to become a better listener?
   i) Don't jump to conclusion.
   ii) Keep a closed mind.
   iii) Talk while listening.
   iv) Don't try to give feedback.

m) Which of the following is not a way to help generate ideas when writing?
   i) Brainstorming.
   ii) Free writing.
   iii) Guessing.
   iv) Clustering.

n) Stammer and stutter such as 'um' and 'er' are called.
   i) Vocalic.
   ii) Fillers.
   iii) Audio pauses.
   iv) Pauses.

o) The process of choosing symbols to carry the message you send is called.
   i) Interpreting.
   ii) Channeling.
   iii) Decoding.
   iv) Encoding.

Q.2 Define Emotional Intelligence. What happens when we manage our emotions? 15

Q.3 How does The Group help in effective decision-Making Process? 15

UNIT-II

Q.4 Why is optimism important? How does it help in coping with life's difficulties? 15

Q.5 Solve:
   a) A student buys a science textbook for $18.00, math textbook for $14.50, and a dictionary for $9.95. What is the total cost of the books?
      i) $27.95
      ii) $42.45
      iii) $41.95
      iv) $38.50
   b) Jack loaned Bob $1,500 at an annual interest rate of 7%. After one year, how much will Bob owe Jack?
      i) $105
      ii) $1,500
      iii) $1,605
      iv) $1,507
   c) Alfred buys an old scooter for Rs. 4,700 and spends Rs. 800 on its repairs. If he sells the scooter for Rs. 5,800, his gain % is:
      i) 10%
      ii) 6%
      iii) 10%
      iv) 12%
   d) If 1/3 of a 12-foot board is sawed off, how much is left?
      i) 4 feet.
      ii) 3 feet.
      iii) 8 feet.
      iv) 6 feet.
   e) If \( x - 2 = 4 \), then \( x \) equals.
      i) 2
      ii) 4
      iii) 2
      iv) 1
f) What are the factors of 12?
   i) 1 and 12 only.
   ii) 2 and 3 only.
   iii) 2, 3, 4, and 6.
   iv) 3 and 4 only.

  g) The cube roots of 64 is:
   i) 3
   ii) 9
   iii) 2
   iv) 4
   h) The reciprocal of 1/6 is:
   i) 1
   ii) 3
   iii) 6
   iv) 1/3
   i) If 0.05 ÷ x = 1, then x =
   ii) 0.5
   iii) 50.0
   iv) 1/3
j) The answer is always infinity when a no. is divided by ________.

UNIT-III

Q.6 a) Mention the various factors / aspects on which the presentation depends. How
does the kind of audience affects the presentation.
 b) What measures should be taken to overcome the stage fright?

Q.7 Goal set is goal half achieved. Justify why goal setting is very important in life.

UNIT-IV

Q.8 a) Mention various documents that need to be carried while going for an
interview.
 b) Mention the do’s and don’ts while appearing for an interview.

Q.9 In an interview your overall behavior, your body language and attitude play an
important role, that is, more than your subject knowledge. Do you agree? Justify.
End Semester Examination, Dec. 2013
BCA – Fifth Semester
INFORMATION AND COMMUNICATION TECHNOLOGY (BCA-501)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 State True or False:
   a) EFTPOS and POS are related to manufacturing.
   b) ICT helps in getting employment at good salaries and higher designations.
   c) A bar code is a series of black lines with white lines in between.
   d) ICT is concerned with the storage and transmission of data via electronic media.
   e) Pilgrims is used to copy the content of the user.
   f) Tele-working means 
   g) The process of electronically filing income tax is called 
   h) The digital divide is a 
   i) A software is a that directs the hardware.
   j) EDI defines the paradigm of 

UNIT-I

Q.2 a) Is information and communication technology a boon or a bane? Discuss. 8
b) Explain bluetooth technology. Compare bluetooth with Wi-fi. 7

Q.3 Write short notes on the following:
   a) HTTP
   b) FTP
   c) URL

UNIT-II

Q.4 Explain the concept of e-mail. State the requirement of having an email. State the advantages and disadvantages of email as well. List down some email supporting websites and the software’s. 15

Q.5 a) What do you understand by web 2.0? What is the need of this concept? 10
b) List any five ways by which we can secure our systems against computer virus? 5

UNIT-III

Q.6 A network service may be improved through the use of network audit software.
   a) Explain why network audit is useful?
   b) Give four data items that may be recorded by the network audit software. 15

Q.7 Write short notes on:
   a) Data protection act
   b) Phishing
   c) Software privacy

UNIT-IV

Q.8 Mention at least five devices that uses ICT in hospitals. Explain the role of ICT in hospital industry and the revolution it brings in the field of medicine. 15

Q.9 Write the use of following in relation to ICT:
   a) Burglar alarms
   b) Microwaves
   c) Simulators
End Semester Examination, Dec. 2013
BCA - Fifth Semester
SOFTWARE ENGINEERING (BCA-502)

Time: 3 hrs
Max Marks: 75

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1
Choose the correct option:

a) Infrastructure software are covered under:
   i) Generic products
   ii) Customised products
   iii) Generic and customised products
   iv) None of the above

b) UML stands for:
   i) Uniform modeling language
   ii) Unified modeling language
   iii) Unit modeling language
   iv) Universal modeling language

c) Spiral model was developed by:
   i) Bev Littlewood
   ii) Berry Boehm
   iii) Roger Pressman
   iv) Victor Basili

d) Which is not a software life cycle model?
   i) Water fall model
   ii) Spiral model
   iii) Prototyping model
   iv) Capability maturity model

e) SRS documents is for:
   i) What system?
   ii) How to design the system?
   iii) Costing and scheduling of a system
   iv) System’s requirement

f) Requirements review process is carried out to:
   i) Spend time in requirements gathering.
   ii) Improve the quality of SRS
   iii) Document and requirements
   iv) None of the above

g) Function point can be calculated by:
   i) UFP*CAF
   ii) UFP* FAC
   iii) UFP* COST
   iv) UFP * Productivity

h) The worst type of coupling is:
   i) Content coupling
   ii) Common coupling
   iii) Stamp coupling
   iv) Data coupling

i) A system that does not interact with external environment is called:
   i) Closed system
   ii) Logical system
   iii) Open system
   iv) Hierarchical system

j) Functional testing is known as:
   i) Structural testing
   ii) Behaviour testing
   iii) Regression testing
   iv) None of the above

UNIT-I

Q.2
a) Define the term software engineering, also discuss how software differs from a program and write down the characteristics of software. 9
b) Distinguish between generic and customized software products. 6

Q.3
Compare the waterfall model and spiral model of software development with their merits and demerits. 15

P. T. O.
UNIT-II

Q.4  a) For a program with the number of unique operators = 28, number of unique operands = 46, total occurrence of operators = 56 and program volume = 542.62, total occurrence of operators = 32. Compute the following:
   i) Vocabulary of a program
   ii) Length of a program
   iii) Difficulty of a program
   iv) Program effort
   v) Program level
b) Discuss the area of applications of software metrics. 10

Q.5  a) What do you understand with the term requirements elicitation? Discuss any two techniques in detail. 10
b) What are the main features of work breakdown structure? Explain. 5

UNIT-III

Q.6  Differentiate between logical design and physical design. Explain all types of coupling and what types of problems arise if two modules have high coupling? 15

Q.7  a) Discuss the detailed COCOMO model and its development phases. 7
b) Define the terms:
   i) Objects
   ii) Abstraction
   iii) Class
   iv) Inheritance 2x4

UNIT-IV

Q.8  Explain the following:
   a) Test case design and test suite
   b) Verification and validation
   c) Alpha and beta testing 5x3

Q.9  What is software testing? Discuss the role of software testing during software life cycle and why is it so difficult? 15
End Semester Examination, Dec 2013
BCA -Fifth Semester
COMPUTER GRAPHICS (BCA-503)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 a) User can make any change on image with the use of:
   i) Non-Interactive graphics.
   ii) Interactive graphics.
   iii) Both i) and ii).
   b) _____ ink is used in laser printer.
      i) Wet.
      ii) Dry.
      iii) Both.
      iv) None.
   c) LCD stands for:
      i) Liquid core display.
      ii) Liquid crystal display.
      iii) Liquid crystal diagram.
      iv) None of these.
   d) A many sided figure is termed as:
      i) Square
      ii) Polygon
      iii) Rectangle
      iv) None.
   e) The transformation that produce a parallel mirror image of an object are called:
      i) Reflection.
      ii) Shear.
      iii) Rotation.
      iv) Scaling.
   f) How many types of projection are?
      i) 1.
      ii) 2.
      iii) 3.
      iv) 4.
   g) Sequentially scanning of screen is done in:
      i) Random scan.
      ii) Raster scan.
      iii) Both.
      iv) None.
   h) To initialize the graphics _______ function are used:
      i) Initgraph ()
      ii) Getdrawname ()
      iii) Initgraphics ()
      iv) None of the above
   i) Graphics.h is known as:
      i) Header file.
      ii) Library file.
      iii) Both of the above.
      iv) None of the above.
   j) The transformation in which the size of an object can be modified in x-direction, y-direction and z-direction?
      i) Translation
      ii) Scaling
      iii) Rotation
      iv) All of these

UNIT-I

     b) What are the applications of Computer Graphics? How graphics is helping us in educating people.

Q.3 a) What are the primary components of CRT?
     b) Explain the difference between random scan and raster scan devices.

UNIT-II

P.T.O
Q.4 What do you mean by transformation? Find the new co-ordinate of triangle A(0,0), B(1,1) and C(5,2) after rotating it with an angle of 90°.

Q.5 What are the steps required to plot a line using Bresenhem's line drawing algorithm. Give an example.

UNIT-III

Q.6 What do you mean by projection? Explain in details.

Q.7 a) What do you understand by viewing pipeline? Explain.
    b) State the difference between 2-D and 3-D plane.

UNIT-IV

Q.8 a) What do you mean by compiler. Explain in details.
    b) Explain any five graphics function in details.

Q.9 Write a program in C language to draw an image shown below:
End Semester Examination, Dec. 2013  
BCA - Fifth Semester  
NUMERICAL ANALYSIS AND STATISTICS (BCA-504)

Time: 3 hrs  
Max Marks: 75

No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.  
Q.1 is compulsory. All questions carry equal marks.

Q.1  
a) Name types of errors in numerical computations.  
b) Define order of an iteration method.  
c) State Runge-Kutta method of order 4 for solving \( \frac{dy}{dx} = f(x, y) \).  
d) State Lagrange's interpolation formula.  
e) Establish relation between forward difference operator and the shifting operator.  
f) Write down normal equations for least square line \( y = a + bx \) for \( n \) pairs of values \((x_i, y_i)\).  
g) Construct divided difference table for the data:  

<table>
<thead>
<tr>
<th>( x )</th>
<th>-1</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>( f(x) )</td>
<td>-21</td>
<td>15</td>
<td>12</td>
<td>3</td>
</tr>
</tbody>
</table>

h) Write down an expression for composite trapezoidal rule for numerical integration.  
i) Define \( r \)-th moment about the mean \( \bar{x} \) and show that \( \mu_r = 0 \).  
j) What are mean and standard deviation of a binomial distribution?  

UNIT-I  

Q.2  
a) Derive general formula for errors.  
b) Find root of \( x^3 - 5x + 3 = 0 \) using Newton-Raphson method if the root lies between 0 and 1.  

Q.3  
a) Use Runge-Kutta method of order four to solve:  
\[ \frac{dy}{dx} = x + y, \quad y(0) = 1 \text{ for } x = 0.1. \]  
b) Find \( \sqrt{13} \) using iteration method and correct up to four decimal places.  

UNIT-II  

Q.4  
a) Using Lagrange's interpolation formula, determine the interpolating polynomial for \((0,2),(1,3),(2,12)\) and \((3,147)\).  
b) Using Newton's forward difference formula, find \( f(0.5) \) for the data:  

<table>
<thead>
<tr>
<th>( x )</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>( y )</td>
<td>-3</td>
<td>3</td>
<td>11</td>
<td>27</td>
<td>57</td>
<td>107</td>
</tr>
</tbody>
</table>

Where \( y = f(x) \).

Q.5  
a) Using divided difference formula, find \( f(3) \) for the data:  

<table>
<thead>
<tr>
<th>( x )</th>
<th>-1</th>
<th>0</th>
<th>3</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>( f(x) )</td>
<td>3</td>
<td>6</td>
<td>39</td>
<td>822</td>
<td>1611</td>
</tr>
</tbody>
</table>

b) Establish Newton's backward difference formula for interpolation.  
P.T.O.
UNIT-III

Q.6  a) Fit a least square line to the following pairs of points:
(2, 2), (5, 4), (6, 6), (9, 9) and (11, 10).

b) Find \( f'(0) \) from the following table:

<table>
<thead>
<tr>
<th>( x )</th>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>( f(x) )</td>
<td>-33</td>
<td>-12</td>
<td>-3</td>
<td>0</td>
<td>3</td>
<td>12</td>
<td>33</td>
</tr>
</tbody>
</table>

Q.7  a) Calculate: \( \int_1^2 \frac{dx}{x} \) using Simpson's rule with \( h=0.25 \).

b) Evaluate: \( \int_0^1 \frac{dx}{1+x^2} \) using the trapezoidal rule with \( h=0.25 \).

UNIT-IV

Q.8  a) A random variable \( x \) has the following probability function:

<table>
<thead>
<tr>
<th>( x )</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>( p(x) )</td>
<td>0.1</td>
<td>( k )</td>
<td>0.2</td>
<td>( 2k )</td>
<td>0.3</td>
<td>( k )</td>
</tr>
</tbody>
</table>

Find the value of \( k \) and calculate the mean and variance.

b) Out of 800 families having 5 children each, how many families would be expected to have three boys and two girls?

Q.9  a) Fit a Poisson distribution to the following data:

<table>
<thead>
<tr>
<th>( x )</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>( f )</td>
<td>122</td>
<td>60</td>
<td>15</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

If \( e^{-\lambda} = 0.1254 \), \( e^{-5} = 0.6065 \).

b) In a locality, 100 persons were randomly selected and asked about their academic qualifications. The results were found as given below:

<table>
<thead>
<tr>
<th>Gender</th>
<th>Middle Standard</th>
<th>High School</th>
<th>Graduation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>10</td>
<td>15</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Female</td>
<td>25</td>
<td>10</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>25</td>
<td>40</td>
<td>100</td>
</tr>
</tbody>
</table>

Can you say that education depends on gender?
End Semester Examination, Dec. 2013
BCA - Sixth Semester
JAVA PROGRAMMING (BCA-601A)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note:
Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1  
   a) Which is a valid keyword in Java?  
      i) Interface  
      ii) String  
      iii) Float  
      iv) None of the above.
   b) Which one is valid declaration of a Boolean?  
      i) Boolean b1=0;  
      ii) Boolean b2='false';  
      iii) Boolean b3=false;  
      iv) Boolean b5=no;
   c) What is the numerical range of a char?  
      i) -128 to 127  
      ii) \text{-2^{15}} to \text{2^{15}}-1  
      iii) 0 to 32767  
      iv) 0 to 65535
   d) Which of the following components generate action events?  
      i) Buttons  
      ii) Labels  
      iii) Check boxes  
      iv) Windows
   e) Java.lang package is imported by default even without a package declaration. (True/False)
   f) A class which doesn’t provide complete implementation is defined as an abstract class. (True/False)
   g) Is the ternary operator written x ? y : z? (True/False)
   h) Can an interface extend another interface? (True/False)
   i) Can a class be defined inside an interface? (True/False)
   j) The ______ operator carries the sign bit when shifting right.
   k) The most important feature of Java is __________.
   l) _______ is the return type of the main method.
   m) _______ class can’t be inherited.
   n) AWT means __________.
   o) Java is dynamic and _______ language.

   1x15

UNIT-I

Q.2  
   a) What is JDK? What are the tools provided by JDK for developing and running Java programs? Explain their functionalities.
   b) What is the use of a volatile keyword?

   10
   5

Q.3  
   a) Differentiate between automatic type conversion and type casting?
   b) Why is Java strongly typed programming language?
   c) Write short note on data types.

   5x3

UNIT-II

Q.4  
   a) Why are arrays usually processed with ‘for’ loops? Explain.
   b) Write Java assignment statements to evaluate the following:
      i) \text{Torque} = \frac{2m_1m_2 \times g}{m_1 + m_2}.
      ii) \text{Energy} = \text{mass} \left(\text{acceleration} \times \text{height} + \frac{\text{velocity}^2}{2}\right).
   c) What data type and range should an array’s index have?

   5
   5
   5

P. T. O.
Q.5  
a) Differentiate between exit controlled and entry controlled statements.  
b) Write a program in Java to print the first m Fibonacci numbers.

UNIT-III

Q.6  
a) How do we access the instantiated variables and methods of a class?  
b) Differentiate between checked and unchecked exception.  
c) Discuss the key points of static inner classes.

Q.7  
Define a class named square as described below:
   Data member: Side
   Methods:   a) squarearea() to compute the area of the square  
               b) squareperimeter() to compute the perimeter of the square  
               c) squarediagonal() to compute the length of the diagonal

Within the main() method of the class named squaredemo, create an object of the classes square. Compute the area, perimeter and diagonal length by invoking the appropriate methods.

UNIT-IV

Q.8  
a) Define event and event handler.  
b) Discuss the types of inheritance.  
c) How is an interface defined? Give example.

Q.9  
a) Why is a classpath required in package program?  
b) Explain the purpose of import statement. Give example.  
c) Write short note on abstract classes.
End Semester Examination, Dec. 2013  
BCA -Sixth Semester  
DATA COMMUNICATION AND NETWORKING (BCA-602)  

Time: 3 hrs  
Max Marks: 75  
No. of pages: 2  

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.  
Q.1 is compulsory. All questions carry equal marks.  

Q.1  
a) MAN stands for:  
i) Metropolitan area network.  
ii) Marked area network.  
iii) Metropolitan arranged network.  
iv) Manufactured arrangement of networks.  
b) NIC stands for:  
i) Network internal card.  
ii) Newer industrial computer.  
iii) Networking internet connection.  
iv) Network interface card.  
c) The arrangement of the computers in a network is called:  
i) NOS.  
ii) topology.  
iii) node layout.  
iv) protocol.  
d) What type of cable uses light waves to carry information at high speed?  
i) Cable modems.  
ii) Fiber-optic cables.  
iii) Wireless cables.  
iv) Phone lines.  
e) Which type of media has the longest maximum distance?  
i) Twisted pair.  
ii) Wireless.  
iii) Coaxial cable.  
iv) Fiber-optic.  

Fill in the blanks:  
f) The rule for exchanging data between a terminal and one or more computers are known as_______.  
g) The most common cabling for a LAN is _______.  
h) Bps stands for_______.  
i) Bandwidth is measured in_______.  
j) A _______ describes the center or central node for other nodes. This device can be a server or simply a connection point for cables from other nodes.  

1½x10  

UNIT-I  

Q.2  
Give a brief description of the application and limitations of the following types of transmission media:  
a) Coaxial cable.  
b) Optical fibre.  
c) Twisted wire pair.  

15  

Q.3  

a) What components are typically found in a data communication system? Explain them.  

10  

P. T. O
b) Define the term data, signal, channel and bandwidth.

UNIT-II

Q.4 Discuss the following techniques with the help of an example:
   a) Pulse code modulation
   b) ASK
   c) Time division multiplexing

Q.5 Discuss the OSI model with the help of a neat diagram. Also discuss the functions performed by each layer.

UNIT-III

Q.6 What do you understand by routing? Discuss the static and dynamic routing.

Q.7 Discuss the following network topologies along with their advantages and disadvantages:
   a) Bus topology
   b) Star topology
   c) Mesh topology

UNIT-IV

Q.8 Explain the need for packet switching. Explain how packet switching takes place? Explain types of packet switching techniques.

Q.9 What is the concept of cryptography? Discuss the symmetric-key-cryptography.
End Semester Examination, Dec. 2013
MCA - First Semester
PROGRAMMING THROUGH 'C' LANGUAGE (MCA-101)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. **Q.1 is compulsory.** All questions carry equal marks.

Q.1 a) Which header file should be included to use malloc() and calloc() functions?
   i) Memory.h
   ii) Stdlib.h
   iii) String.h
   iv) Dos.h

b) How would you round off a value from 1.66 to 2.0?
   i) Cell (1.66)
   ii) Floor (1.66)
   iii) Roundup (1.66)
   iv) Round to (1.66)

c) Which of the following can't be checked in a switch case statement?
   i) Character.
   ii) Integer.
   iii) Float.
   iv) Enum.

d) What do 'V' is argv stands for:
   i) Argument vector.
   ii) Argument vertex.
   iii) Argument visibility.
   iv) Argument vary.

e) What is a stderr stands for?
   i) Standard error.
   ii) Standard error types.
   iii) Standard error streams.
   iv) Standard error definition.

f) In which header file is the NULL macro defined?
   i) Stdio.h
   ii) Stddif.h
   iii) Math.h
   iv) Stdio.h and Stddif.h

g) How many bytes are occupied by char?
   i) 2
   ii) 4
   iii) 6
   iv) 1

h) If return type of a function is not specified it defaults to:
   i) Char.
   ii) Double.
   iii) Int.
   iv) Float.

i) Function called by:
   i) Value.
   ii) Reference.
   iii) Both.
   iv) None.

j) In the following code, s2 is:
   typedef int * ptr
   ptr s1, s2;
   i) Integer pointer.
   ii) Integer.
   iii) Error is declaration.
   iv) None of above. 1½x10

UNIT-I

Q.2 Explain the following Preprocessor directive:
   a) #ifdef
   b) #define
   c) #ifndef

   5x3

Q.3 Differentiate the following:
   a) Identifies and keywords.
   b) Variable and constant.
   c) printf() and scanf().

   5x3

P. T. O.
UNIT-II

Q.4 What are the various ways to pass arguments to a function? Write a program to swap two numbers given by user by using call by value and call by reference. 15

Q.5 Explain the following library functions:
   a) sqrt()
   b) pow()
   c) malloc()
   d) calloc()
   e) putchar() 3x5

UNIT-III

Q.6 a) What are the various operations that we can and can't perform on pointers? 
   b) Write a program to find transpose of a matrix given by user. 8 7

Q.7 a) Why array is also called constant pointer? 
   b) Write a program to insert an element into an array at a location given by user. 5 10

UNIT-IV

Q.8 Differentiate between the following:
   a) fprintf() and fwrite().
   b) fscanf() and fread().
   c) Text and binary files. 5x3

Q.9 Write a program to count character, spaces, tabs and newlines in a file. 15
End Semester Examination, Dec. 2013
MCA - First Semester
DISCRETE STRUCTURES (MCA-102)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 a) Find the matrix of the relation \( R = \{(1,2),(2,3),(3,4),(4,5)\} \) on the set \( A = \{1,2,3,4,5\} \)
   b) Write down recurrence relation for Fibonacci sequence.
   c) Construct the truth table for the statement \( p \leftrightarrow q \).
   d) Define concatenation of the words.
   e) Give an example to show that union of two subgroups of a group need not be a subgroup of that group.
   f) Draw Hasse diagram of the lattice \( D_{10} \).
   g) What is the number of edges in a complete bipartite graph \( K_{m,n} \)?
   h) Define Euler’s path in a graph \( G \).
   i) What do you mean by finite state machine?
   j) Construct transition table for the FSA given below:

   ![Transition Table Diagram]

   1½x10

UNIT-I

Q.2 a) Show that the set of all rational numbers is countable.
   b) Solve the recurrence relation \( a_n = a_{n-1} + 2a_{n-2}, n \geq 2 \) with the initial conditions \( a_1 = 1, a_2 = 8 \)

Q.3 a) State and prove De-Morgan law of logic.
   b) State pigeonhole principle. How many people among 300000 people are born at the same time (hour, minute, seconds)?

UNIT-II

Q.4 a) Let \( G \) be a group. Show that \( Z = \{a : ax = xa \text{ for all } x \in G\} \) is a normal subgroup of \( G \).
   b) Define complemented lattice. Show that the lattice \( D_{30} \) is complemented.

Q.5 a) Express \( x_1x_2x_3 \) in its complete sum-of-products form in three variables \( x_1, x_2, x_3 \).
   b) Using Karnaugh map, find the prime implicants and minimal sum-of-product form of the Boolean expression \( x'y'z' + x'y'z + x'yz + x'yz' + x'yz' + x'y'z' \)

UNIT-III

Q.6 a) Show that the following graph is not Hamiltonian.

   ![Graph Diagram]

P. T. O.
b) Define chromatic number of a graph and determine the chromatic number of the graph given below:

Q.7  
a) Find the path matrix of the diagraph shown below:

b) Using Prim algorithm, find the minimal spanning tree of the following graph.

UNIT-IV

Q.8  
a) Define finite state automation. Determine whether the string abbaa is accepted by the FSA given below:

b) Define Moore's machine. Find the output string for the input string 0111 in case of Moore's machine represented by the table given below:

<table>
<thead>
<tr>
<th></th>
<th>f</th>
<th>g</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>s_0</td>
<td>s_3</td>
<td>s_1</td>
</tr>
<tr>
<td>s_1</td>
<td>s_1</td>
<td>s_2</td>
</tr>
<tr>
<td>s_2</td>
<td>s_2</td>
<td>s_3</td>
</tr>
<tr>
<td>s_3</td>
<td>s_3</td>
<td>s_0</td>
</tr>
</tbody>
</table>

Q.9  
a) Design a finite state machine for binary addition.

b) Define various types of grammar. Find a context free grammar G which generates the language $L = \{a^nb^n : n > 0\}$?
End Semester Examination, Dec. 2013
MCA - First Semester
DIGITAL DESIGN AND COMPUTER ORGANISATION (MCA-105)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Multiple choice questions:

a) When using even parity, where is the parity bit placed?
   i) Before the MSB
   ii) After the LSB
   iii) In the parity word
   iv) After the odd parity bit

b) Which Boolean algebra property allows us to group operands in an expression in any order without affecting the results of the operation [for example \( A + (B + C) = (A + B) + C \)]?
   i) Associative
   ii) Commutative
   iii) Boolean
   iv) Distributive

c) The NAND or NOR gates are referred to as universal gates either.
   i) Can be found in almost all digital circuits
   ii) Can be used to build all the other types of gates
   iii) Are used in all countries of the world
   iv) Where the first gates to be integrated

d) A micro program sequencer performs the operation.
   i) Read
   ii) Write
   iii) Execute
   iv) Read and write
   v) Read and execute

e) A combinational circuit which is used to charge a decimal number into an equivalent BCD number is
   i) Decoder
   ii) Encoder
   iii) Multiplexer
   iv) Demultiplexer

f) A 20 bit address bus allows access to a memory of capacity.
   i) 1 MB
   ii) 2 MB
   iii) 32 MB
   iv) 64 MB

g) What is the major advantage of ECL logic?
   i) Very high speed
   ii) Wide range of operating voltage
   iii) Very low cost
   iv) Very high power

h) A basic instruction that can be interpreted by a computer generally has
   i) An operand and an address
   ii) A decoder and an accumulator
   iii) Sequence register and decoder
   iv) None of these.

i) A group of bits that tell the computer to perform a specific operation is known as
   i) Instruction Code
   ii) Micro operation
   iii) Accumulator
   iv) Register

j) The information available in a state table may be represented graphically in a
   i) Simple diagram
   ii) State diagram
   iii) Complex diagram
   iv) Data flow diagram

UNIT-I

Q.2 a) Design a combinational circuit that takes a 4 bit binary number as input and generates an output 0 for combinations 0000 to 0110 and combinations 1110 to 1111. For other combination output is 1.

b) Find the canonical SOP form for the expression given below:
   \[ F(A, B, C) = A' B + A'B'C + AC + ABC' \]
End Semester Examination, Dec. 2013
MCA - Second Semester
DATA AND FILE STRUCTURES USING 'C’ (MCA-201)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1  a) The elements of an array are stored successively in memory cells because:
i) by this way computer can keep track only the address of the first element and the addresses of other elements can be calculated.
ii) the architecture of computer memory does not allow arrays to store other than serially.
iii) Both of above.
iv) None of above.
b) Which of the following is a two-way list?
i) Grounded header list.
ii) Circular header list.
iii) Linked list with header and trailer nodes.
v) None of above.
c) When new data are to be inserted into a data structure, but there is no available space; this situation is usually called.
i) Underflow.
ii) Overflow.
iii) Houseful.
v) Saturated.
d) Which of the following names does not relate to stacks?
i) FIFO lists.
ii) LIFO list.
iii) Piles.
v) Push-down lists.
e) A data structure where elements can be added or removed at either end but not in the middle is:
i) Linked lists.
ii) Stacks.
iii) Queues.
v) Dequeue. 1x5
f) How linked lists overcome the disadvantage of an array? 2

g) How can one measure the efficiency of an algorithm? 2

h) What is the basic difference between BFS and DFS? 2

i) Evaluate the complexity of insertion sort? 2

j) What is m-way search tree? 2

UNIT-I

Q.2  a) What is the difference between data structure and data type? What are the various operations that we can perform on a data structure? 10

b) Write the algorithm for insertion and deletion in circular queue. 5

Q.3  a) Convert the following infix notation into postfix notation and also evaluate the postfix notation (12/ (7-3)) +2*(1+5). 10

b) Write the structure to create a node for doubly linked list. Also explain the concept for the same. 5

UNIT-II

Q.4  a) What is the benefit of using a threaded tree? 7

b) What is a binary search tree? Can a binary search tree be used as an index? If yes, justify your answer. 8

P. T. O.
Q.5 Find the inorder, preorder and postorder traversal of the given tree.

UNIT-III

Q.6 a) What are various ways to traverse a graph? Write algorithm for each traversing method.  
   b) Write an algorithm to delete element from a graph.  

Q.7 Explain with example:
   a) Graph  
   b) Multigraph  
   c) Strongly and weakly connected graph  

UNIT-IV

Q.8 a) Write the algorithm for quick sort. Also sort the given list using quick sort method: 34, 23, 12, 16, 18, 29, 45, 19, 38, 15.  
   b) Why binary search is better than linear search? Also evaluate complexity of both the searching methods.  

Q.9 What do you mean by hashing? What are the various hashing functions available?
Q.1 Multiple choice questions:
   a) To hide a data member from the program, you must declare the data member in the _______ section of the class.
      i) concealed  ii) confidential
      iii) hidden  iv) private
      v) restricted
   b) The statement int num[2][3]=( {1,2}, {3,4}, {5, 6} );
      i) assigns a value 2 to num[1][2]  ii) assigns a value 4 to num[1][2]
      iii) gives an error message  iv) assigns a value 3 to num[1][2]
   c) The following statement where T is true and F is false: T&F||F&F&T:
      i) is true  ii) is false
      iii) is wrong iv) not applicable in C++ language
   d) What does C++ append to the end of a string literal constant?
      i) a space  ii) a number sign (#)
      iii) an asterisk (*)  iv) a null character
   e) A function that changes the state of the cout object is called a(n) _______.
      i) member  ii) adjuster
      iii) manipulator  iv) operator
   f) An array element is accessed using:
      i) a first-in-first-out approach  ii) the dot operator
      iii) a member name  iv) an index number
   g) Which of the following statements is correct with respect to the use of friend keyword inside a class?
      i) A private data member can be declared as a friend.
      ii) A class may be declared as a friend.
      iii) An object may be declared as a friend.
      iv) We can use friend keyword as a class name.
   h) Which of the following terms is used for a function defined inside a class?
      i) Member Variable  ii) Member function
      iii) Class function  iv) Classic function
   i) When a child class function is called, the compiler looks first for a matching function name in the _______.
      i) class of the object using the function name.
      ii) immediate ancestor class.
      iii) base class.
      iv) descendant class
   j) If a derived class uses the public access specifier, then _______.
      i) public base class members remain public in the derived class.
      ii) protected base class members become public in the derived class.
      iii) Both i) and ii)
      iv) neither i) nor ii)
k) The contents of two pointers that point to adjacent of type float differ by:
   i) one bytes  
   ii) two bytes  
   iii) three bytes  
   iv) four bytes
l) Redirection redirects:
   i) a stream from a file to the screen  
   ii) a file from a device to a stream  
   iii) a device from the screen to a file  
   iv) the screen from a device to a stream
m) If an integer object is thrown with a throw statement, then a subsequent catch block has a usable match if the type of the catch argument is:
   i) int  
   ii) double  
   iii) either i) or ii)  
   iv) neither i) nor ii)
n) To use a template class member function, use the _____ with the instantiation.
   i) scope resolution operator  
   ii) dot operator  
   iii) class definition  
   iv) keyword template
o) You ________ overload function templates.
   i) may, as long as each version has the same arguments  
   ii) may, as long as each version has different arguments  
   iii) must  
   iv) must not

UNIT-I

Q.2 Compare and contrast procedure oriented programming language with object oriented programming language.

UNIT-II

Q.3 Explain C++ data types. Why an array is called a derived data type? What is the main advantage of passing arguments by reference?

UNIT-III

Q.4 Explain explicit constructor, parameterized constructor and multiple constructors with suitable examples.

Q.5 Define a class string. Use overloaded + and = = to concatenate and compare two strings.

UNIT-IV

Q.6 Explain public, private and protected inheritance.

Q.7 a) What are the different types of inheritance? Explain its syntax with a suitable example.
    b) Differentiate between:
       i) Function overloading and function overriding.
       ii) Pointer to object and this pointer.

Q.8 Explain about formatted and unformatted input output with a suitable example.

Q.9 a) What is STL? Explain in brief.
    b) How is an exception handled in C++?
End Semester Examination, Dec. 2013
MCA - Second Semester
LINEAR ALGEBRA AND STATISTICAL TECHNIQUES (MCA-204)

Time: 3 hrs
Max Marks: 75
No. of pages: 3

Note: Attempt FIVE questions in all: taking at least ONE question from each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1 a) Determine null space of the linear transformation \( T : V_1 \rightarrow V_2 \) defined by

\[ T(a_1, a_2, a_3) = (a_1 - a_2, 2a_3). \]

b) Find the matrix of reflection of the vector space \( V_2 \) about the \( x \)-axis.

c) Define row-reduced echelon form of a matrix.

d) Two of the eigenvalues of the following matrix are 1 and 3. What is the third eigenvalue?

\[
\begin{bmatrix}
8 & -8 & -2 \\
4 & -3 & -2 \\
3 & -4 & 1
\end{bmatrix}
\]

e) Normalize the following vectors:

\[
x_1 = \begin{bmatrix} 1 \\ -2 \\ 0 \\ 0 \end{bmatrix}, \quad x_2 = \begin{bmatrix} 0 \\ 0 \\ 1 \\ 2 \end{bmatrix}.
\]

f) What is the probability that a non-leap year will have 53 Sundays?

g) Find the value of \( k \) in the following probability distribution:

<table>
<thead>
<tr>
<th>( x )</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>( p(x) )</td>
<td>0.1</td>
<td>0.2</td>
<td>2k</td>
<td>0.3</td>
<td>k</td>
<td></td>
</tr>
</tbody>
</table>

h) What is the mean of Poisson distribution for the following data?

<table>
<thead>
<tr>
<th>( x )</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>( y )</td>
<td>122</td>
<td>60</td>
<td>15</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

i) Write the dual of the following LPP:

Minimize \( z = 2x_1 + x_2 \)

subject to the constraints

\[ 3x_1 + x_2 \geq 3 \]
\[ 4x_1 + 3x_2 \geq 6 \]
\[ x_1 + 2x_2 \leq 3 \]
\[ x_1, x_2 \geq 0 \]

j) Under which situation an alternate solution of a given transportation problem exists?

P. T. O.
UNIT-I

Q.2  a) Let \( T_1 : M_{22} \to \mathbb{R} \) and \( T_2 : M_{22} \to M_{22} \) be linear transformations defined by
\[
T_1(A) = \text{tr}(A) \quad \text{and} \quad T_2(A) = A^T,
\]
respectively. Find \( (T_1 \circ T_2)(A) \) if \( A = \begin{bmatrix} a & b \\ c & d \end{bmatrix} \).

b) Determine the matrix of the projection of \( V \) on the \( xy \)-plane.

Q.3  a) Using elementary transformations, compute the inverse of the matrix:
\[
\begin{bmatrix}
2 & 1 & -1 \\
0 & 2 & 1 \\
5 & 2 & -3
\end{bmatrix}
\]

b) Find the rank of the following matrix by reducing it to normal form:
\[
\begin{bmatrix}
3 & 2 & -1 \\
4 & 2 & 6 \\
7 & 4 & 5
\end{bmatrix}
\]

UNIT-II

Q.4  a) Diagonalize the matrix:
\[
\begin{bmatrix}
8 & -8 & -2 \\
4 & -3 & -2 \\
3 & -4 & 1
\end{bmatrix}
\]

b) Find the eigenvalues and the corresponding eigenvectors of the matrix:
\[
\begin{bmatrix}
1 & 0 & 0 \\
0 & 2 & 1 \\
2 & 0 & 3
\end{bmatrix}
\]

Q.5  a) Define unitary matrix. Show that eigenvalues of a unitary matrix are of unit modulus.

b) Using Cayley-Hamilton theorem, find \( A^{-1} \) if \( A = \begin{bmatrix} 13 & -3 & 5 \\ 0 & 4 & 0 \\ -15 & 9 & -7 \end{bmatrix} \).

UNIT-III

Q.6  a) Find the Karl Pearson coefficient of correlation between \( x \) and \( y \) for the following data:

\begin{tabular}{c|cccccccc}
\hline
x & 55 & 56 & 58 & 59 & 60 & 60 & 62 \\
\hline
y & 35 & 38 & 38 & 39 & 44 & 43 & 45
\end{tabular}

B) find the standard deviation for the following discrete probability distribution:

\[
\begin{array}{c|cccc}
\hline
x & 8 & 12 & 16 & 20 & 24 \\
p(x) & \frac{1}{8} & \frac{1}{6} & \frac{3}{8} & \frac{1}{4} & \frac{1}{12} \\
\hline
\end{array}
\]

Q.7  a) Fit a poisson distribution to the following data:

\begin{tabular}{c|cccc}
\hline
x & 0 & 1 & 2 & 3 & 4 \\
\hline
y & 122 & 60 & 15 & 2 & 1
\end{tabular}

b) A coin was tossed 400 times and the head turned up 216 times. Test the hypothesis that the coin is unbiased.
UNIT-IV

Q.8  a) Using graphical method solves the following LPP:
Maximize \( z = 5x_1 + 3x_2 \)
Subject to the constraints
\[ 3x_1 + 5x_2 \leq 15 \]
\[ 5x_1 + 2x_2 \leq 10 \]
and \( x_1, x_2 \geq 0 \).

b) Use the simplex method to solve the following LPP:
Maximize \( u = 2x + 3y \)
Subject to the constraints
\[ -2x + 3y \leq 2 \]
\[ 3x + 2y \leq 5 \]
and \( x, y \geq 0 \).

Q.9  a) Find initial basic feasible solution to the following transportation problem by least cost method:

<table>
<thead>
<tr>
<th></th>
<th>( D_1 )</th>
<th>( D_2 )</th>
<th>( D_3 )</th>
<th>( D_4 )</th>
<th>Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>( O_1 )</td>
<td>21</td>
<td>16</td>
<td>25</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>( O_2 )</td>
<td>17</td>
<td>18</td>
<td>14</td>
<td>23</td>
<td>13</td>
</tr>
<tr>
<td>( O_3 )</td>
<td>32</td>
<td>27</td>
<td>18</td>
<td>41</td>
<td>19</td>
</tr>
<tr>
<td>Demand</td>
<td>6</td>
<td>10</td>
<td>12</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

b) Obtain an optimal solution to the following transportation problem using Vogel's approximation method followed by MODI:

<table>
<thead>
<tr>
<th></th>
<th>( D_1 )</th>
<th>( D_2 )</th>
<th>( D_3 )</th>
<th>( D_4 )</th>
<th>Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>( O_1 )</td>
<td>19</td>
<td>30</td>
<td>50</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>( O_2 )</td>
<td>70</td>
<td>30</td>
<td>40</td>
<td>60</td>
<td>10</td>
</tr>
<tr>
<td>( O_3 )</td>
<td>0</td>
<td>10</td>
<td>60</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Demand</td>
<td>5</td>
<td>8</td>
<td>7</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>
End Semester Examination, Dec. 2013
MCA - Second Semester
DATA COMMUNICATION AND NETWORKING (MCA-205)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1  

a) A television broadcast is an example of __________ transmission.
   i) Simplex
   ii) Full Duplex
   iii) Half Duplex
   iv) Automatic

b) Which of the following is most affected by noise?
   i) PSK
   ii) ASK
   iii) FSK
   iv) QAM

c) The performance of transmission media can be measured by __________.
   i) Throughput
   ii) Propagation speed
   iii) Propagation Time
   iv) All of the above

d) To decrease attenuation and distortion of a signal, a line can be __________.
   i) Multiplexed
   ii) Grounded
   iii) Extended
   iv) Conditioned

e) Which error detection method can detect a single bit error?
   i) VRC
   ii) LRC
   iii) CRC
   iv) All of the above

f) In a star-topology ethernet LAN, __________ is just a point where the signals coming from different stations collide; it is the collision point:
   i) An active hub
   ii) A passive hub
   iii) Either i) or ii)
   iv) Neither i) nor ii)

g) __________ regenerates a signal, connects segments of a LAN, and has no filtering capability.
   i) Repeater
   ii) Bridge
   iii) Router
   iv) None of the above

h) The most popular technology in time-division switching is called the __________.
   i) STI
   ii) ITS
   iii) TSI
   iv) None of the above

i) In the OSI model, encryption and decryption are functions of the __________ layer.
   i) Transport
   ii) Session
   iii) Presentation
   iv) Application

j) Mail services are available to network users through the __________ layer.
   i) Data link
   ii) Physical
   iii) Transport
   iv) Application

k) HDLC is an acronym for __________.
   i) High-duplex line communication
   ii) High-level data link control
   iii) Half-duplex digital link combination
   iv) Host double-level circuit

l) __________ control refers to methods of error detection and correction.
   i) Flow
   ii) Error
   iii) Transmission
   iv) None of the above

m) The __________ routing uses the Dijkstra algorithm to build a routing table.
   i) Distance vector
   ii) Link state
   iii) Path vector
   iv) None of the above

P. T. O.
n) UDP and TCP are both ______ layer protocols.
   i) Data link   ii) Network
   iii) Transport iv) None of the above
   o) In FTP, when we ______, it is copied from the client to the server?
      i) Retrieve a file   ii) Store a file
      iii) Retrieve a list iv) None of the above

UNIT-I

Q.2 a) What do you understand by data communication? Explain various components of data communication architecture.
    b) What do you understand by the term: channel bandwidth? How is it affected by the signal to noise ratio?

Q.3 What do you understand by Hamming code? How is Hamming code different from other error correction and detection techniques? Given a remainder of 111, a data unit of 10110011, and a divisor of 1011, is there an error in the data unit?

UNIT-II

Q.4 How do the layers of the TCP/IP protocol suite correlate to the layers of the OSI model? Write at least five differences between OSI and TCP/IP model.

Q.5 What is the fundamental difference between circuit switching and packet switching? A message is broken into three pieces. Discuss the transmission of the packets using the datagram approach of packet switching.

UNIT-III

Q.6 Write short notes on the following:
   a) X.21
   b) TCP
   c) FTP

Q.7 In stop and wait flow control, define and discuss the handling of:
   a) A damaged frame
   b) A Lost frame
   c) A NAK is lost in transit

UNIT-IV

Q.8 Draw the architecture of SNMP v3. How does SNMP v1, v2, v3 differ from each other in terms of their architecture and usage?

Q.9 Give a diagrammatic representation of:
   a) Bilingual Manager
   b) MoM
   c) RMon
End Semester Examination, Dec. 2013
MCA - Third Semester
OPERATING SYSTEMS (MCA-301)

Time: 3 hrs   Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Multiple choice questions:
   a) Which amongst the following is not an advantage of distributed systems?
      i) Reliability   ii) Incremental growth
      iii) Resource sharing   iv) None of the above
   b) Who is called a supervisor of computer activity?
      i) CPU   ii) Operating system
      iii) Control unit   iv) Application program
   c) Interval between the time of submission and completion of the job is called
      i) Waiting time   ii) Turnaround time
      iii) Throughput   iv) Response time
   d) A scheduler which selects processes from secondary storage device is called?
      i) Short term scheduler   ii) Long term scheduler
      iii) Medium term scheduler   iv) Process scheduler
   e) Memory utilization factor shall be computed as follows:
      i) Memory in use/allocated memory
      ii) Memory in use/total memory connected
      iii) Memory allocated/free existing memory
      iv) Memory committed/total memory available 1½x5
   f) Fill in the blank with the appropriate term:
      i) ______ is a non-preemptive scheduling algorithm.
      ii) A program in execution is called a ________.
      iii) The very high page fault activity is known as ________.
      iv) In UNIX, file descriptors are called ________.
      v) ________ is a technique that reduces information to a smaller size. 1½x5

UNIT-I

Q.2 a) Operating system acts as resource manager. What resources does it manage? 10
    b) What are virtual machines? 5

Q.3 a) Explain the basic features of UNIX as an operating system. 9
    b) Differentiate between hard real time and soft real time system. 6

UNIT-II

Q.4 Draw Gantt chart for the CPU schedule under FCFS and SJF algorithms for the following ready queue:
   Queue head : Head Tail
   Processes : P1 P2 P3 F4 P5
   CPU bursts : 12 3 11 6 9
   Also compute average turnaround time and average waiting time. 15

P. T. O.
Q.5  a) What are the properties which a data item should possess to implement a critical section? 6
   b) What is a process? Discuss various states of a process with the help of a process. State transition diagram. 9

**UNIT-III**

Q.6  List the steps needed to perform page replacement policy. Explain the different page replacement policies. Also list out the main requirements, which should be satisfied by a page replacement policy? 15

Q.7  a) For the reference string: 7, 2, 0, 3, 3, 6, 3, 6, 7, 0, 2, 3 show FIFO replacement algorithm. What is the number of page faults? 9
   b) How is protection affected in segmentation of memory? 6

**UNIT-IV**

Q.8  Prepare a SCAN disk schedule for the following sequence of sectors: 34, 98, 354, 2 and 7. Assume that current location of the head is at sector 15. 15

Q.9  Explain the various directory structures used in operating system for storing files. Give merits and demerits of all directory structures. 15
End Semester Examination, Dec. 2013
MCA - Third Semester
WEB APPLICATION AND E-COMMERCE (MCA-302)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 a) Which tag is used for arranging text in paragraphs?
   i) <par>   ii) <paragraph>   iii) <p>   iv) <a>

b) Which type of web document is run at client site?
   i) Static   ii) Dynamic   iii) Active
   iv) All of the above

c) Which language defined the behavior of web page?
   i) HTML   ii) JavaScript   iii) CSS   iv) French

d) Which layer is not present in TCP/IP model?
   i) Application layer  
   ii) Internet layer
   iii) Transport layer
   iv) Presentation layer

e) A digital signature is
   i) Scanned signature
   ii) Signature in binary form
   iii) Encrypting information
   iv) Hand written signature

g) What must you know in order to get to a website?
   i) Its URL
   ii) Its header
   iii) Its title
   iv) Name of its webmaster

g) Tag used for external CSS is
   i) <a>  ii) <p>  iii) <link>  iv) <href>

h) The __________ method can be used to read from text file or to append text to it.

i) DOM is abbreviation of __________.

j) __________ is used to send form data to server. 1½x10

UNIT-I

Q.2 a) What is internet domain? Explain physical and virtual domain? List out some domain name extension?

b) Write short notes on:
   i) Search engine
   ii) Chat and bulletin services

Q.3 Write a command in HTML:
   a) Internal and external links in HTML.
   b) How to create frames in HTML? Write a command to put three html pages in frameset.
   c) Explain HTML tables. Explain different tags and attributes used to create and style HTML tables. Write a program to demonstrate the use of HTML table in creating a web page layout.

P.T.O.
UNIT-II

Q.4  a) Define the role of class and identifier in CSS.  
     b) What are different types of CSS? Explain the order in which different style sheets 
        will be applied if conflicting style sheets are used. Give suitable examples?

Q.5  a) Explain JavaScript object model structure in detail.  
     b) Write a program in JavaScript to swap two images using mouseovers event.

UNIT-III

Q.6  Differentiate between alert(), prompt() and confirm() dialog box with an example. 

Q.7  a) Give the output of following code:
     <script language="vbscript">
       Dim Names()
       Dim count
       Count=2
       Redim names(count)
       Names(0)="Raj"
       Names(1)="Simran"
       Names(2)="Nisha"
       Redim names(count+2)
       Names(3)="Maya"
       Names(4)="Rohit"
       Document.write(Names(0))
       Document.write(Names(1))
       Document.write(Names(2))
       Document.write(Names(3))
       Document.write(Names(4))
     </script>

     b) Write the equivalent script for the following code using FOR loop without effecting 
        the output.
     <script language="vbscript">
       Dim count, ans
       Ans=1
       Count=2
       Do
         Ans=ans*count
         Count=Count+2
         Loop while count<=10
       Document.write (ans)
     </script>

     c) Explain date() object in JavaScript with an example. 

UNIT-IV

Q.8  a) Explain usage of request and response command in ASP with examples. 
     b) Explain with examples the difference between implicit and explicit declaration of 
        variables.

Q.9  a) What do you understand by EDI? Is EDI used in B2C or B2B E-Commerce? 
     b) Write a short note on digital watermarks.
End Semester Examination, Dec. 2013
MCA - Third Semester
COMPUTER SYSTEM ARCHITECTURE (MCA-303)

Time: 3 hrs  Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Multiple choice questions:
a) A stack pointer is
   i) a 16 bit register in the microprocessor that indicate the beginning of the
      stack memory.
   ii) a register that decodes and executes 16 bit expression.
   iii) The first memory location where a subroutine address is stored.
   iv) a register in which flag is stored.
b) CISC machines
   i) have fewer instructions than RISC machines.
   ii) use more RAM than RISC machines.
   iii) have medium clock speeds.
   iv) use variable size instructions.
c) Memory mapped I/O involves
   i) transferring information between memory locations.
   ii) transferring information between registers and memory.
   iii) transferring information between the CPU and I/O devices in the same way
        as between the CPU and memory.
   iv) transferring information between I/O devices and memory.
d) SIMD represents an organization that
   i) refers to a computer system capable of processing several programs at the
      same time.
   ii) represents organization of single computer containing a control unit,
       processor unit and a memory unit.
   iii) includes many processing unit under the supervision of common control unit.
   iv) None of the above.
e) The idea of cache memory is based
   i) on the property of locality of reference.
   ii) on the heuristic 90-10 rule.
   iii) on the fault that references generally tend to cluster.
f) How many memory chips of (128x8) are needed to provide a memory capacity
   of 4096x16?
   i) 64  ii) AB  iii) 32  iv) None.
g) In a non vectored interrupt the address of the interrupt service routine is
   i) obtained from interrupt address table.
   ii) supplied by the interrupting I/O device.
   iii) obtained from vector address generator device.
   iv) Assigned to a fixed memory location.
h) Stack overflow causes
   i) Hardware interrupt.
   ii) External interrupt.
   iii) Internal interrupt.
   iv) Software interrupt.

P. T. O.
i) In DMA the data transfer is controlled by:
   i) Microprocessor. ii) RAM. iii) Memory. iv) I/O devices.

j) Branch predication is used in the context of
   i) Pipelining
   ii) Program loops
   iii) Cache memory
   iv) ALU operation

UNIT-I

Q.2 Explain with an example how effective address is calculated in different addressing modes.  

Q.3 What is an array multiplier? Design a 4 bit by 3 bit array multiplier.  

UNIT-II

Q.4 a) Discuss different techniques used for interfacing I/O units with the processor.
    b) What is the basic advantage of using interrupt initiated data transfer over transfer under program control without an interrupt?  

Q.5 Explain the concept of priority interrupt. Describe daisy chaining technique in detail.  

UNIT-III

Q.6 Discuss about the implementation of virtual memory. What is its importance?  

Q.7 Write short notes on:
    a) Memory hierarchy.
    b) Page replacement.  

UNIT-IV

Q.8 What are different pipelining hazards? How are they eliminated? Explain instruction pipeline.  

Q.9 Define the following terms:
    a) RISC pipeline.
    b) Interleaved memory organization.
    c) Handling of branch instruction.
End Semester Examination, Dec. 2013
MCA - Third Semester
COMPUTER GRAPHICS AND MULTIMEDIA (MCA-304)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 a) Interactive CG can use various kinds of input devices such as:
   i) Mouse.
   ii) Graphics tablet.
   iii) Joystick.
   iv) All of these.

   b) The application area of computer graphics are:
      i) Political.
      ii) Education and textbook.
      iii) CAD and entertainment.
      iv) All of these.

   c) A display controller servers to pass the contents of:
      i) Frame buffer to monitor.
      ii) Monitor to frame buffer.
      iii) Both i) and ii).
      iv) None of these.

   d) The area of computer that is captured by an application is called:
      i) Window.
      ii) Viewport.
      iii) Display.
      iv) None of these.

   e) Basic geometric transformation include:
      i) Translation.
      ii) Rotation.
      iii) Scaling.
      iv) All of these.

   f) The graphics method in which one object is transformed into another object are called:
      i) Clipping.
      ii) Morphing.
      iii) Reflection.
      iv) Shearing.

   g) The transformation that disturbs the shape of an object are called:
      i) Reflection.
      ii) Shear.
      iii) Rotation.
      iv) Scaling.

   h) A line can be represented by minimum.
      i) One point.
      ii) Two point.
      iii) Three point.
      iv) Four point.

   i) The types of projection are:
      i) Parallel and perspective projection.
      ii) Perpendicular and perspective projection.
      iii) Parallel and perpendicular projection.
      iv) None of these.

   j) JPEG is used to compress video.
      i) JPEG.
      ii) MPEG.
      iii) Both.
      iv) None.

   1½x10

UNIT-I

Q.2 a) Explain the advantage and disadvantage of DUST over refresh CRT.
    5

b) Why standard are required? Explain graphics standard in details.
   5

c) Is it necessary to refresh CRT? Justify your answer.
   5

Q.3 Explain the working of color CRT. Explain the various method used for color image formation.
   15

P. T. O.
UNIT-II

Q.4 Perform a 45° rotation of triangle A (0, 0), B (6, 3) and C (9, 7):
   a) About the origin.
   b) About point P (-1, -1)

Q.5 a) A clipping window whose lower left corner is at (0, 0) and upper right corner is at
    (40, 40). Check whether two lines. P (-20, 70), Q (20, 30) and R (50, 10), S (70,
    70) are totally invisible or partially visible with the help of Cohen Sutherland
    clipping algorithm.
   b) What is spline? What are major differences bezier curve and bspline curves.

UNIT-III

Q.6 Derive transformation matrix to scale a unit cube twice uniformly w. r. t origin. Find
    the co-ordinate of transformed cube.

Q.7 a) What do you mean by projection? Explain its type in brief.
   b) Write depth buffer/z-buffer algorithm for back face removal.

UNIT-IV

Q.8 a) What do you mean by MIDI? Give the hardware specification for MIDI.
   b) What do you understand by multimedia? Explain its various applications.

Q.9 a) What do you mean by compression? Explain in details.
   b) Explain different types of files used to store graphics data.
End Semester Examination, Dec. 2013
MCA - Third Semester
SOFTWARE ENGINEERING (MCA-305)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 a) Which is not attribute of good software?
   i) Maintainability    ii) Dependability    iii) Efficiency    iv) Always correct
b) Which one is not a size measure?
   i) LOC    ii) FP    iii) Cyclomatic complexity    iv) Program length.
c) Case tool is:
   i) Computer aided software engineering
   ii) Component aided software engineering
   iii) Constructive aided software engineering
   iv) Computer analysis software engineering
d) Which one is the most important feature of spiral model?
   i) Quality management    ii) Risk management
   iii) Performance management    iv) Efficiency management
e) Functional testing is known as:
   i) Structural testing    ii) Regression testing
   iii) Behavior testing    iv) None of the above
f) One fault may lead to:
   i) Two failures    ii) One failure
   iii) Many failures    iv) All of the above
g) The worst type of cohesion is:
   i) Temporal cohesion    ii) Coincidental cohesion
   iii) Logical cohesion    iv) Sequential cohesion
h) The system that does not interact with external environment is called:
   i) Closed system    ii) Open system
   iii) Logical system    iv) Hierarchical system
i) Cause-effect graphic technique is related to:
   i) White box testing    ii) Regression testing
   iii) Maintenance testing    iv) Black-box testing
j) Estimation of a size for a project is dependent upon:
   i) Cost    ii) Schedule    iii) Time    iv) None of the above

UNIT-I

Q.2 What is the difference between SRS document and design document? What are the contents we should contain in the SRS document and design document? 15

Q.3 a) Differentiate process framework and generic framework. 5
b) Write out the reasons for the failure of waterfall model. 10

UNIT-II

Q.4 What are the metrics used for estimating cost? Discuss the detail about COCOMO model in cost estimation of software. 15

P.T.O.
Q.5  
   a) What is work break down structure? Draw an example.  
   b) Compute the function point value for a project with the following information  
      domain characteristics:  
      Number of user inputs - 32  
      Number of outputs - 60  
      Number of enquiries - 24  
      Number of files - 08  
      Number of external interfaces - 02  
      Assume that all complexity adjustment values are average.  

UNIT-III

Q.6  
   What is cohesion? Explain various types of cohesion? How a software should be  
   designed considering cohesion?

Q.7  
   a) Write a short note on Audit Trail.  
   b) Explain:  
      i) Fault  
      ii) Failure  
      iii) Active fault detection  
      iv) Passive fault detection  
      v) Fault tolerance

UNIT-IV

Q.8  
   Discuss the basis path testing of white box testing with computation of cyclomatic  
   complexity.

Q.9  
   a) Define test plan? List out test plan steps.  
   b) Why unit testing is important? Explain the concept of unit testing in detail.
End Semester Examination, Dec 2013
MCA - Fourth Semester
RAPID APPLICATION DEVELOPMENT (MCA-401)

Time: 3 hrs  Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1  a) How do you add /remove items from a listbox?  2
     b) How do we change the size of an array?  2
     c) How do we change the size of the array and not lose any data?  1
     d) Why should we use Option Explicit?  2
     e) Timer control contains ______ number of events.  1
     f) Which control cannot be placed in MDI?  2
     g) _____ and _____ are container objects.  2
     h) Which property of textbox can not be changed at run time?  1
     i) How many child forms can MDI have?  1
     j) What is the size of the variant data type?  1

UNIT-I

Q.2  Explain the features of visual basic language which makes it a good language for
     GUIs.  15

Q.3  a) What are the advantages and disadvantages of using VB?  10
     b) What do you mean by event driven language?  5

UNIT-II

Q.4  a) What is a procedure? Explain various types of procedures available in VB with
     examples showing the differences between them.  15

Q.5  a) Explain the purpose of MDI form in VB.  5
     b) How will you create a menu on MDI form?  5
     c) Explain the process creating a popup menu on VB form.  5

UNIT-III

Q.6  a) What is control array? Explain it with an example.  5
     b) Can controls be created during Run Time? If yes, explain the procedure to create
        them.  10

Q.7  a) Explain the use of “With” statement with an example.  10
     b) Explain five built-in string functions with examples.  5

UNIT-IV

Q.8  Explain the following terms:
     a) Bound data controls  5x3
     b) Database engine
     c) ResultSet

Q.9  a) Explain the use of making a report by taking an example of data report feature
     available in VB.  10
     b) Explain the situation when a user will prefer to have a Crystal Report instead of a
        data report.  5
End Semester Examination, Dec. 2013
MCA - Fourth Semester
ARTIFICIAL INTELLIGENCE (MCA-402)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blank with suitable word:
a) ________ is a structure for representing knowledge as a pattern of interconnected nodes and arcs.
b) Data structure in a PROLOG program is ________.
c) Any substitution that makes two or more expressions equal is called a ________.
d) The space complexity of depth first search procedure is ________.
e) The number of arguments in a predicate is termed as its ________.
f) Fuzzy logic is a superset of ________ logic.
g) A ________ parser permits only one choice for each category.

State true or False:
h) Representational adequacy is the ability to represent all kinds of knowledge that are needed in that domain.
i) First Order Logic only allows to quantify over variables, and variable can only range over objects.
j) A system is autonomous if it is guided by its designer according to a prior decision.

UNIT-I

Q.2 Solve the following Crypt-arithmetic problem using constraint satisfaction search procedure:

\[
\begin{align*}
\text{NOON} & + \text{SOON} = \text{JUNE} \\
15 & \\
\end{align*}
\]

Q.3 a) Enumerate Classical "Water jug problem". Describe the state space for this problem. 8
b) Discuss the heuristic search with the help of an example. 7

UNIT-II

Q.4 a) Discuss Minimax search procedure in the game playing. 10
b) In addition to Alpha Beta pruning what are the modifications to the minimax search procedure that can improve its procedure. 5

Q.5 Consider the following set of statements:
a) John likes all kinds of food.
b) Apples are food.
c) Chicken is food.
d) Anything anyone eats and isn't killed by is food.
e) Bill eats peanuts and is still alive.
f) Sue eats everything bill eats.
Check using resolution whether john like peanuts? 15

P. T. O.
UNIT-III

Q.6  
a) Define Expert System (ES). Give example of two early expert systems. Also give general structure of ES.  

b) What is ES shell? What does it contain in its knowledge base?  

Q.7  
a) Discuss the fundamental problems in natural language processing.  
b) What are transition networks? Discuss them in brief.  

UNIT-IV

Q.8  
a) What is probability reasoning? How logical reasoning is different with probabilistic reasoning?  
b) What is reasoning under uncertainty?  

Q.9  Define the following terms:  
a) Fuzzy logic  
b) Multi valued logic  
c) Fuzzy set  
d) Fuzzy rules  
e) Membership functions  
f) Linguistic variable  
g) Operations on fuzzy sets  
h) Fuzzy relations
End Semester Examination, Dec 2013
MCA - Fourth Semester
NETWORK SECURITY AND CRYPTOGRAPHY (MCA-405)

Time: 3 hrs
Max Marks: 75
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 a) The equation for additive inverse is ________.
b) Linear congruence has no solution if ________.
c) The value of $\phi(260)$ is ________.
d) The polynomial representation of 10011001 is ________.
e) The two algorithms of primality testing are ________ and ________.
f) Three common algebraic structure are ________, ________ and ________.
g) What is trap door?
h) Define honey pot?
i) Differentiate between passive and active attacks of computer.
j) What are two types of audit records? 1½x10

UNIT-I

Q.2 Explain about intrusion detection techniques in detail. 15

Q.3 Write a short note on:
a) E-mail hacking.
b) Mail bombing.
c) Packet sniffing. 5x3

UNIT-II

Q.4 Discuss in detail concept of trusted systems and data access control. 15

Q.5 a) Explain various models for network security.
b) Why is there a need to take multiple samples during the user registration process of biometrics? 10

UNIT-III

Q.6 a) Explain substitution and transposition techniques with suitable examples.
b) Give differences between conventional encryption and public key encryption. 10

Q.7 Write short notes on:
 a) Message Digest.
b) Hash Function.
c) DES. 5x3

UNIT-IV

Q.8 a) Define Chinese remainder theorem and its application.
b) Find the value of x for the following sets of congruence using the Chinese remainder theorem.
   $X=2 \mod 7$ and $x=3 \mod 9$
c) Define primality testing with a suitable example. 5

Q.9 a) Define discrete logarithms and explain their importance in solving logarithmic and equations.
b) Find the result of $15^4 \mod 17$ using Fermat's little theorem.
c) Find the n-bit word that is represented by $x^2$ in GF ($2^8$). 5
End Semester Examination, Dec. 2013
MCA - Fifth Semester
COMPONENT BASED TECHNOLOGIES (MCA-501)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1  a) Defining two method with the same name but with different parameter is called.
   i) Loading
   iii) Overriding
   b) In a body of a method C# uses the variable named _______ to refer to the
      current object whose method is being invoked.
   i) Call
   iii) Do
   c) A _______ block encloses the code that would throw an exception.
   i) Try
   iii) Exception
   d) Which method do you invoke on the data adapter control to load your generated
      dataset?
   i) Fill
   iii) Execute reader
   e) HTTP is a ____________ protocol.
   i) Stateful
   iii) Stateless
   f) _______ access modifier specifies that element is accessible in the whole
      assembly.
   i) Virtual
   iii) Protected
   g) The extention of a asp.net file is:
   i) .asp
   iii) .aspx
   h) All the methods in an abstract class must be abstract:
   i) True
   i) What is MSIL.
   i) Multi socket internet library
   ii) Microsoft intermediate language
   j) Asp.net websites are run in ___________ web server.
   i) Apache
   iii) IIS
   ii) Oracle

UNIT-I

Q.2  a) Discuss the difference between value type and reference type. 8
b) Explain CTS. How CTS ensures data safety? 7

Q.3  a) Why is multiple inheritance not allowed in C#? Through what other means can
the same functionality be replicated. Give examples to support you answer. 15

P. T. O.
UNIT-II

Q.4  a) Explain the concept of .net name space in detail. Give examples to support your answer.  
     b) What are properties in C#? How do we create a read only property? Give examples.  

Q.5  a) Explain the concept of Delegates. Give suitable examples.  
     b) Write short notes on the following:  
        i) Sealed class  
        ii) Indexer  

UNIT-III

Q.6  Explain the architecture of Asp.net. Explain the life cycle of a Asp.net webpage.  

Q.7  Write short notes on the following:  
     a) Post back  
     b) Code behind file  
     c) Web service  

UNIT-IV

Q.8  Write short notes on the following:  
     a) Data Adapter  
     b) Data Reader  
     c) Data Set  

Q.9  a) Explain the COM-DCOM model.  
     b) Explain the process of binding a gridview control to a data source.
End Semester Examination, Dec. 2013
MCA - Fifth Semester
ANALYSIS AND DESIGN OF ALGORITHM (MCA-502)

Time: 3 hrs Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1  a) The size of problem is measured in terms of:
   i) Output.
   ii) Input.
   iii) Level of problems
   iv) Complexity.
   b) O-notation provides an asymptotic.
   i) Upper bound.
   ii) Light bound.
   iii) Lower bound.
   iv) None of these.
   c) The complexity of merge sort algorithm is:
   i) $O(n)$
   ii) $O(\log n)$
   iii) $O(n^2)$
   iv) $O(n \log n)$
   d) What algorithm technique is used in the implementation of Kurskal solution for MST?
   i) Greedy method.
   ii) Divide and conquer.
   iii) Dynamic programming.
   iv) All of the above.
   e) Algorithm based on greedy methods are used for solving ________.
   i) Linear problem.
   ii) Optimization problem.
   iii) Quadratic problem.
   iv) Bi-Quadratic problem.
   f) Property of 0/1 knapsack problem is:
   i) Weight must be in descending order.
   ii) Profit must be in descending order.
   iii) Both.
   iv) None of these.
   g) An adjacency matrix representation of graph can't contain information of:
   i) Nodes.
   ii) Edges.
   iii) Direction of edges.
   iv) Parallel edges.
   h) Which one of the following is true?
   i) All NP-hard problems are NP complete.
   ii) All NP-complete problems are NP-hard.
   iii) Some NP-complete problems are NP-hard.
   iv) None of these.
   i) _______ is a bottom up approach for solving problem.
   i) Backtracking.
   ii) Divide and conquer.
   iii) Dynamic programming
   iv) Knapsack.
   j) All leaves have same depth, which is the tree?
   i) Weight.
   ii) Breath.
   iii) Height.
   iv) Age.

UNIT-I

Q.2  a) Illustrate how to solve the problem of binary search using divide and conquer method. Also analyze the complexity of binary search using recurrence relation. 10
   b) Explain the concept of recurrence relation. Why is it useful? 5

Q.3  Explain various methods to find matrix multiplication and also analyze the complexity of all the methods. 15

P. T. O.
UNIT-II

Q.4 Solve the problem of Job sequencing with deadline for the given data:

<table>
<thead>
<tr>
<th>Job</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit</td>
<td>70</td>
<td>65</td>
<td>45</td>
<td>32</td>
<td>28</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Deadline</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

Also write the algorithm for the same and explain the above problem step by step. 15

Q.5  
a) Solve the given graph using Dejckstra's algorithm with 0 as source vertex.

\[ \text{Graph Image} \]

b) Write the algorithm for 0/1 knapsack using Dynamic Programming approach. 10

UNIT-III

Q.6  
a) Draw the state space tree for 8 Queen's problem. Also write the algorithm for the same. 10
   b) What is 4 planer graph problem? 5

Q.7 Find LC and FIFO solution of 0/1 knapsack problem with the following data:

<table>
<thead>
<tr>
<th>n=4</th>
<th>m=15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit</td>
<td>10</td>
</tr>
<tr>
<td>Weight</td>
<td>2</td>
</tr>
</tbody>
</table>

UNIT-IV

Q.8 a) State and prove Cook's theorem. 15

Q.9 Explain the following:
   a) P-Class.
   b) NP-Class.
   c) NP-complete. 5x3
End Semester Examination, Dec. 2013  
MCA - Fifth Semester  
DATA MINING AND WAREHOUSING (MCA-503)

Time: 3 hrs  
Max Marks: 75

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1 Fill in the blanks (10 parts)
   a) The three tier architecture of a data warehouse consists of layers for _____, _____ and _____.
   b) The _______ tables are not joined to each other in a data warehouse schema.
   c) _____ is a visualization operation that rotates the data anes in view in a data cube.
   d) The most common type of Smoothing technique is _____
   e) Classification is also known as ____.  
   f) Apriori algorithm is used to generate ______.
   g) HOLOP stands for ______.
   h) _____ and _____ are the measures of a good association rule.
   i) K-means is an algorithm to ______ the data.
   j) In roll up operation we always move up in ______.

UNIT-I

Q.2 What is a Data warehouse? Explain the important fearers of a data warehouse.  

Q.3 What is a Virtual Data Warehouse? Write down its merits, demerits, issues and risks involved. Also suggest some cases in which you will prefer building a virtual data warehouse rather than a physical data warehouse?

UNIT-II

Q.4 What is Data Mining? Explain the steps involved in the process of knowledge discovery from a data warehouse.

Q.5 Explain the following terms:
   a) Data cleaning.
   b) Data Preprocessing.
   c) Concept hierarchy.

UNIT-III

Q.6 What are Frequent Patterns in a dataset? Explain how the association rules can be generated from frequent itemsets with the help of an example?

Q.7 How are decision trees used for classification? Give an example in support of your answer.

UNIT-IV

Q.8 What is Web Mining? Mention the areas where web mining is widely being applied these days.

Q.9 Although Data Mining facilitates a lot a business operations, it has its flip side as well. List the merits and demerits of data mining.
End Semester Examination, Dec. 2013
MCA - Fifth Semester
SOFTWARE TESTING AND QUALITY ASSURANCE (MCA-504b)

Time: 3 hrs  Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1
a) Fault is synonymous with the word.
   i) Fault ii) Defect iii) Error iv) All
b) Testing process starts as soon as the _____ for the system are prepared.
   i) Design ii) Coding iii) Specifications iv) None
c) _____ is at the top level in the test group hierarchy.
   i) Test engineer ii) test manager iii) test leader iv) Junior engineer
d) For a function of n variables, boundary value analysis yields.
   i) 4n+1 ii) 4n+3 iii) 4n+2 iv) All
e) Mutation testing is related to
   i) fault seeding ii) functional testing iii) fault checking iv) fault testing
f) Test suite is
   i) Set of inputs ii) Set of outputs iii) Set of test cases iv) Set of process
g) A changed version that has not passed a regression test is called ______.
   i) Baseline version ii) Delta version iii) Data build iv) None of the above
h) A cookie is a ________ file on a user's system that identifies the user.
   i) hyper text ii) Text iii) Graphics iv) None of the above
i) Which one is not a software quality model?
   i) McCall model ii) Boehm model iii) ISO9000 iv) ISO9126
j) KPA in CMM stands for
   i) Key process area ii) Key product area iii) Key principal area iv) Key performance area

UNIT-I

Q.2
a) What is the importance of debugging process? 5
b) Discuss various types of debugging techniques. 10

Q.3 What is w-model? Discuss its utilization in software development. Explain advantages and disadvantages of this model. 15

P. T. O.
UNIT-II

Q.4 Consider a program to determine whether the number is 'odd' or 'even' and print the message 'NUMBER IS EVEN' OR 'NUMBER IS ODD', the number may be any valid integer. Draw flow graph, do path graph and calculate cyclomatic complexity. 15

Q.5 a) What are the rules for writing effective test cases? 5
b) What is mutation testing? Differentiate between primary mutants and secondary mutants. 10

UNIT-III

Q.6 a) What are various software quality activities? Discuss the software quality activities in comparison of other activities. 10
b) Distinguish between load test and stress test. 5

Q.7 When user acceptance testing takes place in software development process? Discuss its purpose and types. 15

UNIT-IV

Q.8 Describe the McCall's software quality model. How many product quality factors are defined and why? 15

Q.9 a) What is CMMI? What is the difference between CMMI and CMM? 7
b) Discuss organization standard software process (OSSP). 8
End Semester Examination, Dec. 2013
MCA - Fifth Semester
MOBILE COMPUTING (MCA-505A)

Time: 3 hrs
Max Marks: 75
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. All questions carry equal marks.

Q.1  
a) What is MTSO?  
b) Define OSS in GSM?  
c) What is a cluster?  
d) Give the full form of CDPD?  
e) What is route discovery in DSR?  
f) EIR is meant for  
   i) User identification  
   ii) Device identification  
   iii) Protection of user data  
   iv) None of the above  
g) The core concept used in cellular technology is:  
   i) TDM  
   ii) Frequency reuse  
   iii) Code reuse  
   iv) None of the above  
h) If the MH has a permanent address in the home domain, it is called:  
   i) Mobile address  
   ii) Home address  
   iii) Node address  
   iv) None  
i) Which one of the following is a type of MANET?  
   i) Personal area network  
   ii) Body area network  
   iii) Wireless LAN  
   iv) All of the above  
j) In the DSR protocol, a route error packet is sent during:  
   i) Route discovery  
   ii) Route maintenance  
   iii) Both of these  
   iv) None of these

UNIT-I

Q.2  
What are the different tiers in three tier architecture of mobile computing? Describe the functions of these tiers.  

Q.3  
a) Differentiate between forward and reverse tunneling.  
b) Describe the services provided by GSM network.

UNIT-II

Q.4  
Explain the architecture of wireless LAN relating cell design, various layers and access methods with a suitable diagram.

P.T.O.
Q.5 What do you understand by the term WAP? Explain WAP in terms of its architecture and give its applications relating them with real life.  

UNIT-III

Q.6 Triangulation, Trilateration, Multilateration are the three techniques used in location based services. Explain them with suitable diagram and examples.  

Q.7 a) Explain the three most important steps in mobile IP with suitable example.  
    b) How and why does I-TCP isolate problems on the wireless link?  

UNIT-IV

Q.8 What do you understand by the term routing? How is routing related to Adhoc networks? Explain the most fundamental type of routing in Adhoc networks.  

Q.9 Explain the following tricks in relation to routing in mobile Adhoc networks:  
  a) Radius Growth  
  b) Source Routing  
  c) Local Search  
  d) Clustering  
  e) Smarter updates  

5x3
End Semester Examination, Dec. 2013
BA (Hons.) ENGLISH – First Semester
ENGLISH PROSE (ENG-1.1)

Time: 3 hrs
Max Marks: 70
No. of pages: 1

Note: Question paper has three sections A, B and C. All sections are compulsory. Marks are indicated against each question.

SECTION-A

Q.1 Write short notes on any five:
   a) What is an essay? Name some essayists of the Romantic age.
   b) Explain "Studies serve for delight, for ornament and for ability".
   c) What picture of Lamb's grandmother did you get from his essay 'Dream-children: A reverie'?
   d) List the Do's and Don'ts for the traveler which Bacon talks about in his essay 'Of Travel'.
   e) Explain "reading maketh a full man; conference a ready man and writing an exact man".
   f) Explain the title. 'Dream children: A reverie'. What is the meaning of 'Reverie' here?
   g) Explain the following lives with reference to the context: "We are not of Alice, nor of thee, nor are we children at all. The children of Alice. The children of Alice call Bartram father. We are nothing; less than nothing, and dreams". (Dream Children).
   h) What are the ways of deriving benefits from travel according to Francis Bacon? Explain.

   3x5

SECTION-B

Q.2 Answer any five of the following:
   a) Write down the summary of 'Dream Children: A reverie'.
   b) Write a note on the development of the essay from Bacon to Lamb.
   c) Assess Lamb's contribution to English literature.
   d) What is Bacon's view on studies in 'of studies'?
   e) Write a note on the element of honour and pathes in Lamb's essay, giving examples from his essays.
   f) What do you say about the aphoristic style of Bacon? Discuss with reference to the essays you've read.
   g) What are the principal objects to be seen in the course of any travel according to Lamb? Explain.
   h) "Bacon is a teacher and not a companion." Discuss.

   5x5

SECTION-C

Q.3 Explain briefly any two:
   a) It has been said that from his essays we can construct Lamb's outer as well as his inner life. Comment.
   b) "Bacon is not an idealist; he believed in worldly wisdom". Comment.
   c) From the study of Bacon's essays, what conclusion would you draw about his conception of an essay?

   15x2
End Semester Examination, Dec. 2013
BA (Hons.) ENGLISH – First Semester
ENGLISH DRAMA-I (ENG-1.2)

Time: 3 hrs
Max Marks: 70
No. of pages: 1

Note: Question paper has three sections A, B and C. All sections are compulsory. Marks are indicated against each question.

SECTION-A

Q.1 Write short notes on any five:
   a) Discuss the dramatic importance of the opening scene of Hamlet.
   b) ‘Hamlet is a tale of woe and suffering of man in high estate culminating in his death’. Comment.
   c) What light do the soliloquies of Hamlet throw on his character?
   d) Critically examine the problem of Hamlet’s madness and point out whether it is feigned or real.
   e) Why is Rosalind kept at court after her father Duke Senior is banished to the forest?
   f) What points in Rosalind’s character are brought out in scene 3 of “As you like it?”
   g) What are the different types of Drama?
   h) Write in short about the Origin of Drama. 3x5

SECTION-B

Q.2 Answer any five of the following questions:
   a) What is the part played by fate or destiny in Hamlet?
   b) Write a note on the character of Gertrude.
   c) Examine the role and dramatic significance of the Ghost in Hamlet.
   d) Explain the following lines:
      i) Though yet of Hamlet our dear brother’s death
      ii) The memory be green, and that it us befitted
      iii) To bear our hearts in grief and our whole kingdom.
   e) Write in brief about the character of Rosalind in “As you like it”.
   f) Comment on the aptness of the title as you like it.
   g) Explain the following lines:
      ‘All the world’s a stage,
      And all the men and women merely players,
      They have their exits and entrances,
      His acts being seven age’
   h) What are the elements of Drama? Discuss in detail. 5x5

SECTION-C

Q.3 Explain briefly any two:
   a) Write a detailed note on Shakespeare's concept of tragedy with special reference to Hamlet. How far is the statement “character is destiny” applicable to this play?
   b) “As you like it” is a pastoral comedy. Elaborate?
   c) What are the characteristic of a Drama? Explain. 15x2
End Semester Examination, Dec. 2013
BA (Hons.) ENGLISH – First Semester
ROMANTIC POETRY-I (ENG-1.3)

Time: 3 hrs  Max Marks: 70
No. of pages: 2

Note: Question paper has three sections A, B and C. All sections are compulsory. Marks are indicated against each question.

SECTION-A

Q.1  Answer any five of the following short questions:
   a) Explain Keat's poetry as a 'poetry of paradox' on the basis of the odes you've read.
   b) Explain the following lines with reference to the context:
      'Beauty is truth, truth beauty' — that is all,
      Ye know on earth, and all ye need to know.
   c) Explain with reference to the context:
      Weave a circle round him thrice,
      And close your eyes with holy dread,
      For he on honey-dew hath fed,
      And drunk the milk of paradise.
   d) Explain with reference to the context:
      Hail to thee, blithe Spirit!
      Bird thou never wert,
      That from Heaven or near it
      Poorest thy full heart
      In profuse strains of unpremeditated art.
   e) Explain with reference to the context:
      Thanks to the human heart by which we live,
      Thanks to its tenderness, its joys and fears,
      To me the meanest flower that blows can give,
      Thoughts that do often lie too deep for tears.
   f) Explain with reference to the context:
      The sounding cataract,
      Haunted me like a passion: the tall rock,
      The mountain, and the deep and gloomy wood,
      Their colours and their forms, were then to me,
      An appetite.
   g) Explain with reference to the context:
      The trumpet of a prophecy! O, wind,
      If winter comes, can spring be far behind?
   h) Explain with reference to the context:
      'O'er rough and smooth she trips along,
      And never looks behind;
      And sings a solitary song
      That whistles in the wind.

SECTION-B

Q.2  Answer any five of the following questions:
   a) Define Ode and apply it to any one of two- 'Ode to Nightingale' and 'Ode on a
      Grecian urn'.
   b) How is Shelley a lyrical poet? Explain with examples.
   c) Define the concept of supernaturalism in Coleridge and apply this to any one of
      these poems-Kubla Khan/Rime of ancient mariner.

P. T. O.
d) Ilucidate the following lines with reference to the Intimation Ode.
   The child is father of the man;
   And I could wish my days to be
   Bound each to each by natural piety.

e) Explain the blend of the ideal and the real in ‘The Ode to Westwind’.
f) How does Keats personify and humanise nature in ‘Ode to Autumn’? Explain.
g) Write a note on negative capability in Keats citing from the odes you’ve read.
h) Write down the critical appreciation of the poem ‘Lucy Gray’ by William Wordsworth.

SECTION-C

Q.3 Answer any two of the following:

a) What aspects of Wordsworth’s philosophy of nature are revealed in ‘Tintern Abbey’?

b) Discuss briefly Wordsworth’s assertion that poetry is the spontaneous overflow of powerful feelings: ‘It takes its origin from emotions recollected in tranquility.’

c) Give your views on Keats as a poet of pictorial sensuousness with reference to the poems you have read.
End Semester Examination, Dec. 2013
BA (Hons.) ENGLISH – First Semester
VICTORIAN POETRY (ENG-1.4)

Time: 3 hrs
Max Marks: 70
No. of pages: 1

Note: Question paper has three sections A, B and C. All sections are compulsory. Marks are indicated against each question.

SECTION A

Q.1 Answer any five of the following short questions. Explain with reference to context.
   a) If you get simple beauty and nought else,
      You get the best thing God invents:
   b) Nay, we’ll go
      Together down, Sir. Notice Neptune, though,
      Taming a sea-horse....
   c) For there is no friend like a sister,
      In calm and stormy weather;
   d) I am half-sick of shadows.
   e) Lizzie as “Female Christ.”
   f) To strive, to seek, to find, and not to yield.
   g) She had
      A heart – how shall I say? – too soon made glad.
   h) What hand and brain went ever paired?
      What heart alike conceived and dared? 3x5

SECTION B

Q.2 Answer any five of the following questions:
   a) Fra Lippo Lippi’s life is a dramatic journey that he traverses. Explicate.
   b) The “Redeemer” and the “Redeemed” in Goblin Market.
   c) Ulysses as an indomitable adventurer.
   d) How does the character of the Duke of Ferrara appear to you?
   e) The lover’s optimism in the “Last Ride Together.”
   f) What does Tennyson mean by “Crossing the Bar”?
   g) The salient features of the Dramatic Monologue.
   h) “I am poor brother Lippo, by your leave.” What does this very first line of the poem signify? 5x5

SECTION C

Q.3 Answer any two of the following questions:
   a) The use of economic language and metaphors, terms of finance and commerce by goblins who are costermongers, justify the title “Goblin Market.” Do you agree?
   b) Compare and contrast the characters of the Duke and the Duchess in “My Last Duchess.”
   c) The illusion and reality in “The Lady of Shalott.” 15x2
End Semester Examination, Dec. 2013
B.Com. (Hons) and (Industry Integrated) - First Semester
INDIAN ECONOMIC AND SOCIAL ENVIRONMENT (CHE-1.1)

Time: 3 hrs
Max Marks: 100
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.
Q.1 is compulsory. Marks are indicated against each.

Q.1  
a) Fill in the blank:
   i) _______ is the major source of revenue for the Indian Government.
   ii) The full form of IDBI is _______.
   iii) _______ was abolished in New Economic Policy 1991.
   iv) The important objective of India's trade policy was _______ and self-sufficiency.
   v) Since independence, there is a central role of _______ in India's developmental effort.
   vi) _______ is important, as it contributes towards employment, output and basic food security.
   vii) _______ sector play a major role in small scale and cottage industry.
   viii) _______ is the example of exogenous factors.
   ix) Schedule A consisted of _______ member of industries.
   x) The major goal of India's Industrial Policy (1991) is _______.

b) Write very short notes on the following:
   i) Industrial Licensing policy.
   ii) Mixed economy.
   iii) Globalisation.
   iv) Development banks.
   v) Fiscal deficit.

2x5

c) Write short notes on any four of the following:
   i) Social responsibility of business.
   ii) Industrial sickness.
   iii) Role of private sector in economic development.
   iv) Economic environment.
   v) Merits of foreign trade.

4x5

UNIT-I

Q.2 In what ways does the politico-legal environment in any country affect business firms? Briefly explain with examples. 15

Q.3 Discuss the role of Government of India in the economic domain from a historical point of view. 15

UNIT-II

Q.4 State and explain the major objectives of the public sector. Critically evaluate the performance of public enterprises. 15

Q.5 Discuss the role and importance of small scale industry in a developing economy like India. Also, examine the growth of SSI in post-reform period. 15

P. T. O.
**UNIT-III**

Q.6  a) Explain the scope and classification of external debt.  
     b) Define Balance of Payments and explain the significance of BOP.  

Q.7  Discuss the role and significance of foreign trade for a developing economy.  

**UNIT-IV**

Q.8  a) Discuss the Industrial Policy of 1991.  
     b) Discuss the impact of economic reforms on poverty and employment.  

Q.9  Discuss the significance and need for financial and fiscal reforms in India.
End Semester Examination, Dec. 2013
B.Com. (Hons) and (Industry Integrated) - First Semester
BUSINESS ORGANISATION AND MANAGEMENT (CH-1.1)

Time: 3 hrs
Max Marks: 100

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.
Q.1 is compulsory. All questions carry equal marks.

Q.1    a) Answer briefly (very short answer type):
   i) Give two benefits of MNCs.
   ii) What is entrepreneurship?
   iii) State two objectives of CII.
   iv) State two advantages of planning.
   v) Give any two features of matrix organization.
   vi) Diagrammatically represent Maslow’s theory of motivation.
   vii) State any two techniques of controlling.
   viii) State any two characteristics of co-operative society.
   ix) Diagrammatically represent leadership continuum.
   x) Discuss any two barriers of communication.

   b) Answer briefly (very short answer type):
   i) Discuss the interface between business and its environment.
   ii) Differentiate between sole proprietorship and partnership firms.
   iii) Discuss the role of FICCI as a form of business.
   iv) Discuss two factor theory of motivation.

   UNIT-I

Q.2 What is business? Discuss the main objectives of business.  

Q.3 a) Differentiate between business, trade and commerce. 
     b) Differentiate between public and private limited company.

UNIT-II

Q.4 Discuss the causes of business combinations. Is it true to say that formation of business combination is a conspiracy against the consumer?

Q.5 What is a stock exchange? Discuss the role of SEBI.

UNIT-III

Q.6 "Whatever a manager does, he does through decision-making”. Discuss this statement and explain the significance of rational decision-making in management.

Q.7 Project organization is not a panacea for overcoming all functional organizational weaknesses. But it can be a great asset to those companies which possess the acumen to exploit its strengths. Indicate the various strengths of project organization and suggest whether it should complement or supplement or replace the functional organization.

UNIT-IV

Q.8 Identify the leadership styles describing the situation under which each style is useful. What factors influence the choice of leadership style?

Q.9 “The controlling function of management is similar to the function of thermostat in a refrigerator”. Elucidate the statement and bring out the main steps in the control process.
End Semester Examination, Dec. 2013
B.Com.(Hons) Industry Integrated -First Semester
FINANCIAL ACCOUNTING (CH-1.2)

Time: 3 hrs
Max Marks: 100
No. of pages: 2

Note: Attempt All questions; Marks are indicated against each.

Q.1 a) What are the three fundamental accounting assumptions? Explain briefly. 10
    b) Discuss the concept of double entry accounting system. 10

Q.2 a) Journalise the following transactions:
    i) Paid rent of building Rs. 12,000. Half of the building is used by proprietor for residential purpose.
    ii) Paid fire insurance of the above building in advance Rs. 1000.
    iii) Paid life insurance premium Rs. 2,000.
    iv) Paid income-tax Rs. 3,000.
    v) Charge depreciation on furniture @ 10% p.a for one month (furniture Rs. 12,000).
    vi) Provide interest on loan from Ram (Rs. 1,00,000) at 18% p.a. for two months.
    vii) Sold 2000 shirts (costing Rs. 500 each) at 10% trade discount. 16
    b) Explain the meaning of "2/10, n/60". 4

Q.3 a) From the following particulars, prepare the Bank reconciliation statement of Shri Krishan as on 31st March 2013.
    i) Balance as per pass book is Rs. 10,000.
    ii) Bank collected a cheque of Rs. 500 on behalf of Shri Krishan but wrongly credited it to Shri Krishan's A/c (another customer).
    iii) Bank recorded a cash deposit of Rs. 1,589 as 1,598.
    iv) Withdrawal column of the pass book understated by Rs. 100.
    v) The credit balance of Rs. 1,500 as on page 5 of the pass book was recorded on page 6 as the debit balance.
    vi) The payment of a cheque of Rs. 350 was recorded twice in the pass book.
    vii) The pass book showed a credit for a cheque of Rs. 1,000 deposited by Shri Krishan (another customer of the Bank). 14
    b) Explain the difference between accrued income and unearned income with example. 6

Q.4 A book keeper while preparing trial balance finds that the debit exceeds by Rs. 500. He places the difference to a suspense account. Pass the necessary journal entries to rectify the following errors discovered by the auditor and prepare suspense account.
    a) A cheque from A for Rs. 150 had been posted to the credit of A as Rs. 100.
    b) Goods worth Rs. 100 purchased from Chandra were entered in the sales book. The account of Chandra was correctly credited.
    c) A credit balance of Rs. 755 of rent received account shown as Rs. 570.
    d) Goods worth Rs. 130 returned by Green were entered in the sales book and were posted there from to the credit of Green's personal account.
    e) Bills receivable from Henry of Rs. 1,600 posted to the credit of Bills Payable account and also credited to Henry. 12

P. T. O.
f) An amount of Rs. 800 owing by a customer had been omitted from the list of Sundry debtors.
g) A credit item of Rs. 349 has been debited to a personal account of customer as Rs. 439.
h) A discount allowed to a customer has been credited to him as Rs. 145 in place of Rs. 154.
i) Total sales of Rs. 594 had been posted as Rs. 495 in the sales account.
j) Cash received from Meenu Rs. 720 was posted to the debit of Meena as Rs. 270.

Q.5 Following are the extracts of a Trial Balance as at 31st March 2013.

<table>
<thead>
<tr>
<th>Name of Account</th>
<th>Debit Balance (Rs.)</th>
<th>Credit Balance (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debtor</td>
<td>2,06,000</td>
<td></td>
</tr>
<tr>
<td>Bad debts</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>Provision for doubtful debts</td>
<td></td>
<td>15,000</td>
</tr>
</tbody>
</table>

Further bad debts were amounting to Rs. 6,000.
Maintain a provision for doubtful debts @ 5% on debtors.
You are required to prepare relevant ledgers and show how the final balances will appear in Profit and Loss account and balance sheet?
End Semester Examination, Dec. 2013
B.Com. (Hons) and (Industry Integrated) -First Semester
MICRO ECONOMICS -1 (CH-1.3)

Time: 3 hrs
Max Marks: 100
No. of pages: 1

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit. Q.1 is compulsory. Marks are indicated against each.

Q.1
a) Answer in brief of the followings:
   i) List out central problems of an economy.
   ii) Define economic efficiency.
   iii) Mention the factors that bring changes in demand.
   iv) What is meant by shift in supply curve?
   v) Write any two conditions for consumer equilibrium.
   vi) Define pure competition.
   vii) What is Slutsky's measure?
   viii) What is excess capacity?
   ix) Write the formula for calculating income elasticity of demand.
   x) Define Consumer Surplus.

b) Answer the following questions in short:
   i) Explain the essential elements of basic competitive model.
   ii) Does utility analysis explain income and substitution effect? Explain.
   iii) Define group equilibrium with the help of diagram.
   iv) "Monopolistic competition is a mixture of Monopoly and Competition". Explain.

UNIT-I

Q.2 Discuss the significance of economics in life. Why should commerce students study economics? Is it a science or an art? Explain.

Q.3 Explain the difference between "Change in Quantity demanded" and "Change in Demand". Also discuss various factors responsible for these changes.

UNIT-II

Q.4 Explain the concept of cross elasticity of demand. How is it used by firms in formulating pricing strategy and analyzing the degree of competition in an industry?

Q.5 Define the term "marginal rate of substitution". Why does it diminish with the increase in consumption? Discuss its applications.

UNIT-III

Q.6 Define perfectly competitive market. Explain the equilibrium of a firm in short and long run under perfect competition.

Q.7 Explain the concept of revenue. Define the relationship among total, average and marginal revenue under different market conditions with the help of suitable examples.

UNIT-IV

Q.8 What is price discrimination? Explain its practical applications. When can a firm use price discrimination? Explain using suitable examples.

Q.9
a) Differentiate between Monopoly and Monopolistic Competitive Market.

b) Write a short note on "Anti-trust Policy".
End Semester Examination, Dec. 2013  
B.Com. (Hons) & Industry integrated -First Semester  
BUSINESS LAW (CH-1.4)

Time: 3 hrs  
Max Marks: 100  
No. of pages: 2

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.  
Q.1 is compulsory. Marks are indicated against each question.

Q.1 a) State whether the following statements are true or false:  
i) All illegal agreements are void but all void agreements are not necessarily illegal.  
ii) An agreement can be ratified by a minor on attaining the age of majority.  
iii) A finder of lost goods is subject to the same responsibility as of bailee.  
iv) Money and actionable claims are not the subject matter of contract of sale of goods.  
v) Breach of warranty can be treated as breach of condition but not vice-versa in contract of sale of goods.  
vi) Unless otherwise agreed, delivery of goods and payment of price are concurrent conditions.

vii) LLP does not enjoy perpetual succession.  
viii) Minor can be admitted to benefits of LLP.  
ix) The Information Technology Act has empowered the State Governments to make rules in respect of digital signatures.  
x) The person who makes the unauthorized use of electronic signature of another person is punishable under IT Act, 2000.  

b) Fill in the blanks:  
i) Electronic records are as authentic as _________.  
j) The applicant for a licence to issue electronic signature certificate must have a capital of _________.  
ii) _________ is the consideration of the contract of sale.  
iii) Quiet possession is an implied _________.  
iv) ________ has to apply for delivery, unless otherwise agreed.  
v) The LLP act was passed in the year _________.  
vi) To use the words bank, banking in the name of a LLP; the approval of ________ is required.  
vii) Quantum Meruit was means _________.  
viii) Consideration must move at the desire of the _________.  
x) Exemplary damages are available in the case of _________.

1x10

c) Write short notes on any four:  
i) Privity of contract.  
ii) Tax treatment of LLP.  
iii) Asymmetric crypto system.  
iv) Difference between condition and warranty.  
v) Contingent contract.  

5x4

UNIT-I

Q.2 "All contracts are agreements but all agreements are not contracts." Explain the statement discussing all the essential elements of a valid contract.  

Q.3 What do you mean by contract of bailment? Discuss the rights of bailor and bailee.  

15  
15

P. T. O.
UNIT-II

Q.4 Define the term “unpaid seller” as per Sale of Goods Act. Explain in detail the rights of unpaid seller:
   a) As against the goods and
   b) As against the buyer. 15

Q.5 Explain the various conditions and warranties in a contract of sale of goods. 15

UNIT-III

Q.6 Who can become a partner in LLP? How is the mutual relation between partners intense and between LLP and its partners determined? 15

Q.7 Write notes on:
   a) Incorporation of LLP. 5
   b) Winding up of LLP. 10

UNIT-IV

Q.8 Write a detailed note on 'digital signature'. Also differentiate between digital signature and electronic signature. 15

Q.9 Explain in detail various punishable offences under the Information Technology Act, 2000. 15
End Semester Examination, Dec. 2013
BA (Hons.) ENGLISH – First Semester
ENGLISH GRAMMAR AND LITERARY TERMS (ENG-1.5)

Time: 3 hrs

Note: Question paper has three sections A, B and C. All sections are compulsory. Marks are indicated against each question.

SECTION-A

Q.1 Fill in the blanks (any five where g and h are compulsory):
   a) He jumped _____ a conclusion not warranted by facts. The child jumped ___ joy when I gave him sweets. He jumped ______ my offer.
   b) He responded _____ the ladies in a humorous speech. The boy immediately responded _____ a blow. He responded _____ his toast in a neat little speech.
   c) There are some diseases that proceed _____ dirt. After visiting Agra we proceed _____ Delhi. Let us proceed _____ the work in hand.
   d) He exercises complete authority _____ his followers. I say this on the authority _____ the Oxford English Dictionary. Dr. Kumar is an authority _____ English Poetry.
   e) He takes no interest _____ politics. What you say has no interest _____ me. I have no interest _____ the agents of the firm.
   f) Let us talk _____ something else. For a while they talked _____ politics. I will talk _____ son respecting his conduct.
   g) Warden: Have you _____ complaints against the food?
      Student: We have _____ complaints at all against the food. What we ask for is _____ changes in the timings.
   h) X: Can you tell me _____ road will take me to the college?
      Y: You see these two roads ______ road will take you there. You can take the one or the _________.

SECTION-B

Q.2 Explain any five of the following literary terms with examples.
   a) Elegy  
   b) Spenserian stanza  
   c) Tragedy  
   d) Sonnet  
   e) Lyric  
   f) Comedy  
   g) Tragedy

SECTION-C

Q.3 Answer any two of the following questions:
   a) Recently you purchased a clean wash washing machine with one year warranty. Within six months of purchase the machine started giving trouble. Write a letter to Ms. National Appliances, 28, Darya Ganj, Delhi, describing the problems and asking for rectification. You are Akshay/Ashima Mehta of 19, Sector 12, R.K. Puram, New Delhi.
   b) This year students of your university organised many campaigns to create awareness in society towards some social evils. The efforts of the students were appreciated by all. Write an article on the 'Role of students in National Development' for publication in your University Magazine (150-200 words).
   c) Draw up a notice on behalf of the Managing Director, for the office notice-board asking office staff to insert the dates on which they would like to take their annual holidays.
End Semester Examination, Dec. 2013  
B.Com. (Hons) & Industry Integrated-First Semester  
BUSINESS COMMUNICATION-I (CH-105)  

Time: 3 hrs  
Max Marks: 100  
No. of pages: 2  

Note: Attempt FIVE questions in all; taking at least ONE question from each Unit.  
Q.1 is compulsory. Marks are indicated against each.  

Q.1 a) Give one word for the following:  
i) Way of sitting and standing.  
ii) Fast kind of reading to look for something particular.  
iii) An example of intra-office communication.  
iv) A reaction or response to a message.  
v) Informal communication called gossip.  
vi) Another name for body language.  
vii) Hearing with understanding.  
viii) Looking at the speaker while communicating.  
ix) Ability to recall the material heard.  
x) Way of using your hands while speaking is called _________.  

b) Define the following in one or two sentences (Give examples of each):  
i) Feedback  
ii) Letterhead  
iii) Decoding  
iv) Encoding  
v) Active listening  

2x5  

Q.2 What do you understand by the term communication? Highlight the barriers which make communication incomplete and discuss steps to remove these barriers?  

15  

Q.3 Explain in details the seven Cs which make communication effective. Also give an example of each to support your answer.  

15  

UNIT-II  

Q.4 Write short notes on the following:  
a) Agenda  
b) Memo  
c) Minutes of the meeting  

5x3  

Q.5 Draft a circular for all your employees to discuss the problem of late-coming among employees. Call them for an urgent meeting and also attach an agenda with the circular, so that everyone comes prepared for the meeting.  

15  

P. T. O.
UNIT-III

Q.6 Discuss the different types of business reports used in an organization. Give an example of each. 15

Q.7 Write short notes on:
   a) Abstracts
   b) Summaries
   c) Proposals 15

UNIT-IV

Q.8 What role does body language play in highlighting the personality of an individual? Highlight the different components of body language and explain how each one can be used for enhancing the personality of an individual. 15

Q.9 Listening skill is one of the most important aspects of communication. Explain how listening skills can be made effective by removing the barriers to listening? 15
Q.1 Explain any ten of the following: (1.5 \times 10 = 15)

(i) India is an autocratic country. True/false

(ii) Who is the Chairman of Planning Commission?

(iii) Head office of the RBI is situated at Mumbai. True/False

(iv) Who is Montek Singh Ahluwalia?

(v) Bahujan Samaj Party is a National Party. True/False

(vi) To whom should the Vice President of India address the letter of his resignation?

(vii) Who is the supreme commander of Indian Armed Forces?

(viii) How many members are in Loksabha?

(ix) Who is Sonia Gandhi?

(x) Who is the Minister of Home Affairs of India?

(xi) What is the tenure of Rajya Shaba?

(xii) What do you mean by Republic?

(xiii) What do you mean by Parliamentary Democracy?

(xiv) What do you mean by Unitary State?

(xv) Which party is ruling in Punjab?
PART-A

Write briefly about any five of the following (6x5 = 30)

Q.2 Discuss about the various organs of Indian government.
Q.3 Explain the preamble of Indian Constitution?
Q.4 Write a short note on Cauvery river disputes.
Q.5 What are the directive principles of state?
Q.6 What are the duties of Planning Commission of India?
Q.7 What are the eligibility criteria for the Member of Loksabha?
Q.8 Write a short note on Telangana movement.
Q.9 Write the merits and demerits of local self government.

PART-B

Answer any two of the following: (17.5x2=35)

Q.10 Discuss the political party system of India. Write the basic features of National party with examples.
Q.11 Define Naxalism. Explain in detail about the cause and effect of Naxalism.
Q.12 What do you mean by fundamental right? Explain.
Q.1 Explain any ten of the following:

(i) What do you mean by Sufi movement?
(ii) What is Female feticide?
(iii) What do you mean by modernization?
(iv) Write the name of the major religions of India.
(v) What do you know about Raja Ram Mohan Roy?
(vi) Who is credited with the formation of Arya Samaj?
(vii) Write the name of any person who was associated with the Bhakti movement.
(viii) What is subsidy?
(ix) Define Private sector.
(x) Who is the finance minister of India?
(xi) Define Public sector.
(xii) What do you mean by primary activity?
(xiii) Write any two features of cast system.
(xiv) What do you mean by Fiscal deficit?
(xv) What do you mean by traditions?
परंपराओं आप क्या समझते हैं?

**PART-A**
Write briefly about any five of the following:
किसी पांच के उत्तर दें।

Q.2) Write a short note on women empowerment
 महिला सशक्तिकरण पर तपू मिठायी लिखें।
Q.3) What are the causes of urbanization?
 शहरीकरण के क्या कारण हैं?
Q.4) What do you mean by modernization?
 आधुनिकीकरण से आप क्या समझते हैं?
Q.5) What are the causes of poverty and unemployment in India?
 भारत में समस्या और अर्थव्यवस्था के क्या कारण हैं?
Q.6) Write a short note on the liberalization of economy.
 अर्थव्यवस्था के उद्दीपक नर्म पर लिखें।
Q.7) Discuss the role of public and private sectors in development of Indian economy?
 भारतीय अर्थव्यवस्था के विकास में गृही और सरकारी क्षेत्र की क्या भूमिका है?
Q.8) Write a note on Indian renaissance of 19th century.
 19वीं सदी के भारतीय नववर्धन पर लिखें।
Q.9) Discuss the features of sufi movement.
 सूफ़ी आन्दोलन की विशेषताएँ पर चर्चा करें।

**PART-B**
Answer any two of the following:
किसी से दो के उत्तर दे।

Q.10) What are the salient features of Indian Society? Discuss in detail.
 भारतीय समाज की मुख्य विशेषताएं क्या हैं? विस्तारपूर्वक चर्चा करें।
Q.11) Write a detailed note on primary, secondary and tertiary sectors of industry.
 उद्योग के प्राथमिक द्वितीयक तथा तृतीय क्षेत्रों पर विस्तारपूर्वक लिखिए।
Q.12) Write a detailed note on the impact of freedom movement on Indian society.
 भारतीय समाज पर स्वतंत्रता आन्दोलन के प्रभाव की विस्तारपूर्वक चर्चा करें।
Q1. Attempt any ten of the following: (1.5X10=15)

(किसी दस प्रश्नों के उत्तर दे)

a. Define communication.
   संचार को परिभाषित करें।

b. Name any two international news agencies.
   किन्हीं दो अंतरराष्ट्रीय न्युज़ एजेंसियों के नाम बताएँ

c. In which year radio came to India?
   भारत में रेडियो किस वर्ष में आया?

d. SITE stands for
   एस इटीई से क्या तात्त्विक निर्देश है?

e. What is e-newspaper?
   ई-समाचार पत्र क्या है?

f. Radio is an audio visual medium of communication. (True/False)
   रेडियो संचार का आudiosvisual माध्यम है (सत्य/गलत)

g. Cinema is one of the most powerful medium of communication. (True/False)
   सिनेमा संचार का सर्वोच्च प्रभावशाली माध्यम है (सत्य/गलत)

h. Give any two advantage of internet.
   इंटरनेट के किसी दो लाभ बताएँ।

i. Who poised the term ‘Global Village’?
   ग्लोबल वाइंगल किसने दिया?

j. Give two examples of non verbal communication.
   मौखिक संचार का दो उदाहरण दे।

k. Name any two magazines that are published for women.
   महिलाओं के लिए प्रकाशित होने वाले किसी दो मैगजीन का नाम बताएँ।

l. Define edutainment.
   एड्युटेन्टम की परिभाषित करें।

m. In which year Vivid Bharti Started?
   विविध भारती किस वर्ष में आरंभ हुआ?
n. In which year color television came to India?
रंगीन टीवी भारत में किस वर्ष आरंभ हुआ?
o. PTI stands for
पी टी आई से तात्पर्य है ..............

PART-A
Answer any five of the following:
किन्ही पांच प्रश्नों का उत्तर दे (6X5=30)

Q2 Discuss the functions of communication in detail.
संचार के कार्यों की विस्तारपूर्वक चर्चा करें.
Q3 Write a short note on Magazine.
मैजैज नामक पर एक संक्षिप्त दिखाईं लिखें।
Q4 Discuss in detail the various types of audience.
दर्शक के विभिन्न प्रकारों की चर्चा करें.
Q5 What do you understand by interpersonal communication? Explain.
अंतर्व्यक्तिक संचार से आप क्या समझते है? व्याख्या करें.
Q6 Write a short note on history of Radio.
रेडियो के इतिहास पर एक संक्षिप्त दिखाईं लिखें।
Q7 What do you mean by Target audience? Explain.
स्पष्ट दर्शक से आप क्या समझते हैं? व्याख्या करें.
Q8 Write a short note on Mass media.
मास मीडिया पर एक संक्षिप्त दिखाइं लिखें.
Q9 Discuss in detail the elements of communication.
संचार के क्षेत्रों की विस्तारपूर्वक चर्चा करें.

PART-B
Answer any two of the following:
किन्ही दो प्रश्नों का उत्तर दे। (17.5X2=35)

Q10 ‘Mass communication plays an important role in the development of a society’. Discuss in detail.
‘जन संचार समाज के विकास में एक महत्वपूर्ण भूमिका निभाता है’. विस्तार से चर्चा करें.
Q11 Differentiate between group communication and mass communication citing suitable examples.
समूह संचार एवं जन संचार में उचित उदाहरणों सहित अंतर बताएं.
Q12 Write a detailed note on the future of print journalism in the era of new media?
प्रिंट मीडिया के जमालों में प्रिंट मीडिया के भविष्य पर विस्तारपूर्वक दिखाइं।
Manav Rachna International University
End Semester Examination, Dec, 2013
BJMC—I Semester
Basic Language Skills (BJMC-104)

Time: 3 Hours
Max Marks: 80

Note: Q. No. I is compulsory. Attempt any five from Part A and two questions from Part B

1. Answer any ten of the following questions and selecting at least three from each group. (1 ½ marks each X 10 = 15 Marks)

A. Correct the following Sentences:
   (i) He read a book.
   (ii) Is it the right way for go?
   (iii) He is best student of his class.
   (iv) Sachin Tendulkar is consider as the best batsman of India.
   (v) He is about reach.
   (vi) Why don’t she perform well?
   (vii) This a emotional moment.
   (viii) Have they complete the assignment?
   (ix) They are supposed to reach on Monday.
   (x) Students are teach by the teacher.
   (xi) We have been working on the project since four days
   (xii) Hard work is the key for success.

B. Fill in the blanks:
   (i) He is ..... weak to walk.
   (ii) It..... been raining since 5am.
   (iii) Shyam...... have done this work.
   (iv) He lives.....Saket.....New Delhi
   (v) What is the time.....your watch?

Part A

Answer any five of the following. (6 marks each X 5 = 30 Marks)

(i) Write a short note on Prominence and proximity.
(ii) What are the elements of a story?
(iii) What are the different types of feature?
(iv) Why writing for media is different from other forms of writing?
(v) Write a profile of any famous personality.
(vi) Write a press release of any event organized by your department.
(vii) Write a short note on human interest story.
(viii) Write a feature on any topic of your interest.

Part B

Answer any two of the following. (17 ½ marks each X 2 = 35 Marks)

1. What are the basic elements of writing? Discuss in detail.
2. Discuss the concept of news. Explain the different types of news with suitable examples.
3. What is resume/CV? Prepare a resume for the job you are applying for.
Q.1 Attempt any ten questions:

(1X10=10)

a) Who started the publication of Samvad Kaumudi?
   संवाद कौमुडी का प्रकाशन किसने आरम्भ किया है?

b) What do you know about ‘Udant Martand’?
   ‘उदंत मार्तांड से आप क्या समझते है?

c) What is defamation?
   मानहानि क्या है?

d) Who invented the Printing press?
   प्रिंटिंग प्रेस की स्थापना किसने किया की?

e) Who was James August Hickky?
   जेम्स अगस्ट हिक्की जैसा था?

f) What is UNI?
   यू.एन.आई क्या है?

g) What do you known about Pulitzer Prize?
   पुलिटर प्राइज़ के बारे में आप क्या जानते है?

h) What is vernacular press act?
   वर्नकुलर प्रेस अधिनियम क्या है?

i) When was RTI Act passed?
   आर टीआई अधिनियम कब पारित हुआ?

j) What was Adam’s Regulation formed?
   एडम अधिनियम कब बना?

k) What is accuracy?
   सहीता क्या है?

l) What is Rowlatt Act?
   रॉलट अधिनियम क्या है?

m) Which important act was passed in 1910?
   1910 में कौन सा महत्वपूर्ण अधिनियम पारित हुआ था?

n) What is PCI?
   पीसीआई क्या है?

o) Define Ethics.
   इतिहास को परिभाषित करें.
PART-A
Answer any five of the following:
किन्ही पाँच प्रश्नों का उत्तर दें. (5X5=25)

1. What is the contribution of Mahatma Gandhi in the field of Indian Journalism?
   भारतीय पत्रकारिता के क्षेत्र में महात्मा गांधी का योगदान क्या रहा है?

2. Write a short note on Metcalfe’s Act of 1835.
   1835 के मेटकल्फ अधिनियम पर एक संक्षिप्त टिप्पणी लिखें.

3. What are the functions of the Press Council of India? Discuss in detail.
   प्रेस कांसिल ऑफ इंडिया के कार्य क्या है? विस्तारपूर्वक चर्चा करें.

4. Write a detailed note on the salient features of Indian constitution
   भारतीय संविधान की प्रमुख विशेषताओं पर विस्तारपूर्वक टिप्पणी लिखें.

5. Explain cyber laws in detail.
   साइबर कानून की विस्तारपूर्वक व्याख्या करें.

6. What is copyright act? Why is it important?
   कॉपीराइट अधिनियम क्या है? यह क्यों महत्वपूर्ण है?

7. Discuss the role of press in Indian social reform movement of 19th century.
   उन्नीसवीं सदी के भारतीय सामाजिक सुधार आंदोलन में प्रेस की भूमिका पर चर्चा करें.

8. Throw light on the early history of Indian Newspapers.
   भारतीय समाचारपत्र के आरंभिक इतिहास पर प्रकाश डालें.

PART-B
Answer any two of the following:
किन्ही दो प्रश्नों के उत्तर दें. (17.5X2=35)

1. What do you mean by journalistic ethics? Discuss the code of conduct for journalists.
   पत्रकारिता मूल्य से आप क्या समझते हैं? पत्रकारों के लिए आचारसंहिता की चर्चा करें.

   इटी अधिनियम , 2000 पर विस्तारपूर्वक टिप्पणी लिखें.

3. Discuss the role of press in Indian National Movement.
   भारतीय स्वतंत्रता आंदोलन में प्रेस के भूमिका की चर्चा करें.
Q.1 Attempt any ten of the following:

किसी दस प्रश्नों के उत्तर दें (1x10=10)

a) Define Communication.

b) What do you mean by Noise?

(c) Two-step flow of communication theory was poised by whom?

(d) Name any two traditional forms of communication.

(e) Write any two characteristics of Mass communication.

(f) What do you understand by mass media?

(g) Hypodermic needle theory is also known as …………..

(h) What do you understand by Kinesis?

(i) Cultivation Theory was propounded by …………….

(j) What is feedback?

(k) What do you mean by Crowd?

(l) “Who says What in Which Channel to Whom with What Effect?” model of communication was given by …………….

(m) Body language is a part of verbal communication. (True/False)

Note: Q. No.1 is compulsory. Attempt any five questions from Part-A and any two questions from Part-B.

नोट: प्रश्न अनिवार्य है. भाग अ से कोई पांच प्रश्न व भाग ब से दो प्रश्न करने का प्रयास करें.
Q2. Discuss in detail the multi step theory of communication.
संचार के क्षेत्र चरण सिद्धांत पर विस्तार से चर्चा करें।
Q3. Write a short note on the barriers of communication.
संचार की बाधाओं पर एक संक्षिप्त नोट लिखें।
Q4. Write a short on Osgood model of communication.
संचार के ओस्गूड सिद्धांत पर लघु टिप्पणी करें।
Q5. Write a short note on the seven C’s of communication.
संचार के सात सी पर एक संक्षिप्त नोट लिखें।
Q6. Explain briefly the uses and gratification theory of communication.
यूजेंज और ग्रेटीफिकेशन सिद्धांत संपन्न में की व्याख्या करें।
Q7. Write a short note on group communication.
समूह संचार पर संक्षिप्त नोट लिखें।
Q8. With the help of a diagram discuss the process of communication in detail.
रेखाचित्र के माध्यम से संचार प्रक्रिया की चर्चा करें।
Q9. Discuss the selective exposure and selective perception theory of communication.
संचार के सेलेक्टीव एक्सपोजर और सेलेक्टीव पर्सेप्शन सिद्धांत की चर्चा करें।

PART-B

Answer any two of the following:
किसी दो प्रश्नों का उत्तर दें। (17.5x2=35)

Q10. Discuss in detail the Laswell model and the Shannon & Weaver’s model of communication.
संचार की लस्वेल मॉडल और शॉन्एन और वीवर मॉडल की विस्तारपूर्वक चर्चा करें।
Q11. Write a detailed note on verbal and non verbal communication
मुख्य और अन्य मुख्य पर विस्तारपूर्वक नोट लिखें।
Q12. Discuss intrapersonal and interpersonal communication in detail.
अंतर व्यक्तिक संचार और अंत: व्यक्तिक संचार संदर्भ की विस्तारपूर्वक चर्चा करें।
End Semester Examination, December- 2013
BJMC –III Semester
Advertising and Public Relations (BJ-302)

Time: 3 Hours
Max. Marks: 70

Note: Q. 1 is compulsory. Attempt any five questions from Part- A and two questions from Part-B

Q.1 Attempt any ten questions.

(1X10=10)

a) The abbreviation KISS stands for what?

b) Write any two qualities of an advertising manager.

c) Write down the definition of AMA on advertising.

d) What do you mean by an identified sponsor?

e) Name the stages in PLC.

f) Who is known as the father of Public Relations?

 g) What do you mean by propaganda?

h) Write down any two tools of Public Relations.

i) What is SWOT?

j) Define Press Conference.

k) What type of advertising appeal is used in baby foods?

l) Name any two big advertising agencies of India.
m) Which is the first advertising agency of India?
भारत की पहली विज्ञापन एजेंसी कौन है?

n) What do you mean by Media selection?
मीडिया चयन से आप क्यों समझते हैं?

o) “Drive your way” is the punchline of which company?
“ड्राइव यर वे” किस कंपनी का पंच लाइन है?

PART-A
Answer any five of the following:
किसी पांच प्रश्नों का उत्तर दें
(5x5=25)

a) Write a brief note on the various departments of an advertising agency.
विज्ञापन एजेंसी के विभिन्न विभागों पर एक संक्षिप्त नोट लिखें.

b) Write the role of a PR professional in an organization.
संगठन में एक पीआर व्यक्ति का भूमिका है.

b) Prepare an advertising script for television.
टेलीविजन के लिए एक विज्ञापन का स्क्रिप्ट लेखें.

d) Discuss in detail the advertising appeals.
विज्ञापन आकर्षण पर विस्तार से चर्चा करें.

e) Define copy and write down the rules of copy writing.
प्रतिभावान को पूरी तरह से उपयोगी तथा सही लिखने के नियम लिखें.

f) Explain in detail the ethical aspects of advertising.
विज्ञापन के नैतिक प्रभावों के बारे में विस्तार से बताएं.

g) Briefly discuss the role of Public Relations in public sector.
साझी क्षेत्र में पब्लिक रिलेशंस की भूमिका पर संक्षेप में चर्चा करें.

h) Write a short note on code of ethics for Public Relations.
जन समूह के लिए आचरण सहीता पर एक संक्षिप्त नोट लिखें.

PART-B
Answer any two of the following
किसी दो प्रश्नों के उत्तर दें
(17.5x2=35)

a) Discuss in detail the historical growth and development of PR and Advertising in India.
भारत में पब्लिक रिलेशंस और विज्ञापन का इतिहास और विकास पर विस्तार से चर्चा करें.

b) Explain in detail the various tools and the importance of PR in today’s world.
आज की दुनिया में पीआर के विभिन्न उपकरण और पीआर के महत्व के बारे में बताएं.

c) Write a descriptive note on the various types and appeals of advertising.
विज्ञापन के विभिन्न प्रकार और विज्ञापन के आकर्षण पर एक वर्णनात्मक नोट लिखें.
photography, Design and Graphics (Sub Code: BJ-303)

ime: 3 Hours
ote: Q. No. 1 is compulsory. Attempt any five questions from Part-A and any two questions from Part B.

1. Attempt any ten of the following:

   i) Slow Process Emulsion is sensitive to
      a) Red Color
      b) Green Color
      c) Blue Color
      d) None of the above

   ii) Which colour is the most active?
       a) Red
       b) Green
       c) Blue
       d) Yellow

   iii) The fastest colour film available is...
        a) 1000 ASA
        b) 1600 ASA
        c) 3200 ASA
        d) 100 ASA

   iv) Angle of coverage of Normal Lens is:
iv) Angle of coverage of normal lens is:
   a) 180 degrees
   b) 270 degrees
   c) 42 degree
   d) 360 degrees
   सामान्य लेंस कर कर सकते हैं......के इस्तेमाल कोण को।
   क) 180 डिग्री
   ख) 270 डिग्री
   ग) 42 डिग्री
   घ) 360 डिग्री

v) What is the simplest thing you can change on your camera to vary the depth-of-field?
   a) The aperture of the lens
   b) The flash
   c) Plane mirror at 45 degree
   d) Film
   क्या आपके कैमरे पर निर्मित एक बदलना सरल होगा?
   क) सेंस का एपर्चर
   ख) फ्लैश
   ग) 45 डिग्री पर रामतल दर्पण
   घ) फिल्म

vi) Who coined the term ‘Photography’?
   a) Fox Talbot
   b) Nicephore Niepce
   c) Sir John Herschel
   d) Robert Hook
   'फोटोग्राफी' शब्द का प्रयोग सर्वप्रथम किसने किया?
   क) फोक्स टेल्बोट
   ख) निचीफोर नीपस
   ग) सर जॉन हर्स्चेल
   घ) रोबर्ट हुक

vii) A ‘bleeding’ picture is one that is
   a) Without borders
   b) Badly printed
   c) Streaked due to exhausted developer
   d) Red color picture
   एक ब्लीडिंग चित्र है एक
   क) सीमाओं के बिना
   ख) बुरी तरह मुद्दित
   ग) खाली विन्यास के कारण स्ट्रीक्ड चित्र
   घ) लाल रंग चित्र

viii) Hypo is a
a) Developng agent  
b) Reducing agent  
c) Both  
d) None of the above

[Options]
क) डेवलपिंग एजेंट  
ख) रेड्यूसिंग एजेंट  
ग) दोनों  
घ) उपयुक्त से कोई नहीं

ix) Using tungsten film in daylight will cause a
   a) Blue cast  
   b) Orange cast  
   c) Green cast  
   d) Normal cast

[Options]
क) दिन के उजाले में टंगस्टन फिल्म का प्रयोग करने पर निम्न की सम्भावना है :  
ख) नीले कॉस्ट  
ग) नारंगी कॉस्ट  
घ) हरे कॉस्ट  
ङ) सामान्य कॉस्ट

x) Panchromatic film is sensitive to
   a) all light  
   b) all light bar red  
   c) all light bar green  
   d) None of the above

[Options]
क) पैंच्रोमेटिक फिल्म संबंधित शील है.-  
ख) सभी प्रकाश के लिए  
ग) सभी साल प्रकाश पट्टी  
घ) सभी हरी प्रकाश पट्टी  
ङ) उपयोग में से कोई नहीं

xi) Name any two of the Fonts.  
    किसी दो फोटो का नाम बताएं.

xii) JPEG stands for..........  
      जेपीजे से तात्पर्य है...........

xiii) What is aperture in a camera?  
      कैमरे में अपेक्षा क्या है?

xiv) Name the secondary colours.  
     द्वितीय रंगों का नाम बताएं।

xv) CMOS stands for....  
     सीमीस ने तात्पर्य है........
PART-A

Answer any five of the following: (5x5=25)

Q.2 What are the principles of graphics? Explain the elements of the graphics.

Q.3 Explain the various types of manipulation in photography.

Q.4 What are the characteristics of the masthead? Why do different newspapers follow different format of columns i.e. six or eight?

Q.5 What is Zoom Lens? Enlist the advantages and disadvantages of Zoom lens in photography.

Q.6 What is design? Explain the importance of designing.

Q.7 Explain the various kinds of shutter.

Q.8 What do you mean by Emulsion? Describe the basic process of emulsion preparation.

Q.9 Write short notes on the following:
   a) Sports Photography
   b) Nature Photography
   c) Children Photography

Part-B

Answer any two of the following: (17.5x2=35)

Q.10 Discuss the “Single Lens Reflex System” in SLR camera with suitable diagram. Write down the advantages and disadvantages of SLR camera over TLR camera.

Q.11 Explain in detail the various composing methods used by newspaper industry. Enlist the advantages of phototypesetting.

Q.12 How photojournalism is different from simple photography? Discuss the points to be observed while selecting the news photographs.
Q. 1 Attempt any ten questions. (1 X 10 = 10)

(i) What is a biogenic need?
(ii) SWOT stand for....
(iii) एस व्हा ओट का बिस्तार क्या है?
(iv) Define media market.
(v) लिंडा बाजार की परिभाषा करें।
(vi) What is closed ended questions?
(vii) What is open ended questions?
(viii) What is the case study method.
(ix) What is survey research?
(x) Write any one aim of Communication research.
(xi) Write any one merit of Hypothesis.
(xii) Write the relevance of readership survey.
(xiii) What is sampling?
(xiv) What do you mean by branding?
(xv) ब्रांडिंग से आप क्या सम्बन्धित है?
(xvi) What do you mean by secondary data?
PART-A

(5X5=25)

Q.2) Discuss the objectives of Social Research.
Q.3) What are various sources of data collection? Explain.
Q.5) What are the scope of communication research?
Q.6) Explain the types of motivation.
Q.7) What are difference between Qualitative and Quantitative Research?

PART-B

(17.5x2=35)

Q.10) What do you mean by market segmentation? Explain the types of Market Segment.
Q.12) Write the Meaning of Content Analysis. Explain the key steps of content analysis.
MANAV RACHNA INTERNATIONAL UNIVERSITY
End Semester Examination, December-2013
BJMC - Third Semester
Environmental Studies (BJ-305)

Time: 3 Hours Max. Marks: 100
Note: All parts are compulsory. Attempt any eight questions from Part-A and any three questions from part B.

सभी भाग अनिवार्य हैं। भाग-ए से किन्हीं भी 8 प्रश्नों तथा भाग-बी से किन्हीं भी 3 प्रश्नों का उत्तर दें।

Section-A

Answer any eight of the following: (8X5=40)

Q. 1. Discuss in brief the greenhouse effect.

Q. 2. Differentiate between degradable and non-degradable pollutants.

Q. 3. Discuss the models of energy flow in ecosystem.

Q. 4. Who is the consumer in an ecosystem? Write with examples.

Q. 5. Write Short notes on
   i) Ozone layer depletion
   ii) Rain water harvesting

Q. 6. Differentiate between the
   i) National park and sanctuary
   ii) Endangered and extinct species
Q. 7. Why is the man-made environment different from the natural environment?
Q. 8. What are the causes of soil pollution?
Q. 9. How can mineral resources be conserved?
Q. 10. What are food chains and food webs?

Section-B

Answer any three of the following: (3X20=60)

Q. 1. How will environmental awareness support sustainable development of the environment? Discuss in detail.
Q. 2. Why environmental study is considered as multidisciplinary study? Discuss in detail.
Q. 4. What is pollution? What are the causes of air pollution? Explain some methodologies to control the air pollution.
Q. 5. What is global warming? What are its causes and effects? Discuss the measures to control it.
Manav Rachna International University
End Semester Examination, December-2013 (Re appear)
BJMC- IV Semester
Media Issues and Debates, BJ-401

Time: 3 hrs
Max. Marks: 70

Note: Q. No.1 is compulsory. Attempt any five questions from Part-A and any two questions from Part-B.

Q.1 Attempt any ten of the following:

किन्ही दस एशी के उत्तर दें

(1x10=10)

a) What is UN?
यू.एन. आई क्या है?

b) Why Tarun Tejpal was the talk of the town?
तरुण तेजपाल क्यों चर्चा में रहे?

c) Who is the director of the movie “Raan Leela”?
फिल्म रानलीला के निर्देशक कौन है?

d) Who is the chairperson of Press Council of India?
प्रेस काउंसिल ऑफ इंडिया के अध्यक्ष कौन है?

e) Who is the brand ambassador of Gujarat tourism?
गुजरात पर्यटन के ब्रांड अंबेस्डर कौन है?

f) What is Bhasha?
भाषा क्या है?

g) What is Varta?
वार्ता क्या है?

h) Who is the Information and Broadcasting Minister of India?
भारत के वित्त एवं प्रसारण मंत्री कौन है?

i) What is RTI?
आर.टी.आई क्या है?

j) Name the editors of any two English Newspapers.
फिर्ते दो इंग्लिश समाचारपत्रों के संपादक का नाम बताएं.

k) What is AP?
ए पी क्या है?

l) What is Paid News?
पेड न्यूज क्या है?

m) Who is Arvind Kejriwal?
अरविंद केजरीवाल कौन है?
n) What is Lokayukta?
लोकायुक्त किया होता है?
o) When was RTI enforced?
आर टी एल कब पारित हुआ?

PART-A
Answer any five of the following:
किसी पांच प्रश्न का उत्तर दे (5X5=25)

2. ‘Media has played a great role in the field of women empowerment’. Discuss.
‘मीडिया सामाजिक कर्म में महिलाओं के अतिक्रमण निवारण का महत्वपूर्ण चरित्र है’ दर्शाइए?

3. What is the code of conduct for journalists? Discuss in detail.
पत्रकार के लिए अनौपचारिक कार्य है ?विस्तारपूर्वक वर्णित करें

4. Write an application regarding seeking any information from any government undertaking as per the RTI?
आरटीआई के तहत किसी सरकारी विभाग से सूचना लेने के लिए रिक्विजिशन लिखें

5. What are the functions of Press Council of India?
प्रेस काउंसिल ऑफ़ इंडिया के मुख्य कार्य क्या है?

6. What should be the attitude of a journalist on the sensitive issues or religious series of incidents?
शास्त्रीय घटनाक्रम या संबंधित धार्मिक मुद्दों पर एक पत्रकार का क्या उद्देश्य होता घटित?

7. Write a short note on media activism.
मीडिया सशक्तिकरण पर एक संक्षिप्त नोट लिखें

8. Discuss the causes for the growth of regional media.
क्षेत्रीय मीडिया के उदय के कारणों पर प्रकाश करें

9. Do you agree with the politicization of media? Support your answer.
मीडिया के राजनीतिक कर्म से क्या आप सहमत हैं? आपने उत्तर के पक्ष में लिखें

PART-B
Answer any two of the following:
किसी दो प्रश्न का उत्तर दे (17.5X2=35)

10. ‘Media is controlled and guided by the market’. Do you agree? Support your answer with suitable arguments.
‘मीडिया बाजार द्वारा नियंत्रित एवं संचालित है’ क्या आप सहमत हैं? उचित तरीके से सार्वजनिक करें।

11. Write a detailed note on the role and responsibilities of media.
मीडिया की भूमिका और जिम्मेदारियों पर विस्तारपूर्वक विवरण लिखें

12. Right to Information has become a boon for journalist. Discuss.
सूचना का अधिकार पतरकारों के लिए वरदान सिद्ध हुआ है। वर्णित करें
Q.1 Attempt any ten of the following:

1. Give any two examples of fundraising event.
2. What is educational event?
3. Give any two objective of an event.
4. What is formal event?
5. Name any two informal events.
6. Write any two advantage of using an event management company.
7. What is press conference?
8. Media plays an important role in promotion of an event. (True/False)
9. Name the 5 C’s of an event.
10. What is feedback?
11. Give two differences between trade fair and exhibition.
12. Event management is one of the fastest growing industries. (True/False)
13. Budget is the key element of any event. (True/False)
14. Advertising is one of the publicity tools. (True/False)
PART-A

Answer any five of the following:

Q2. Discuss the various key elements of an event.

Q3. Write a short note on event evaluation.

Q4. What do you mean by publicity? Discuss the various publicity tools.

Q5. Discuss the advantages of planning in detail.

Q6. Discuss the various qualities of an event Manager.

Q7. Write a short note on corporate event.

PART-B

Answer any two of the following:

Q10. What is planning? Discuss in detail the various steps of planning process of event.

Q11. Write a detailed note on event budget and account keeping.

Q12. What is event? Discuss the importance and scope of event management in detail.
Q.1 Attempt any ten questions.

(1x10=10)

a) ATS-6 satellite was given by which country to India in 1975?
   भारत को किस देश ने एटीएस-6 दिया था?

b) Affiliate marketing is a form of which type of marketing?
   संबद्ध विपणन किस प्रकार के विपणन का एक रूप है?

c) Blog Sphere refers the world of blogs. Yes/No
   ब्लॉग शर्क: ब्लॉग की दुनिया संदर्भित करता है. हां / नहीं

d) A kind of journalism where common man has every right to raise their voice is-----.
   यह एक प्रकार की जमकर आम आदमी को अपनी आवाज उठाने का पूरा अधिकार है यह----- है.

e) What do you mean by Digital Divide?
   दिजिटल डिवाइड क्या है?

f) What is crowd sourcing?
   क्राउड सोर्सिंग क्या है?

g) Write the Full form of TIFR.
   टीआईएफआर का पूरा नाम वर्तमान से स्पष्ट करे.

h) Who is the present I&B minister of India?
   भारत के प्रतीतिम सूची एवं प्रसारण मंत्री कौन है?

i) Street Play is a form of New Media. Yes/No
   स्ट्रीट प्ले व्यु न्यू मीडिया का एक रूप है. हां / नहीं

j) Name any two cyber crimes.
   किसी दो साइबर अपराधों का नाम लिखे.

k) Name any two latest Social Networking Sites which are used extensively by politicians.
   किसी भी दो न्यूज़टॉल सामाजिक नेटवर्किंग साइट्स का नाम लिखे, जो नेताओं के द्वारा कई पैमाने पर इस्तेमाल किया जाता है.

l) What is Video Conferencing?
   वीडियो कॉन्फ्रेंसिंग क्या है?

m) A computer system providing audio, video and text material is known as ___.
   आवृत्ति, वीडियो और पाठ सामग्री उपलब्ध कराने के लिए एक कंप्यूटर प्रणाली ___ जाना जाता है.

n) Name any two latest social movements in India.
   भारत में किसी भी दो नयीनतम सामाजिक आंदोलनों का नाम दीजिए.

o) What do you mean by E-Governance?
   ई-राजनीति क्या उपलब्ध है?
PART-A

Q2. Answer any five of the following:

कितनी पांच प्रश्न का उत्तर दें ।

(5X5=25)

a) “Search Engine is known as a Journalist’s best friend”. Discuss.
   खोज इंजन किसी पत्रकार के सबसे अच्छे टूल के रूप में जाना जाता है । चर्चा करें.

b) Discuss in detail the concept of convergent Journalism.
   क्रंतिकी एककारिता की अवधारणा पर विस्तार से चर्चा करें.

c) Discuss in detail the online writing skills.
   ऑनलाइन संवेदन कौशल पर विस्तार से चर्चा करें.

d) Write a short note on the impact of Online Journalism.
   ऑनलाइन प्रकाशित के प्रभाव पर एक संक्षिप्त नोट लिखें.

e) Explain in detail the IT Act 2000.
   आईटी अधिनियम 2000 के बारे में विस्तार से व्याख्या करें.

f) Discuss in detail the advantages and disadvantages of cyber media.
   साइबर मीडिया के फायदे और नुकसान पर विस्तार से चर्चा करें.

g) Distinguish between Online and Traditional Journalism.
   ऑनलाइन और प्रादर्शिक प्रकाशित के बीच का अंतर क्या है?

h) Write a brief note on the various types of websites.
   वेबसाइट के विभिन्न प्रकार पर एक संक्षिप्त नोट लिखें.

PART-B

Q3. Answer any two of the following:

कितनी दो प्रश्नों का उत्तर दें ।

(17.5X2=35)

a) Critically examine the role of Internet in civil society and social movements in India.
   भारत में सामाजिक और राजनैतिक आंदोलनों के इतर संसद की आंतरराष्ट्रीय परंपरा करें.

b) Explain in detail the technological advances or changes in the Media field.
   मीडिया क्षेत्र में तकनीकी विकास या परिवर्तन के बारे में विस्तार से बताएं.

c) Critically examine the importance of Mobile News technologies in today’s world with some of its features.
   आज की दुनिया में मोबाइल समाचार प्रौद्योगिकियों के महत्त्व के बारे में विस्तार से बताएं.
Q.1 Attempt any ten questions.
(1x10=10)

किन्हीं दस प्रश्नों के उत्तर दें

i. Name any two sister concerns of Navbharat Times.

नवभारत टाइम्स की दो बहनीय सम्बंधित कंपनियों का नाम बताइये।

ii. Who is the CEO of The Hindustan Times?

हिंदुस्तान टाइम्स के सीईओ कौन है?

iii. What is FII?

एफआईआई क्या है?

iv. What is VIACOM?

वायकॉम क्या है?

v. When was PTI formed?

पीटीआई का गठन कब हुआ?

vi. What is NANAP?

एनएनएपी क्या है?

vii. What do you mean by Cooperative society?

सहकारियों द्वारा अपनी क्या समस्तता है?

viii. What is Broadsheet?

ब्रॉडशीट क्या है?

ix. Which is the biggest media group of India?

भारत का सबसे बड़ा मीडिया समूह कौन सा है?

x. Who was the chairman of first Press Commission?

प्रथम प्रेस आयोग के प्रथम अध्यक्ष कौन थे?

xi. Who is the chairman of PCI?

पीसीआई के अध्यक्ष कौन है?

xii. What is Bleed?

ब्लीड क्या है?

xiii. Who is Chandan Mitra?

चंदन मित्र कौन है?

xiv. In which year ‘The Hindu’ started?

द रिंड्डु किस वर्ष आरम्भ हुआ?

xv. Who is the owner of the Facebook?

फेसबुक का स्थापित किसके पास?
PART-A

Answer any five of the following:

किन्ही पांच प्रश्नों का उत्तर दे (5X5=25)

Q2 Explain Traditional media and its uses in communication.

Q3 Differentiate between Government and Private Media.

Q4 What is the procedure for starting a Newspaper?

Q5 Explain FDI in detail.

Q6 Throw light on recent trends in broadcasting management.

Q7 Write in detail about Fox and News Corporation.

Q8 Explain the role of management in media.

Q9 Write a short note on News Agencies.

PART-B

Answer any two of the following:

किन्ही दो प्रश्नों के उत्तर दे (17.5X2=35)

Q10 Explain different ownership patterns of mass media.

Q11 Write a detailed note on small newspaper and its problems in India.

Q12 Discuss in detail the code of conduct for journalists in India.
End Semester Examination, December- 2013
BJMC – V Semester
Radio Journalism (BJ-503)

Max. Marks: 70

Note: Q. 1 is compulsory. Attempt any five questions from Part- A and two questions from Part-B

Q.1 Attempt any ten questions.

Q.1

a) In which year Radio broadcasting begin in India?
   रेडियो प्रसारण भारत में कब शुरू हुआ?

b) The abbreviation OBD stands for what?
   OBD का अर्थ क्या है?

c) Name any two entertainment programmes of AIR.
   आईआर द्वारा कितने दो मरम्मत कार्यक्रमों के नाम लिखे।

d) In which year Akashvani introduced commercials on Vividh Bharati?
   आकाशवाणी में विविध भारती पर विज्ञापन का शुरूआत कब हुआ था?

e) The abbreviation NSD and ESD stands for———.
   एनएसडी और ESD क्या है?

f) What do you mean by ‘Promo’?
   ‘प्रोमो’ का अर्थ क्या है?

g) Who is the first controller of Broadcasting in 1935?
   प्रसारण के पहले निदेशक कौन थे?

h) Announcers are also known as ———.
   उपदेशक को और फिर रूप में भी जाना जाता है ———.

i) Whatever is written for radio is known as———.
   रेडियो के लिए जो लिखा जाता है, वह फिर रूप में भी जाना जाता है ———.

j) A film based on real people and issues is called———.
   वास्तविक लोगों और मुद्दों पर आधारित फिल्म को कहा जाता है ———.

k) Radio programmes are decided on the basis of the needs of the people. Yes/No
   रेडियो कार्यक्रमों के आयोजन के आधार पर रेडियो तय किये जाते हैं। हाँ / नहीं

l) What do you mean by phone-in-programmes?
   फोन इन राजकीय से आप क्या समझते हैं?

m) AIR started its internet services on———.
   इंटरनेट पर आकाशवाणी का शुरूआत कब हुआ था?

n) What do you mean by Jingle?
   जिंगल से आप क्या समझते हैं?

o) What is Yuuvavani?
   युववाणी क्या है?
PART-A

Answer any five of the following:
किसी पांच प्रश्नों का उत्तर दे

(5X5=25)

a) Write a brief note on the attributes of Radio.
   रेडियो की विशेषताओं पर एक संक्षिप्त नोट लिखें:
b) Discuss in detail the qualities of a Radio Journalist.
   एक रेडियो पत्रकार के गुणों पर विस्तार में चर्चा करें,
c) Write a short note on various types of Radio Programmes.
   रेडियो कार्यक्रम के विभिन्न प्रकार पर एक संक्षिप्त नोट लिखें.
d) Differentiate between Internet and community radio.
   इंटरनेट और समुदाय रेडियो के बीच अंतर स्पष्ट करें.
e) Distinguish between a RJ and VJ.
   एक एरीज़ और वीज़ के बीच अंतर स्पष्ट करें.
f) Explain the radio broadcasting guidelines in India.
   भारत में रेडियो प्रसारण के दिशानिर्देशों के बारे में व्याख्या करें.
g) How is a radio interview different from TV interview? Discuss
   एक रेडियो साक्षात्कार टीवी साक्षात्कार से कैसे अलग है?
   चर्चा करें.
h) Write a brief note on Ideation and conceptualization in a radio show.
   रेडियो शो में विचार और अवधारणा पर संक्षिप्त नोट लिखें.

PART-B

Answer any two of the following
किसी दो प्रश्नों के उत्तर दे

(17.5X2=35)

a) Write a descriptive note on the latest trends of radio in India.
   भारत में रेडियो के नये नतीजे पर एक वर्णनात्मक नोट लिखें.
b) Explain in detail the growth and development of radio through different ages.
   विशिष्ट काल में रेडियो के विस्तार एवं विकास के बारे में व्याख्या करें.
c) “Reach and impact of radio is very high in both urban and rural areas”. Justify
   “रेडियो का पहुँच एवं प्रभाव शहरी और कृषि क्षेत्रों में बहुत अधिक है”. साक्ष्य करें.
Q. 1 Attempt any ten questions: (1x10=10)

i. What is the full form of ESPN?
ii. What is the role of Art Director?
iii. What is ENPS?
iv. Who is Arnab Goswami?
v. What is Freeze Frame?
vi. What is Dolly?
vii. Name two awards associated with Journalism.
viii. In which year Television was started?
ix. Vinod Dua is the anchor of which Television programme?
x. Transponder sends signals to the satellite. (True/False)
xi. What is Shot?
xii. What do you mean by Docudrama?
xiii. What is Output Desk?
xiv. What is Tickr?
xv. What is Slug?
PART-A

Answer any five of the following:

Q2 Discuss the roles and responsibilities of a television reporter.

Q5 Explain the structure of Output and Input desk and its functioning.

Q9 Explain different approaches of writing an English and Hindi programme.

Q10 Explain Television hierarchy and role of everyone.

Q11 Throw light on different beats of Reporting and its essentials.

Q12 Explain in detail the vocabulary used in Television programme production.

PART-B

Answer any two of the following:

Q6 What is Television programme package? Prepare a package of fifteen minutes?

Q7 What are the essentials for coordination within the newsroom?

Q8 What are the steps of preparing a News Report?

Q10 Explain Television hierarchy and role of everyone.

Q11 Throw light on different beats of Reporting and its essentials.

Q12 Explain in detail the vocabulary used in Television programme production.