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

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

Note: Attempt any 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 business organization. 2
   b) Define social responsibility of business. 2
   c) What is trade? 2
   d) Write a note on HUF. 2
   e) Define feasibility study. 2
   f) Full form of FICCI ______. 1
   g) Is business system as a part of economic system? (True/False) 1
   h) Give two factors that affect the choice of a suitable form of organization. 1
   i) Full form of SEBI ______. 1
   j) Give one objective of CII. 1

UNIT-I
Q.2 What is business? Explain the features and scope of business. 15

Q.3 Business is an open system. Comment upon this statement and discuss the nature of interaction between a business system and its environment. 15

UNIT-II
Q.4 Explain the basis of classification of companies. Distinguish between public and private company. 15

Q.5 Explain the factors that govern choice between sole proprietorship and partnership. 15

UNIT-III
Q.6 What are the functions performed by entrepreneurs? Explain the qualities of successful entrepreneurs. 15

Q.7 Write short notes on:
   a) Feasibility study. 2
   b) Process of setting up a business enterprise. 7½x2

UNIT-IV
Q.8 State the meaning and features of stock exchange. What are the functions performed by stock exchange in India? 15

Q.9 Write short notes on:
   a) FICCI 7½x2
   b) CII Association 7½x2
End Semester Examination, May 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) If \(3^{x+y} = 27\) and \(3^{x-y} = 243\), then \(x\) is equal to _______.
   b) If \(\begin{bmatrix} 4 & \phantom{-}x \\ -3 & \phantom{-}5 \end{bmatrix} = 8\), find \(x\).
   c) If \(a = 18\) and \(d = -2\), find the sum of 20 terms.
   d) How many words can be formed from the letters of the word 'DAUGHTER' by taking all the letters together?
   e) Find the value of \('y'\) for which the matrices \(A\) and \(B\) are equal, where
      \[
      A = \begin{bmatrix} 2y+1 & 3x \\ 0 & x^2 - 5x \end{bmatrix} \quad \text{and} \quad B = \begin{bmatrix} y+3 & x^2 + 2 \\ 0 & -6 \end{bmatrix}.
      \]
   f) If \(r = 2\) and \(a = 8\); find 7th term.
   g) Solve: \(\frac{dx}{dx}(x^2 + 2x + 2)\).
   h) What do you mean by equivalent sets?

UNIT-I

Q.2 a) Prove that: \(A - (B \cap C) = (A - B) \cup (A - C)\).
   b) In a class of 25 students, 12 had taken economics, 8 had taken economics but not maths. Find:
      i) The number of students who had taken economics and maths.
      ii) Those who had taken maths but not economics.
   c) If \(A = \{1, 2, 3\}, B = \{2, 3, 4, 5\}\), then show that \(A \Delta B = \{1, 4, 5\}\).

\[A = \{x: x \in N \text{ and } x \text{ is multiple of } 2\};\]
\[B = \{x: x \in N \text{ and } x \text{ is multiple of } 5\};\]
\[C = \{x: x \in N \text{ and } x \text{ is multiple of } 10\};\]
Describe the sets, i) \((A \cap B) \cup C\) ii) \(A \cup (B \cap C)\).

Q.3 a) Let \(B = \{x: x \in N \text{ and } x \text{ is multiple of } 5\};\)
   \[C = \{x: x \in N \text{ and } x \text{ is multiple of } 10\};\]
   Describe the sets, i) \((A \cap B) \cup C\) ii) \(A \cup (B \cap C)\).

b) In a survey of 25 students, it was found that 15 had taken maths, 12 had taken physics and 11 had taken chemistry, 9 had taken maths and physics, 4 had taken physics and chemistry and 3 had taken all the three subjects. Find the number of students who had
   i) Only chemistry and only physics.
   ii) Physics and chemistry but not maths.
   iii) At least one of the three subjects.

UNIT-II

Q.4 a) If \(\log(x^2 - 10x + 125) = 2\). Find value of \(x\).
   b) Simplify: \(\frac{3^{2x} + 8^{2x}}{8^{3x} - 2^{2x}}\).

P. T. O.
c) If \(n^{th}\) term of an A.P. is \(\frac{1}{n}\) and the \(m^{th}\) term is \(\frac{1}{m}\); show that the sum of \(mn\) terms is 
\[\frac{1}{2}(mn + 1).\]

Q.5
a) The sum of three numbers in A.P. is 18. If the numbers be increased by 3, 4, 10 respectively, they form a G.P. Find the numbers.
b) If one A.M., A and two G.M.s \(g_1\) and \(g_2\) be inserted between two numbers; prove that 
\[\frac{g_2^2}{g_1} + \frac{g_1^2}{g_2} = 2A.\]

UNIT-III

Q.6
a) In how many ways can the letters of the word 'PERMUTATIONS' be arranged if:
   i) the words start with P and end with 5.
   ii) Vowels are all together.
b) The compound interest on a sum of money for 3 years at 10% per annum is Rs. 264.80. Find the simple interest for the same sum for the same time at the same rate.

Q.7
a) Find the difference between simple interest and compound interest on Rs. 2,400 for 2 years at 5% per annum, compounded annually.
b) How many words can be formed by taking 4 letters at a time out of the letters of the word 'MATHEMATICS'?

UNIT-IV

Q.8
a) Verify that \(\frac{dy}{dx} = \frac{1}{x}\), if \(ax^2 + 2hxy + by^2 = 0\).
b) Solve the following system of equations:
\[
\begin{align*}
\frac{2}{x} + \frac{3}{y} + \frac{10}{z} &= 4 \\
\frac{4}{x} + \frac{6}{y} + \frac{5}{z} &= 1 \\
\frac{6}{x} + \frac{9}{y} + \frac{20}{z} &= 2
\end{align*}
\]

Q.9
a) If \(A = \begin{bmatrix} 3 & 5 \\ 2 & 7 \end{bmatrix}\) and \(B = \begin{bmatrix} 1 & 3 \\ 2 & 4 \end{bmatrix}\), then show that \((AB)^{-1} = B^{-1}A^{-1}\).
b) If \(y = v^3 + 2v^2 + 5, v = 3u + 1\) and \(u = 9x + 1\), find \(\frac{dy}{dx}\) by using chain rule.
End Semester Examination, May, 2013
BBA (GEN)/BBA (Banking) – First Semester
FINANCIAL ACCOUNTING (bba-1003)

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

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

Q.1 a) Classify the following accounts in personal, real and nominal accounts:
   i) Drawing accounts
   ii) Sales accounts
   iii) Cash accounts
   iv) Bank accounts
   v) Rent accounts

   b) Choose the best alternative:
      i) As per Income Tax Act accounting period is:
         a) from 1st January to 31st December.
         b) from 1st April to 31st March.
         c) from 1st July to 30th June.
      ii) Purchase of goods from X for cash should be credited to:
         a) Purchase account.
         b) Cash account.
         c) X account.
      iii) Accrual concept is based on:
         a) Cost concept.
         b) Matching concept.
         c) Dual aspect concept.

   c) Fill in the blanks:
      i) The net result shown by Income and Expenditure account is either _______ or ________.
      ii) _______ is the main source of Income of a nonprofit organization.
      iii) Discount allowed balance is appearing on _______ side in trial balance.
      iv) Journal is _______ record of business transaction.
      v) Premium paid on life insurance policy will be debited to _______ account.

   d) State whether the following statements are True or False:
      i) Real account generally show debit balance.
      ii) Assets is equal to capital if there is no liabilities.

Q.2 Define accounting. What are its main objectives? Also explain the users of accounting information in brief.

Q.3 a) Give accounting equation for the following transactions:
   i) Started business with cash Rs. 18,000/.
   ii) Purchase goods from cash Rs. 5, 000/.
   iii) Paid Rent to advance Rs. 400/.
   iv) Sale goods for cash Rs. 4,000/.
   v) Purchase goods from R, Rs.10,000/.
   b) Explain the process of accounting in brief.

Q.4 What do you mean by trial balance? Discuss the main objectives, limitations and method of preparing trial balance.

P. T. O.
Q.5 Pass journal entries for the following transactions in the books of XYZ Ltd. And prepare cash account:

**2011**

- Jan.1 Started business with cash
  - Rs. 50,000/-
- Jan.2 Purchased goods from Subhash
  - Rs. 12,000/-
- Jan.3 Bought machinery for cash
  - Rs. 8,000/-
- Jan.4 Paid to Subhash for full settlement of his A/C
  - Rs. 11,800/-
- Jan.10 Sold good to Ram
  - Rs. 6,000/-
- Jan.12 Goods withdraw for personal use
  - Rs. 2,000/-
- Jan.15 Cash received from Ram and Allowed discount
  - Rs. 5,900/-
  - Rs. 100/-
- Jan.20 Depreciation paid
  - Rs. 200/-
- Jan.25 Withdraw cash for office use
  - Rs. 1,000/-
- Jan.26 Paid interest on capital
  - Rs. 500/-

**UNIT-III**

Q.6 What is bank reconciliation statement? Why is it prepared? Give a specimen of bank reconciliation statement with imaginary figures.

Q.7 J.K. Cement Ltd. Purchased on 1st January, 2006 a plant for Rs.80,000/-. On 1st April, 2007 it purchased additional plant costing Rs.48,000/-. On 1st September, 2008, the plant purchased on 1st January, 2006 was sold off Rs.42,000/-. and on the same date fresh plant was purchased at the cost of Rs.72,000/-. Depreciation is provided at 10% p.a. on the written down value method. Prepare plant account and depreciation account when books are closed on 31st December every year.

**UNIT-IV**

Q.8 Define a financial statement. Why is it prepared? Show the treatment of the following adjustment entries:

   (i) Outstanding expenses.
   (ii) Prepared expenses.
   (iii) Depreciation.

Q.9 From the following Receipt and Payment account of a club, prepare Income and Expenditure account for the year ending 31st December, 2010 and a Balance Sheet.

<table>
<thead>
<tr>
<th>Receipt</th>
<th>Amount (In Rs.)</th>
<th>Payement</th>
<th>Amount (In Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Balance f/d</td>
<td>6,000/-</td>
<td>By Salaries</td>
<td>15,400/-</td>
</tr>
<tr>
<td>To Subscription (including Rs.600 received in advance)</td>
<td>40,000/-</td>
<td>By Rent</td>
<td>12,300/-</td>
</tr>
<tr>
<td>To Interest on investment (cost of investment Rs.50,000/-)</td>
<td>6,000</td>
<td>By Stationery</td>
<td>700</td>
</tr>
<tr>
<td>To Bank interest</td>
<td>200</td>
<td>By Postage</td>
<td>400</td>
</tr>
<tr>
<td>To Sale of furniture (book value Rs.5,000/-)</td>
<td>2,400/-</td>
<td>By Computer</td>
<td>1,800/-</td>
</tr>
<tr>
<td>To Life membership fees</td>
<td>8,100/-</td>
<td>By Govt. bond</td>
<td>12,500/-</td>
</tr>
<tr>
<td></td>
<td>62,700/-</td>
<td>By Balance c/d</td>
<td>19,600/-</td>
</tr>
</tbody>
</table>

Additional information:

a) Subscription Rs.3,200 include for the last year.
b) Rent include Rs. 900 paid for the last year.
c) Out standing subscription Rs.45,00 for current year.
d) Rent outstanding Rs.1,000 current year.
e) Payment for stationary is due for Rs.750.
f) On 1st January, 2010 club had land Rs.50,000 and furniture Rs.15,000.
End Semester Examination, May, 2013
BBA (GEN)/ BBA (BANKING) – First Semester
COMPUTER FUNDAMENTALS (bba-1004)

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

Note: Attempt any 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 best alternative in the following:
   a) Which of the following devices can be used for image printed text?
      i) OCR  ii) OMCR
      iii) MICR  iv) All of above
   b) When a key is pressed on the keyboard, which standard is used for converting the keystroke into the corresponding bits?
      i) ASCII  ii) EBCDIC
      iii) ANSI  iv) ISO
   c) Which device is used as the standard pointing device in a Graphical User Environment?
      i) TRACKBALL  ii) KEYBOARD
      iii) MOUSE  iv) JOYSTICK
   d) Which of the following is not an output device?
      i) SCANNER  ii) PRINTER
      iii) PLOTTER  iv) FLAT SCREEN
   e) Memory unit is one part of:
      i) Input device  ii) Output device
      iii) Control unit  iv) Central Processing unit
   f) A computer program that converts assembly language to machine language is:
      i) Assembler  ii) Compiler
      iii) Interpreter  iv) All of these
   g) Which access method is used for obtaining a record from a cassette tape?
      i) Direct  ii) Sequential
      iii) Random  iv) All the above
   h) The 2’s compliment of a binary no. is obtained by adding...to its 1’s compliment:
      i) 0  ii) 1
      iii) 10  iv) 2
   i) A program that is employed in the development, repair or enhancement of other programs is known as:
      i) System software  ii) Software tool
      iii) Application software  iv) None of above
   j) Dot-matrix is a type of:
      i) Printer  ii) Plotter
      iii) Bus  iv) Disk

UNIT-I

Q.2  Discuss:
   a) Special purpose and general purpose of computer.  5x2
   b) Analog, digital and hybrid computer.

P. T. O.
Q.3 What are the major components of a digital computer? Discuss with the help of a block diagram.

UNIT-II

Q.4 Perform subtraction using:
   a) 1’s compliment method
      \[(11010)_2 - (10000)_2\]
   b) 2’s compliment method
      \[(1000100)_2 - (1010100)_2\]

   5x2

Q.5 a) How will you convert an octal number to a decimal number? Explain with an example.
    b) How will you convert a hexadecimal number to an octal number? Explain with an example.

UNIT-III

Q.6 a) What is the advantage of an inkjet printer compared to a dot matrix printer?
    b) Describe characteristics of physical storage device.

Q.7 a) Explain need of operating system.
    b) What is the difference between a primary memory and secondary memory?
    c) What is the main application of magnetic ink character readers?

UNIT-IV

Q.8 Discuss the application of computer in banks. How the advent of IT made the routine task easier in banks?

Q.9 Discuss:
   a) Desktop publishing.
   b) Computer application in data analysis.

   5x2
End Semester Examination, May, 2013  
BBA (GEN)/ BBA (BANKING) – First Semester  
BUSINESS COMMUNICATIONS (bba-1005)  

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

Note: Attempt any 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) Listening means hearing with _______.  
   b) Ability to recall the material read is called_______.  
   c) Informal communication is called______.  
   d) Short piece of writing used as an inter office communication to convey information or make short requests is called_______.  
   e) Mild and persuasive reminders to the customer to pay his dues are called ___ letters.  
   f) A small booklet containing essential information about an event is called______.  
   g) Letter written to the defaulter in case of broken or unsatisfactory goods is called_______.  
   h) Visual-aids like______ can be used to make an effective speech.  
   i) A sheet of paper having details about the candidate and his qualifications is called a ________.  
   j) A study of body movements and gestures is called_______.  

   1½x10

UNIT-I

Q.2 Discuss the role of communication skills in a business enterprise. Highlight the directions in which communication takes place in a business setup.  

15

Q.3 Explain the types of barriers which makes communication ineffective. How can these barriers be avoided?  

15

UNIT-II

Q.4 How can we make listening more effective in an organization? What are the advantages of listening?  

15

Q.5 Write short notes on the following:
   a) Public speaking  
   b) Voice modulation  
   c) Body Language  

   5x3

UNIT-III

Q.6 Prepare a resume of your-self to apply for a job in a BPO. Highlight your good points so that you may get the job.  

15

Q.7 Write short notes on:
   a) Circular  
   b) Agenda  
   c) Claim letter  

   5x3

UNIT-IV

Q.8 As the General Manager of a company issue a notice to all employees about their late-coming and absenteeism. Also call them for a meeting to discuss the same. Send an agenda beforehand.  

15

Q.9 Discuss the characteristics and layout of a good business report. Why is it important?  

15
End Semester Examination, May 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) Define Management?
   b) Name the two types of basic system of management.
   c) The ________ model is a framework for analyzing organizations and their effectiveness.
   d) Delegation is assigning of duties to subordinates (True/False).
   e) Name the types of Organisational Structures.
   f) Motivation is something that ______________ a person.
   g) Mcgregor's gave the 'X' and 'Y' theory. (True/False)
   h) If you are a highly skilled team leader, it does not matter who is on your team. (True/False).
   i) Write any two problems in the controlling process.
   j) Leadership is the willingness of people to follow that make a person a ______________.
   k) Mention any two qualities of leadership.
   l) What does CSR stand for?
   m) What are 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 “Management is an art of getting things done through others”. Explain. 15
Q.3 What are managerial skills? Discuss in detail the levels and role of managers. 15

UNIT-II

Q.4 Define Planning? Explain the steps and essentials 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 Explain the term Delegation of Authority. How does it differ from decentralisation? 15
Q.7 Good leadership is an integral part of effective management; explain and illustrate. 15

UNIT-IV

Q.8 Define control. Discuss the steps of controlling function of management. 15
Q.9 Write notes on the following:
   a) Social audit 7
   b) Prerequisites of effective control system 8
End Semester Examination, May 2013
BBA (GEN) / BBA (BANKING) – Second Semester
MACRO-ECONOMIC ANALYSIS AND POLICY (bba-2002)

Time: 3 hrs \hspace{2cm} \text{Max Marks: } 75
\hspace{2cm} \text{No. of pages: } 1

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

Q.1 Answer the following question in brief:
a) Write any two working areas of macro economics.
b) Define real flow of national income.
c) Explain personal income.
d) Give two examples of indirect taxes.
e) Define cyclical consumption function.
f) \[ \text{GDP}_{\text{MP}} = \text{________________ minus } \text{________________}. \]
g) Multiplier \((K) = \frac{\text{________________}}{\text{________________}}. \] \hspace{1cm} 2x7
h) Direct taxes are levied on goods and services \(\text{(True/False)}. \) \hspace{1cm} 1

\textbf{UNIT-I}

Q.2 Explain the concept and different phases of a business cycle. Discuss its causes and measures to control it. \hspace{1cm} 15

Q.3 Write short notes on:
a) Alternative concept of national income \hspace{1cm} 8
b) Discuss circular flow of income in an open economy. \hspace{1cm} 7

\textbf{UNIT-II}

Q.4 Explain the relative income theory of consumption function. How is Milton Friedman’s permanent income theory different from absolute and relative income theory of hypothesis? \hspace{1cm} 15

Q.5 Define a multiplier. Discuss the working of investment multiplier with the help of an example and diagram. Does investment multiplier work in both the directions? \hspace{1cm} 15

\textbf{UNIT-III}

Q.6 Write a brief notes on the nature, causes and impact of public debt in India. \hspace{1cm} 15

Q.7 Write short notes on:
a) Various tools of fiscal policy. \hspace{1cm} 7
b) Fiscal deficit management. \hspace{1cm} 8

\textbf{UNIT-IV}

Q.8 Define inflation. What are the causes of inflation in India? What measures would you suggested to correcting inflation at present in India? \hspace{1cm} 15

Q.9 Discuss the tools and objective of monetary policy in the developing countries. What are the limitations? \hspace{1cm} 15
End Semester Examination, May 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 Answer the following questions in brief:

a) Define the term: shares.
b) Give provision regarding underwriting commission.
c) Provisions regarding liquidator remuneration.
d) Write any two provisions regarding redemption of preference shares.
e) How would you calculate goodwill by average profit method?  
State: **True or False**:
f) Debentures are owner of the company.
g) A new company cannot issue its share at discount.
h) Discount on issue of shares should be shown debit side of profit and loss account.
i) Goodwill is a tangible assets.
j) The balance of forfeited shares accounts is transfer to capital A/c.

**UNIT-I**

Q.2 The Calcutta Sugar Mills Ltd. invited application for 10,000 shares of Rs.10 each at a premium of Rs.10 each payable as follows:
- Rs.50 on application
- Rs.35 on allotment (including premium)
- Rs.25 on final call

Application for 15000 shares were received. Applicants for 5,000 shares did not get any allotment and their money returned. Allotment was made to the remaining applicants. Mr. A was allotted 400 shares. He failed to pay the amount due on allotment and call money. The company forfeited his shares and reissued at Rs.105 per share.

Show the journal entries in the book of company and also prepared the balance sheet.

Q.3 Write short notes on the following:

a) Under-subscription and over-subscription with illustration.
b) Buy back of shares.

**UNIT-II**

Q.4 The following underwriting of shares takes place:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,000 shares</td>
<td>2,500 shares</td>
<td>1,500 shares</td>
</tr>
</tbody>
</table>

Firm underwriting is:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>800 Shares</td>
<td>300 shares</td>
<td>1,000 shares</td>
</tr>
</tbody>
</table>

The issue consists of 10,000 shares. The total subscription including the firm underwriting was 7,100 shares and the form included the following marked applications:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000 shares</td>
<td>2,000 shares</td>
<td>500 shares</td>
</tr>
</tbody>
</table>

Show the allocation of liability of the underwriters and calculates commission amount at 2%.

P. T. O.
Q.5 On 1st April, 1990, T Ltd. issued 12% debentures of Rs.2,00,000 on the condition that these will be redeemed after 4 years at a premium of 5%. It has been decided to set up a sinking fund for this purpose. Sinking fund table shows that 0.235490 Rs. invested in 4% securities will amount to Rs.1 in 4 years. Investments were made in multiples of Rs.100 only. On 31st March, 1994 investment were sold for Rs.1,56,000. The debentures were paid off as per the term of issue. Give necessary journal entries in the book of company. 15

UNIT-III

Q.6 a) Prepare a summarized form the balance sheet of a company as per Companies Act, 1956, taking imaginary figures. 10
   b) Discuss the Accounting Standard 17 (AS-17). 5

Q.7 The following particulars are related to a limited company, which has gone into liquidation. You are required to prepare the liquidator’s final statement, allowing for his remuneration at 2% on the assets realized and 2% on the amount distributed to unsecured creditors other than preferential creditors:

<table>
<thead>
<tr>
<th>Amount(Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferential creditors</td>
</tr>
<tr>
<td>Unsecured creditors</td>
</tr>
<tr>
<td>Debentures</td>
</tr>
<tr>
<td>The assets were realized as:</td>
</tr>
<tr>
<td>Land</td>
</tr>
<tr>
<td>Plant</td>
</tr>
<tr>
<td>Furniture</td>
</tr>
<tr>
<td>The liquidation expenses amounted to</td>
</tr>
</tbody>
</table>

UNIT-IV

Q.8 The following particulars are available about the business of X Ltd.:
   a) Average capital employed Rs. 50,000.
   b) Trading results:

<table>
<thead>
<tr>
<th>Year</th>
<th>Profit/Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>12,200</td>
</tr>
<tr>
<td>2002</td>
<td>15,000</td>
</tr>
<tr>
<td>2003</td>
<td>(2,000)</td>
</tr>
<tr>
<td>2004</td>
<td>21,000</td>
</tr>
</tbody>
</table>

c) Market rate of interest on investment 10%.
   d) Remuneration from alternative employment of the proprietor (If not engages in business) Rs.3,600 p.a.

You are required to compute the value of goodwill on the basis of 3 years purchase of super profit of the business. Ignore taxation. 15

Q.9 Write notes on:
   a) Methods of valuation of shares. 8
   b) Profit prior to incorporation. 7
End Semester Examination, May 2013
BBA (GEN) / BBA (BANKING) – Second Semester
INTRODUCTION TO MS OFFICE AND MULTIMEDIA (bba-2004)

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) Merge cells option can be applied from
      i) Format Cells dialog box Alignment Tab
      ii) Formatting toolbar
      iii) Both of the above
      iv) None of above
   b) Which of the following is not true regarding conditional formatting?
      i) You can add more than one condition to check.
      ii) You can set condition to look for Bold and apply Italic on them.
      iii) You can apply font, border and pattern formats that meet the specified conditions.
      iv) You can delete any condition from Conditional Formatting dialog box if it is not required.
   c) A feature of MS Word that saves the document automatically after certain interval is available on
      i) Save tab on Options dialog box
      ii) Save as dialog box
      iii) Both of above
      iv) None of above
   d) Which of the following is graphics solution for Word Processors?
      i) Clipart   ii) WordArt   iii) Drop Cap   iv) All of above
   e) Portrait and Landscape are
      i) Page Orientation
      ii) Paper Size
      iii) Page Layout
      iv) All of above
   f) MIDI stands for
      i) Musical Instrument Digital Interface
      ii) Musical Internet Digital Interrupt
      iii) Musical Instrument Download Interface
      iv) None of these.
   g) Data can be arranged in a worksheet in an easy to understand manner by
      i) Auto Formatting
      ii) Applying Styles
      iii) Changing fonts
      iv) All of these
   h) Which key on the keyboard can be used to view Slide show?
      i) F1    ii) F2    iii) F5    iv) F10
   i) In Microsoft PowerPoint good design determines.
      i) Credibility    ii) First impression    iii) Readability    iv) All of the above

P. T. O.
j) The keystrokes Ctrl + I is used to
   i) Increase font size
   ii) Inserts a line break
   iii) Indicate the text should be bold
   iv) Applies italic format to selected text

UNIT-I

Q.2 Explain the following features of MS-Word: Checking spelling and Grammar, Page Setup, Header and Footer, paragraph formatting.

Q.3 What is a Word Processor? Describe the important features of MS Word.

UNIT-II

Q.4 Write the steps involved in creating a presentation using PowerPoint to include the following tasks and by selecting the corresponding slide layout(s):
   a) To include a title for the presentation
   b) To include a chart and text on the same slide
   c) Bulleted lists
   d) Media clip and some text

Q.5 Explain the various component of PowerPoint screen.

UNIT-III

Q.6 a) State and explain any three arithmetic functions in MS Excel.
    b) Explain paste special feature in MS Excel.

Q.7 a) What is cell referencing? Explain relative cell referencing with an example.
    b) How are charts useful in Excel? Compare any three chart types available in Excel.

UNIT-IV

Q.8 Define multimedia. Explain its various authoring tools.

Q.9 Explain any two multimedia software packages. Discuss the web applications of multimedia.
End Semester Examination, May 2013
BBA (GEN) / BBA (BANKING) – Second Semester
ORGANISATIONAL BEHAVIOUR (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 the following questions briefly:
   a) Describe the scope of organizational behavior. 3
   b) Is intelligence an inherited trait or a learned trait? 2
   c) Explain the organizational behavior process. 2
   d) What is perceptual selectivity? 2
   e) Distinguish between power and authority. 2
   f) What do you understand by teamwork? 2
   g) What is transactional communication? 2

UNIT-I

Q.2  a) What are some of the major challenges facing today’s organizations and management? 7½ x 2
     b) Explain how OB is an interdisciplinary concept?

Q.3 Discuss in detail the historical development of organizational behavior. 15

UNIT-II

Q.4 Does workforce in an organization need motivation? Briefly discuss various theories of motivation and their role in improving the morale of the workforce. 15

Q.5  a) Explain classical conditioning theory of learning. 7
     b) Explain the personality traits that shape the personality of individuals. 8

UNIT-III

Q.6  a) Briefly explain the stages in team development. 7
     b) Discuss the process of rational decision making. 8

Q.7 What is meant by group dynamics? Discuss the causes of emergence of informal group. 15

UNIT-IV

Q.8 Write short notes on the following:
   a) Management of change. 7½ x 2
   b) Organizational culture.

Q.9 What do you understand by organization structure? What are its elements? 15
End Semester Examination, May 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:
   a) The observation that occurs frequently in any individual series is known as ________________
   b) ________________ is the value of observation that divides the data in two equal parts.
   c) 7th Decile is always equal to __________ percentile.
   d) If mean and median are 20 and 30 respectively, then mode is ____________
   e) If \( \Sigma fx^2 = 369 \), \( \Sigma fx = 61 N = 139 \), Standard deviation will be ____________.
   f) \( r (\text{correlation coefficient}) = \frac{2x6}{x} \). 
   State whether the statement is True/False.
   f) The correlation coefficient between X and Y is -1.83.
   g) Fisher's Index satisfies the entire tests that's why it is known as Ideal Index.
   h) Seasonal Variations are irregular in nature. 1x3

UNIT-I

Q.2 List out various activities you perform on a day to day basis along with average time consumed. Use Pie chart to show how you allot 24 hrs day to various activities.

Q.3 Given below is the distribution of marks obtained by students of BBA I semester. Represent this information using suitable diagram:
Accounts: 30 31 46 42 48 38 36 45
Economics: 35 30 39 48 32 36 42 39

UNIT-II

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

<table>
<thead>
<tr>
<th>Marks</th>
<th>No of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>01</td>
</tr>
<tr>
<td>30-40</td>
<td>15</td>
</tr>
<tr>
<td>40-50</td>
<td>18</td>
</tr>
<tr>
<td>50-60</td>
<td>10</td>
</tr>
<tr>
<td>60-70</td>
<td>12</td>
</tr>
<tr>
<td>70-80</td>
<td>9</td>
</tr>
<tr>
<td>80-90</td>
<td>4</td>
</tr>
</tbody>
</table>

Q.5 Two students A and B have scored the following marks in various subjects. Calculate the coefficient of variation. Which one is more consistent?
A: 40 48 44 52 55 49 43
B: 50 52 56 51 58 61 44

UNIT-III

Q.6 The data given below relate to the sales and advertisement cost of a company:

<table>
<thead>
<tr>
<th>Advtg (Rs '000)</th>
<th>Sales (Rs. lacs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>3</td>
</tr>
<tr>
<td>62</td>
<td>6</td>
</tr>
<tr>
<td>48</td>
<td>4</td>
</tr>
<tr>
<td>55</td>
<td>5</td>
</tr>
<tr>
<td>70</td>
<td>7</td>
</tr>
<tr>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>60</td>
<td>7</td>
</tr>
<tr>
<td>45</td>
<td>5</td>
</tr>
<tr>
<td>54</td>
<td>6</td>
</tr>
</tbody>
</table>

P. T. O.
Obtain regression equation of sales on advertisement cost. If Company plans Rs.70,000 as advertising budget, what would be the likely sales?  

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

X: 50 55 65 50 55 60 50 65 70 55
Y: 110 110 115 125 140 115 130 120 115 160

UNIT-IV

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

Year: 2005 2006 2007 2008 2009 2010 2011 2012
Sales: 78 88 90 85 84 96 94 102

Calculate the trend values of sales from 2005 to 2012 and forecast the sales for the Year 2015.

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

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

b) Calculate Index numbers by (i) Laspeyer's (ii) Paasche's and (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, May 2013  
BBA (GEN) – Third Semester  
COST AND MANAGEMENT ACCOUNTING (bba-3001)

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  Answer briefly:
   a) Define cost unit.
   b) What is prime cost?
   c) What is overhead?
   d) What is meant by variance analysis?
   e) What do you mean by master budget?  
   f) Fill in the blanks:
      i) A __________ budget is prepared for more than one level activity.
      ii) When actual cost is less than the standard cost it is known as ________ variance.
      iii) __________ + variable overhead = marginal cost.
      iv) The __________ rate is computed by dividing the factory overhead by the total number of direct labour hours.
      v) __________ refers to the techniques and processes of ascertaining costs.

2x5

1x5

UNIT-I

Q.2  Explain fully the concept of cost. Discuss the various methods of classification of cost.

15

Q.3  What is a cost sheet? Give a specimen of a cost sheet.

15

UNIT-II

Q.4  How is labour turnover measured? Why is high labour turnover a matter of serious concern of management?

15

Q.5  Calculate the machine hour rate from the following particulars:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of machine</td>
<td>Rs.100000</td>
</tr>
<tr>
<td>Installation charges</td>
<td>Rs.10000</td>
</tr>
<tr>
<td>Scrap value</td>
<td>Rs.5000</td>
</tr>
<tr>
<td>Life of machine</td>
<td>10 years</td>
</tr>
<tr>
<td>Estimated working house per year</td>
<td>2200 hours</td>
</tr>
<tr>
<td>Rent, rates for the shop per month</td>
<td>Rs.250</td>
</tr>
<tr>
<td>Supervisor's salary per month</td>
<td>Rs.700</td>
</tr>
<tr>
<td>General lighting for the shop per month</td>
<td>Rs.300</td>
</tr>
<tr>
<td>Rate of power per hour</td>
<td>10 units</td>
</tr>
</tbody>
</table>

Machine occupies ¼ th area of shop. The supervisor is spending 1/5th of his time on this machine.

15

P. T. O.
UNIT-III

Q.6 What is marginal costing? How does it help in managerial decision making process? 15

Q.7 The following data are available from the records of S.T.Co. Ltd. for the year ended 31st March, 2009:

\[
\begin{align*}
\text{Rs.} & \\
\text{Sales} & 49000 \\
\text{Variable cost} & 20000 \\
\text{Fixed cost} & 12000
\end{align*}
\]

a) Calculate the P/V ratio, B.E.P and margin of safety at this level.
b) Calculate the effect of 10% increase in sales price.
c) Calculate the effect of 10% decrease in sales price. 15

UNIT-IV

Q.8 From the data given below, calculate the material price variance, the material usage variance and the material mix variance:

<table>
<thead>
<tr>
<th>Row material</th>
<th>Standard</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material A</td>
<td>40 Units @ Rs.50 per unit</td>
<td>50 units @ Rs.50 per units</td>
</tr>
<tr>
<td>Material B</td>
<td>60 Units @ Rs.40 per unit</td>
<td>60 units @ Rs.45 per units</td>
</tr>
</tbody>
</table>

Q.9 Write notes on following:

a) Zero base budgeting
b) Flexible budget
c) Objectives of budgetary control 5x3
End Semester Examination, May 2013
BBA (GEN) - Third Semester
HUMAN RESOURCE MANAGEMENT (bba-3002)

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

Note: Attempt any FIVE questions in all; taking at least ONE question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

Q. 1 Answer the following (in brief):
   a) Define human resource management and discuss the two categories of function. 3
   b) Differentiate between transfer and promotion. 2
   c) What do you understand by fringe benefits? 2
   d) Define strategic human resource management. 2
   e) What is golden parachute? 2
   f) Explain induction. 2
   g) Differentiate between job analysis and job evaluation. 2

UNIT-I

Q. 2 What is human resource development? What are the major sub-systems of HRD? 15

Q. 3 Write short notes on:
   a) HRM in globally competitive environment. 7½x2
   b) Scope of human resource management.

UNIT-II

Q. 4 How is recruitment different from selection? Explain at length the diverse types of tests being used in selection process. 15

Q. 5 Write short notes on:
   a) Placement. 7½x2
   b) Job design.

UNIT-III

Q. 6 Explain the importance of performance appraisal in public sector organizations. Critically discuss the modern techniques of performance appraisal. 15

Q. 7 What is the need of training? How will you assess the training needs of employees working at different levels of the organization? 15

UNIT-IV

Q. 8 Write short notes on:
   a) Performance management system. 7½x2
   b) Workers participation in management.

Q. 9 What is compensation? What are the components of compensation? 15
End Semester Examination, May, 2013
BBA (GEN) - Third Semester
PRODUCTION MANAGEMENT (bba-3003)

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

Note: Attempt any FIVE questions in all; taking at least ONE question from each Unit.
Q. No. 1 is compulsory. All questions carry equal marks.

Q.1 Answer the following (in brief):
   a) Write two differences between product and service.
   b) Define inspection.
   c) Define process layout.
   d) Give two objectives of quality control.
   e) What is EOQ?
   State whether the followings are True or False:
   f) Conveyors are commonly used for material handling inside factory.
   g) Charts and diagrams are the tools for 'method study'.
   h) Factor rating method is used for evaluating plant layout.
   i) Cellular is a type of plant layout.
   j) Flow production is also known as mass production.  2x5 1x5

UNIT-I

Q.2 Define production management. State the objectives and importance of production management in any manufacturing form. 15

Q.3 Describe the major long-term and short-term decision to be taken by production manager. Also mention the activities involved in production management. 15

UNIT-II

Q.4 Define a production system. Differentiate between 'production to stock' and 'production to order' by using suitable examples. 15

Q.5 Describe plant location. Discuss various factors affecting plant location decisions, if you want to establish a Pharma company in Haryana. 15

UNIT-III

Q.6 Discuss in brief various elements of production planning and control (PPC). Also mention the objectives and limitation of PPC. 15

Q.7 Following table represents the time taken by different workers to complete different jobs:

\[
\begin{array}{cccccc}
J_1 & J_2 & J_3 & J_4 & J_5 \\
W_1 & 2 & 9 & 2 & 7 & 1 \\
W_2 & 6 & 8 & 7 & 6 & 1 \text{ (hours)} \\
W_3 & 4 & 6 & 5 & 3 & 1 \\
W_4 & 2 & 7 & 3 & 1 \\
W_5 & 3 & 9 & 5 & 1 \\
\end{array}
\]

In what way should various jobs be assigned to different workers so as to complete all jobs in minimum time? 15

UNIT-IV

Q.8 Define inventory control. Discuss in brief various techniques of inventory control. 15

Q.9 Discuss various control charts for variables and attributes. How do these help in controlling quality in production? 15
End Semester Examination, May, 2013
BBA - Third Semester
DATABASE MANAGEMENT SYSTEM (bba-3004)

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

Note: Attempt any FIVE questions in all; taking at least ONE question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

Q. 1 a) What is a constraint? Give names of any two constraints.
b) What is a file?
c) What is an instance?
d) Three levels of architecture are ______.
e) Give names of all logical operations.
f) The tool used for database recovery is ______.
g) Define datamining.
h) Write an update query to update only one row of a table.
i) BCNF mean ______.
j) Define a view.

UNIT-I

Q. 2 a) What is clause in a database? Give names of any five clauses with examples.
b) Explain complete structure of database management system. Also briefly explain data dictionary.

Q. 3 What are the languages used in SQL? Explain all the command comes under different languages.

UNIT-II

Q. 4 Explain data models briefly.

Q. 5 Explain E-R diagram with a suitable example.

UNIT-III

Q. 6 What do you mean by firewalls? Explain the firewalls and viruses in detail.

Q. 7 What do you mean by backup and recovery? Explain all the recovery techniques in detail.

UNIT-IV

Q. 8 Explain the followings:
a) Digital libraries.
b) Mobile database.

Q. 9 What are the emerging database technologies in data warehousing? Explain.
End Semester Examination, May, 2013
BBA - Third Semester
WORKSHOP ON ENVIRONMENTAL STUDIES (bba-3005)

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

Note: Attempt any FIVE questions in all; taking at least ONE question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

Q.1 Answer the followings:
   a) Name one gas in the atmosphere which causes ozone layer depletion.
   b) Name one developed national park.
   c) Give one example of natural resources.
   d) Name one example of decomposers.
   e) Name two gaseous air pollutants.
   f) Name two non-traditional sources of energy.
   g) Which day is celebrated as the World’s Environment Day?
   h) Name the abiotic component of an ecosystem.
   i) Give two uses of silver.
   j) Name one source of water pollution.

UNIT-I

Q.2 a) Discuss the natural resources. What methods can be opted to conserve natural sources?  5
   b) Explain the multidisciplinary nature of environment science.  5

Q.3 a) ‘An individual plays an important role in conservation of environment’. Comment.  5
   b) Enumerate the importance of environment awareness.  5

UNIT-II

Q.4 a) Discuss ecological succession along with examples.  5
   b) What is the structure of an ecosystem? Explain with examples.  5

Q.5 a) Discuss the desert ecosystem.
   b) Briefly describe the causes and effects of noise pollution and marine pollution.  5

UNIT-III

Q.6 a) What is global warming? Discuss the causes and control measures of global warming.  5
   b) Write short note on watershed management.  5

Q.7 a) Explain the acid rain. Also describe the causes and effects of acid rain.  5
   b) Briefly describe the principles of sustainable development.  5

UNIT-IV

Q.8 Write a short note on the environment legislations.  10

Q.9 Enlist the main guidelines of Wildlife Protection Act.  10
End Semester Examination, May 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 in briefly:
   a) Define Business.
   b) What does LPG stand for?
   c) Internal Environment includes ______ factors of the business.
   d) Balance of trade = Export of visible goods - ______.
   e) What does SWOT analysis stand for?
   f) Define privatization?
   g) Write the name of two Committee of Licensing System.
   h) What is the full form of EXIM?
   i) Write any two objectives of WTO.
   j) What is full form of NBFC?

UNIT-I

Q.2 What is Business Environment? Discuss in details the internal and external factors of business environment in India.

Q.3 What do you understand by social responsibilities? Discuss the social responsibilities towards customers and employees.

UNIT-II

Q.4 Define industrial policy? Explain the main components of New Industrial policy, 1991 of India.

Q.5 Write notes on the following:
   a) Is full privatization possible in India? Explain.
   b) What are the internal and external causes of industrial sickness?

UNIT-III

Q.6 Write notes on the following:
   a) Capital issues guidelines of SEBI.
   b) Latest EXIM policy.

Q.7 What do you understand by balance of payments and balance of trade? Give the difference between balance of trade and balance of payments.

UNIT-IV

Q.8 Write notes on the following:
   a) What do you mean by globalization? Explain the current features of globalization.
   b) "The establishment of the World Bank is a boon to underdeveloped countries". Explain.

Q.9 Define Multinational Corporation? Discuss in detail the role of MNCs.
End Semester Examination, May 2013
BBA (GEN) – Fourth Semester
FINANCIAL MANAGEMENT (bba-4002)

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) Among all long term sources of finance, _____________ carries maximum cost.
   b) To financial analysts, "working capital" means the same thing as ____________.
   c) Internal rate of return is that discount rate at which projects net present value is ____________.
   d) Market price per share ____________, if more debt is used as per NI approach. 2x4

State whether the statement is True/False:
   e) The term Capital Structure includes also the financial structure. 2
   f) There is a reverse relationship between risk and return. 2
   g) The traditional approach is mid-way between the two extreme (The NI and NOI) approaches. 2
   h) In case of independent investment proposals, IRR and NPV methods provide the same results. 1

UNIT-I

Q.2 Define Finance function. Explain the duties and responsibilities of a finance manager in any business organisation. 15

Q.3 Differentiate wealth maximisation from profit maximisation. Which one would you prefer as decision criterion in today's environment? Justify your answer. 15

UNIT-II

Q.4 a) Define capital budgeting. Explain Net Present Value (NPV) method of capital budgeting. 9
   b) What is "Time Value of Money"? How does it affect the decision making? Explain using examples. 6

Q.5 Urja Vikas Ltd. is considering purchase of an equipment costing Rs.2,50,000 having 6 yr life with Rs10,000 as salvage value. Its annual maintenance cost is Rs.35,000. Per unit selling price of output produced using this equipment is Rs.5 and variable cost is Rs.2. Estimated sale is 100000 units per year. Firm uses straight line depreciation method and tax rate is 30%. Cost of capital is 10%. Calculate the Net Present Value of this equipment.

<table>
<thead>
<tr>
<th>Year</th>
<th>PV factor@10%</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>.909</td>
<td>.826</td>
<td>.751</td>
<td>.683</td>
<td>.621</td>
<td>.564</td>
</tr>
</tbody>
</table>

UNIT-III

Q.6 Explain financial and operating leverage. Explain the relevance of leverages for finance managers. 15

Q.7 Define capital structure. Discuss the factors that contribute in designing an optimum capital structure. 15

P. T. O.
UNIT-IV

Q.8  a) Does a stable dividend policy affect the value of a firm? Justify your answer.

b) Explain giving suitable examples the Walter’s model to determine dividend policy.

Q.9  a) Using given information: workout working capital requirement of a firm:

- Finished goods inventory: Rs.15000
- Raw material inventory: Rs.12000
- Domestic sales 6 weeks’ credit: Rs.350000
- Export sales 3 week’s credit: Rs.80000

Average time lag in payment:
- Wages: 0.5 weeks, Rs.300000
- Stock and Material: 3 months, Rs.80000
- Rent and Royalties: 6 months, Rs.12000
- Staff salary: 2 weeks, Rs.90000
- Misc. expenses: 1 month, Rs.60000

b) Define Economic Order Quantity (EOQ). How does it help the managers in controlling inventory?
End Semester Examination, May 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) State 4P’s of marketing mix.  
   b) State the concept of target marketing.  
   c) What are the stages in new product development?  
   d) Design suitable distribution channel for:
      i) Vegetable  
      ii) Soft drink  
   e) State different methods of promotion of a product.  
   f) State few points of difference between advertising and publicity.  
   g) Is packaging 5th P in marketing mix? (True or false)  
   h) Is marketing skimming one of the techniques of pricing a product? (True or false)  
   i) Is evaluation of alternatives first step in consumer’s purchase decision process? (True or false).

UNIT-I

Q.2 a) Discuss the various concepts of marketing in detail.  
   b) What are the differences between marketing and selling?

Q.3 Why is it necessary to understand marketing environment? What are controllable and uncontrollable factors?

UNIT-II

Q.4 What are the major stages in consumer buying decision process? Explain.

Q.5 What are the bases for market segmentation? Discuss suitable bases for market segmentation in case of TV and washing machine.

UNIT-III

Q.6 What is product life-cycle? Explain it various stages and the strategies often used during each stage.

Q.7 a) Discuss the different pricing strategies used by the marketer to price a product.  
    b) What is branding? Discuss different branding challenges.

UNIT-IV

Q.8 What is meant by sales promotion? Describe briefly the various methods of sales promotions.

Q.9 a) What do you understand by retailing? Explain the various decisions and trends in retailing.  
    b) Explain the elements and process of advertisement.
End Semester Examination, May 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 blanks:  
a) ..................................... is a careful investigation/inquiry through search of new facts in any branch of knowledge.  
b) ..................................... is a group of homogenous elements while ..................................... is a group of mixed elements.  
c) ..................................... is used to select the specific elements as samples in order to serve the defined purpose.  
d) ..................................... refers to allocating the equal chances of selecting any random sample.  

STATE WHETHER THE STATEMENT IS TRUE OR FALSE:  
e) Chi square test is used to analyse the data.  
f) Ordinal scale measures the variable to identify and distinguish each value from the others.  
g) Ratio scale is used to measure the variable in proportion of a specified unit.  
h) Report writing should follow a specific format in order to make it reader friendly.  

UNIT-I

Q.2  What is Business Research? Discuss its significance for a real estate agent in a city.  

Q.3  a) “Identification of a business problem” is a key for a good research proposal”. Explain.  
b) What is hypothesis? Discuss its role in research.  

UNIT-II

Q.4  a) “Research Design is a just like a map of a house, required before its construction.” Explain.  
b) Explain the followings:  
   i) Completely Randomized design  
   ii) Thurstone scale  

Q.5  As a business graduate, prepare a research design to carry out a research study for choosing a good Institution to pursue post graduate in Business Administration.  

UNIT-III

Q.6  Define sampling? Suggest the appropriate method to select a sample of 11 students out of BBA course to be sent for participation in a cricket tournament.  

Q.7  a) Differentiate between primary and secondary data on the basis of relative merits.  
b) What precautions would you suggest in using the secondary data in any research?  

UNIT-IV

Q.8  a) Enumerate various statistical methods for uni-variate analysis of data.  
b) Define the process of Hypothesis Testing.  

Q.9  Discuss the essentials a good project report. How will you prepare a report of your summer project?
End Semester Examination, May 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 question in one or two sentences:
   a) What do you mean implied contract?
   b) State the limitation of the doctrine of quantum merit.
   c) Define contract of indemnity under section 124.
   d) Sections 2(1) (p) of IT act 2000 has defined digital signature as authentication of an electronic record by mean of an electric method in accordance with the provision of ______
   e) Give name of two punishable offences under IT Act, 2000.
   f) Distinguish between “sub-agent and substituted agent”.
   g) When communication of offer is completed? Explain.
   h) Meaning of unpaid seller.
   i) Explain agency by ratification.
   j) Explain rule of “no consideration no contact”. 1½x10

UNIT-I

Q.2 Differentiate between void agreement and void contract and mention at least seven types of agreement which are expressly declared void by the Indian Contract Act, 1872. 15

Q.3 What do you mean by breach of contract? What are the remedies available to an aggrieved party on the breach of a contract? 15

UNIT-IT

Q.4 Write short notes on the following:
   a) Bill of Exchange
   b) Dishonour of negotiable instrument
   c) Holder on due course 5x3

Q.5 Define ‘Negotiable Instrument’? Explain presumptions and provisions relating to a negotiable instrument. 15

UNIT-III

Q.6 a) Explain the rule that no one can transfer a better title than what he has. 10
    b) Explain the right of unpaid seller. 5

Q.7 What do you mean by an agency? How is an agency created and how is it terminated? 15

UNIT-IV

Q.8 Define Guarantee? What are the requisites of a valid guarantee? And also explain its various types. 15

Q.9 Explain the meaning of the term “digital signature”. Describe the process of creation and verification of digital signature. 15
Q.1  a) Information systems are composed of ______ basic components.
   i) Four  ii) Three  iii) Two  iv) Many
b) Management information systems usually:
   i) Serve managers interested in weekly, monthly, and yearly results, not day-to-day activities.
   ii) Help managers make decisions that are unique, rapidly changing, and not easily specified in advance.
   iii) Provide managers with a generalized computing and telecommunications capacity that can be applied to a changing array of problems.
   iv) Perform and record the daily routine transactions necessary to the conduct of business.
c) Which of the following statements describes a good approach to information security for an organization?
   i) Staff passwords are shared between user groups.
   ii) Security lapses are not reported except in an emergency situation.
   iii) Sensitive data is available to as many employees as possible.
   iv) Computer systems are backed up on a regular basis.
d) When data is organized in a meaningful way, the results are called:
   i) Artificial intelligence.
   ii) An expert system.
   iii) Information.
   iv) A database.
e) 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.
f) Enterprise collaboration systems involve the use of software tools to support communication, coordination, and collaboration among members of a networked team or workgroup.
   i) True  ii) False
g) When businesses develop attractive electronic marketplaces to entice and sell products and services to customers, this is considered which type of application?
h) For taking decisions data must be:
   i) Very accurate.
   ii) Massive.
   iii) Processed correctly.
   iv) Collected from diverse sources.
i) What type of commerce is enabled by technology?
   i) Path-to-profitability  ii) E-commerce
   iii) E-Buy  iv) Internet
j) Which of the following are building blocks for an information system?
   i) Data
   ii) Processes
   iii) Interface
   iv) Communications
   v) All of the above

UNIT-I
Q.2 Define data, information and discuss attributes of information.  10
Q.3 Explain the role of information system in business.  10

UNIT-II
Q.4 Explain the role of computers in MIS.  10
Q.5 What are the various resources of an information system? Explain.  10

UNIT-III
Q.6 Why quality control is necessary in an information system design? Explain.  10
Q.7 What are the critical success factors in implementation of information system planning?  10

UNIT-IV
Q.8 What are the importance of information security and control in MIS department?  10
Q.9 Write short notes on:
   a) E-Collaboration  5x2
   b) E-Communication
End Semester Examination, May, 2013
BBA (GEN) – Fifth Semester
INDIAN FINANCIAL SYSTEM (bba-5002)

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

Note: Attempt any 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) the followings:
   a) What is financial market? 2
   b) Write two functions of financial system. 2
   c) Define indirect securities. 2
   d) Write any four instruments traded in money market. 2
   e) Where should an individual open a demand account? 2
   f) Who are the participants in debt segment of stock exchanges? 2
   g) Define factoring. 2
   h) Who can set up a mutual fund in India? 1

UNIT-I

Q.2 Define a financial system. How does it contribute towards economic development? Discuss its structure in India. 15

Q.3 Discuss main functions of financial markets. How does the capital market differ from money market? Explain. 15

UNIT-II

Q.4 Explain in brief various regulations that regulate various activities of capital market in India. 15

Q.5 Critically analyze various securities/instruments being traded in capital market. Also mention the Government securities. 15

UNIT-III

Q.6 How does electronic security differ from paper/physical security? Discuss the process of converting physical shares into electronic share. Also discuss its benefits. 15

Q.7 Explain the structure, objectives and functions of NSDL. How does it differ from SHCIL? 15

UNIT-IV

Q.8 How does a mutual fund function? Discuss the structure, objective and regulations of a mutual fund. 15

Q.9 Write short notes on:
   a) Merchant banking. 15
   b) Credit rating.
End Semester Examination, May, 2013
BBA (GEN) – Fifth Semester
COMPANY LAW (bba-5003)

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

Q.1 Explain the following in brief:
   a) Private company.
   b) Pre-incorporation contracts.
   c) Special resolution.
   d) Legal position of director.

   Fill in the blanks:
   e) Maximum number of members of a public company are ________.
   f) Liability of members of a company limited by share is ________.
   g) ________ company may adopt table 'A' in place of 'Articles of Association'.
   h) The first meeting of share holders of a public company is ________.
   i) Appointment of proxy should be lodged with the company at least ___ hours before the meeting.
   j) The maximum number of companies an auditor can audit at time is ________.
   k) A company which never commenced its business and has either no assets or has such assets as shall not be sufficient to meet the cost of liquidation is known as ________.

   \[1 \times 7\]

UNIT-I

Q.2 "The fundamental attribute of a corporate personality is that company is a legal entity separate from the member". Elucidate the statement.

   \[15\]

Q.3 Write short notes on:
   a) Promoter.
   b) Difference between Article of Association and Memorandum of Association.
   c) Doctrine of ultra vires.

   \[5 \times 3\]

UNIT-II

Q.4 Define a prospectus. What are the consequences of miss-statement in a prospectus?

   \[15\]

Q.5 Write short notes on:
   a) Extra ordinary general meeting.
   b) Resolutions.
   c) Voting in a share holders meeting.

   \[5 \times 3\]

UNIT-III

Q.6 What are the rights, powers and duties of an auditor?

   \[15\]

Q.7 Explain:
   a) Destination between Managing Director and Manager.
   b) Removal of a director.

   \[5 \times 10\]

UNIT-IV

Q.8 What do you understand by winding up? Discuss in detail compulsory winding up of company.

   \[15\]

Q.9 Briefly explain:
   a) Contributors liability.
   b) Powers of liquidators.
   c) Consequences of compulsory winding-up.

   \[5 \times 3\]
End Semester Examination, May, 2013
BBA (GEN) – Fifth Semester
COMPUTER NETWORKING AND INTERNET (bba-5004)

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

Note: Attempt any 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) An ISP:
      i) Provides access to the internet   ii) Is a CPU register
      iii) Is a CPU functional unit   iv) Make of processor
   b) Telnet:
      i) used to send email   ii) uses telephone lines
      iii) is a part of Netscape   iv) is a protocol that allows for remote login
   c) Telephone systems may be classified as:
      i) simplex and symmetrical   ii) duplex and asymmetrical
      iii) simplex and asymmetrical   iv) duplex and symmetrical
   d) MAN refers to:
      i) Mega area network   ii) Metropolitan area network
      iii) Mini area network   iv) Medium area network
   e) Collection of interconnected networks sometimes called:
      i) internet   ii) wireless network
      iii) mobile network   iv) none of these
   f) Why was the OSI developed?
      i) Manufactures disliked the TCP/IP protocol.
      ii) The rate of data transfer was increasing exponentially.
      iii) Standards were needed to allow any two systems to communicate.
      iv) None of these.
   g) Which of the following is a function of e-mail system?
      i) composition   ii) transfer
      iii) reporting   iv) all of above
   h) Which of the following is not an scripting language?
      i) HTML   ii) XML
      iii) Postscript   iv) Java script
   i) Layer one of the OSI model is:
      i) Physical layer   ii) Link layer
      iii) Transport layer   iv) Network layer
   j) Which of the following is a data communication system?
      i) Sender   ii) Medium
      iii) Receiver   iv) All of the above

UNIT-I

Q.2  What are HTMP tags and for what they are used in HTML?  10

Q.3  What do you understand by computer networks? Discuss the advantages and disadvantages of network. Differentiate between different types of data signals.  10

UNIT-II

Q.4  List the five key differences between TCP reference model and OSI reference model.  10

P. T. O.
Q.5 What is network security? Explain firewalls and its different types. 10

UNIT-III

Q.6 What is an internet? Trace it history and discuss how it was developed? 10

Q.7 Write short notes on:
   a) Internet service provider.
   b) Search engine. 5x2

UNIT-IV

Q.8 What are the different protocols of communications? 10

End Semester Examination, May 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 blanks:
   a) In case of newly set up business or profession, the previous year is from ________ to ________.
   b) Tax paid in advance means ________.
   c) Return for service tax is filed ________ in a year.
   d) Deductions u/s 80C to 80U are deducted from ________.

State True or False:
   e) All incomes in India are taxable at a flat rate.
   f) Exempted incomes are deducted from total income.
   g) Service tax is charged on the value of services provided.
   h) No Input credit is available on goods.

Write one sentence about:
   i) Rebate
   j) E-filing of service tax return

UNIT-I

Q.2 Write short notes on:
   a) Agricultural income
   b) Total income
   c) Residential Status of an Individual

UNIT-II

Q.3 "Income of a previous year is chargeable to tax in the immediate following assessment year." Explain the statement along with its exceptions.

Q.4 Explain:
   a) Short term capital gains
   b) Deduction of interest in case of self-occupied house property
   c) Incomes chargeable under the head other sources

UNIT-III

Q.5 What are deductions? Explain deductions u/s 80C, 80D and 80 G.

UNIT-IV

Q.6 What are the different modes of computation of VAT? Explain with examples.

Q.7 Explain in relation to VAT:
   a) Composition scheme
   b) Deficiencies in the present system

Q.8 Explain service tax rules in relation to:
   a) Registration
   b) Payment of service tax

Q.9 What is service tax? Explain its features. Who is liable to pay service tax?
End Semester Examination, May 2013  
BBA (GEN) – Sixth Semester  
SYSTEM ANALYSIS AND DESIGN (bba-6002)

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) Name types of feasibility studies.  
   b) Define system.  
   c) What are the tools for decision analysis?  
   d) What is called recovery?  
   e) Define benchmarking.  
   f) How many steps are there in system development life cycle?  
      i) 4  
      ii) 5  
      iii) 6  
      iv) 10  
   g) DFD stands for __________________________.  
   h) In E-R model attribute stands for __________________________.  
   i) What does a data dictionary contains?  
   j) Documentation should be done on ______________ stage.  
(2x5)

UNIT-I

Q.2 Explain the phases of SDLC in detail. Also draw a clean diagram for that.

Q.3 a) What is feasibility study? Explain the concept of operational feasibility.  
   B) Explain the role of system analyst in developing a system.  
   (8)
   (7)

UNIT-II

Q.4 Discuss the term ‘fact finding techniques’ for system requirement and specification.  
   (15)

Q.5 Discuss the following:  
   a) Data dictionary.  
   b) Decision table.  
   (7)  
   (8)

UNIT-III

Q.6 What is the use of I/O design in system analysis? Discuss each aspect of I/O design in detail.  
   (15)

Q.7 Write notes on:  
   a) Software selection procedure for a system.  
   b) Structured English vs decision table and decision tree.  
   (7)  
   (8)

UNIT-IV

Q.8 Who is responsible for backup and recovery in a system? Explain system backup and recovery plans in detail.  
   (15)

Q.9 Write notes on the following:  
   a) Unit and integration testing.  
   b) Post implementation review.  
   (8)  
   (7)
End Semester Examination, May 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  a) Risk involved in ____business is less than the risk involved in _____business.
   b) Macro economic factors such as ____and ____reflect the economic condition of any country.
   c) _________refers to integration of countries economies into world economy.
   d) The _______refers to the investment in assets by foreign companies.
   e) GATT refers to ______.

State whether the statement is TRUE or FALSE:

f) Setting up joint venture abroad is the first and easiest step towards internationalization.
   ___

g) Tariff barriers can better insulate the domestic industry than Non tariff barriers.
   ___

h) Bill of lading can be used to temporarily finance the export.
   ___

i) Foreign institutional investment (FII) includes the foreign direct investment (FDI).
   ___

j) Licensing is better arrangement than franchisee to expand business beyond boundaries. ___

UNIT-I

Q.2  a) Differentiate domestic business from international business. ____
   b) An Indian software company aims to be world’s no.1 in this industry. Suggest various ways of expanding its business across the world. ___

Q.3 "Foreign Direct Investment contributes towards development of an underdeveloped country leading to overpowering its economy.” Comment. Discuss various steps to attract FDI. ___

UNIT-II

Q.4 a) What is product life cycle (PLC)? Discuss in detail the international PLC theory of international business. ___
   b) "International trade takes place because different countries have different factor endowments of identical factors of production.” Justify the statement. ___

Q.5 Write notes on:
   a) Non tariff Barriers. ___
   b) Bill of Lading. ___

UNIT-III

Q.6 Define BOP. How does the gold import effect India’s balance of payments? Suggest various measures to improve BOP. Support your answer with illustrations. ___

Q.7 a) "The IMF – a panacea for every illness? Comment. ___
   b) Explain the role of international financial institutions in economic development. ___

UNIT-IV

Q.8 a) Discuss strategic orientation of MNCs. ___
   b) Explain major considerations in packaging decision in international market. ___

Q.9 Discuss with the help of suitable examples the major issues for an Indian MNC in designing promotional strategies for Middle East. ___
End Semester Examination, May 2013
BBA (GEN) – Sixth Semester
E-COMMERCE (bba-6004)

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 Choose the correct alternative:
   a) Which of the following is part of the four main segments for e-commerce?
   b) Which segment do eBay, Amazon.com, and LandsEnd.com belong to?
   c) All of the following are techniques B2C e-commerce companies use to attract customers, except:
      i) Registering with search engines
      ii) Viral marketing
      iii) Online ads
      iv) Virtual marketing
   d) What is an arrangement made between e-commerce sites that direct users from one site to the other?
      i) Spam
      ii) Viral marketing
      iii) Affiliate programs
      iv) None of the above
   e) What is the percentage of customers who visit a Web site and actually buy something called?
      i) Affiliate programs
      ii) Click-throughs
      iii) Spam
      iv) Conversion rate
   f) What is the process in which a buyer posts its interest in buying a certain quantity of items, and sellers compete for the business by submitting successively lower bids until there is only one seller left?
      i) B2B marketplace
      ii) Intranet
      iii) Reverse auction
      iv) Internet
   g) What is a combination of software and information designed to provide security and information for payment is called?
      i) Digital wallet
      ii) Pop up ad
      iii) Shopping cart
      iv) Encryption
   h) Virtual reality is being used in which of the following applications?
      i) Entertainment
      ii) Kitchen design
      iii) Auto demonstrations
      iv) All of the above

P. T. O.
i) A password 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?

j) What is the use of your physical characteristics – such as your fingerprint, the blood vessels in the iris of your eye, the sound of your voice, or perhaps even your breath – to provide identification?
   i) Push technology
   ii) Pull technology
   iii) Biometrics
   iv) Virtual reality

**UNIT-I**

Q.2 What are the advantages and limitations of e-commerce? Do you think the advantages outweigh the limitation? 10

Q.3 How will you assess the requirement for an online business? How a good management team can influence the E-Commerce? 10

**UNIT-II**

Q.4 What are the main characteristics of cash payment in contrast with cheque payment? Why are governments not sympathetic to large cash transactions in e-commerce? 10

Q.5 Discuss the following:
   a) Electronic payment system
   b) Laws relating to online transactions 5x2

**UNIT-III**

Q.6 What is a digital signature? Why is it necessary in E-Commerce? What are the necessary conditions a hash function used in digital signature should satisfy? 10

Q.7 a) What are the security issues of E-commerce? 5
   b) How e-commerce can be applied in service sector? Discuss. 5

**UNIT-IV**

Q.8 Draw an e-commerce model stating its infrastructure requirement and transaction handling. 10

Q.9 Write short notes on:
   a) Workspace 5x2
   b) Virtual Organization
End Semester Examination, May 2013
BBA (CAM) – First Semester
CONCEPTUAL FOUNDATIONS OF MANAGEMENT (BCAM-101)

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

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

Q.1 Give very short/one word answer for the following:
a) Define management.
b) ____ level of management includes foremen and supervisor.
c) Fayol developed the ________.
d) What are the basic functions of management?
e) Write down 10 qualities of a manager.
f) What are the three skills of managers?
g) Management is professionalism in India. (Yes/No)
h) Communication is a part of the directing function of management. (Yes/No)
i) Find the difference between administration and management.
j) Who is the father of scientific management?
k) What is the meaning of contingency approach?
l) How many type of system approach are there in management?
m) What is synergy?
n) Managers are needed only in business firms. (Yes/No) 1x14

UNIT-I

Q.2 Elaborate in detail the evolution of management. 14

Q.3 "Management is the force which leads, guides and directs an organization in the accomplishment of predetermined objectives". Discuss in detail. 14

UNIT-II

Q.4 Define planning. Discuss briefly the various types of planning. 14

Q.5 What is business forecasting? What are the advantages and process of forecasting? 14

UNIT-III

Q.6 What do you understand by organizing? Explain the importance and principles of organizing. 14

Q.7 Write short notes on:
a) Span of control.
b) Delegation and decentralization. 7x2

UNIT-IV

Q.8 "Decision making is the primary task of the manager". Critically analysis this statement and explain the process of scientific decision making. 14

Q.9 What are the pre-requisites of effective managerial control? Discuss the nature and process of control. 14
End Semester Examination, May 2013
BBA (CAM) – First Semester
BUSINESS ECONOMICS (BCAM-102)

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

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

Q.1 Answer the following questions in one or two sentences:
a) Define business economics.
b) Examine the term utility.
c) Economics is a: (Tick one)
   i) Social science
   ii) Natural science
   iii) Political science
d) Slope of indifference curve is indicated by ________.
e) Average cost is the cost ________ of output.
f) Production function is ________.
g) Opportunity cost is ________ cost.
h) What is law of demand?
i) Write any two effects of Inflation.
j) National Income is ________.
k) Define discriminating monopoly.
l) AR is known as ____ of a commodity.
m) Equilibrium means ________.
n) Total revenue minus total cost is equal to ________. 1x14

UNIT-I

Q.2 What is law of demand? Why is it sloping downward? Explain the exception of demand. 14

Q.3 Define consumer equilibrium. Explain how consumer equilibrium is attained with the help of law of equi-marginal utility curve. 14

UNIT-II

Q.4 Define total revenue, average revenue and marginal revenue. Discuss the relationship between AR and MR curves of a firm under perfect competition and monopoly competition. 14

Q.5 Explain the relationship between average cost, average variable cost and marginal cost curve in short and long period. 14

UNIT-III

Q.6 Define market. Explain the characteristic of monopolistic completion. Compare demand curves under monopolistic and monopoly competition. 14

Q.7 Write short notes on:
a) Term 'Monopoly Power'.
b) Price determination under monopoly. 7x2

UNIT-IV

Q.8 Explain the concept of inflationary gap. What are the effects on the economy in short run? Give any two measures to reducing it. 14

Q.9 Write short notes on:
a) Value added method of calculating National Income.
b) Tools of Fiscal policy. 7x2
End Semester Examination, May 2013
BBA (CAM) – First Semester
BUSINESS STATISTICS (BCAM-103)

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

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

Q.1 a) What is statistics?
   b) Write two functions of statistics.
   c) What are discrete and continuous variables?
   d) Explain inclusive and exclusive series.
   e) What do you mean by 'central tendency'?
   f) Define absolute value.
   g) What are quartiles, deciles and percentiles?
   h) What is the area under normal curve?
   i) What is probability scale?
   j) What are regression coefficients?
   k) Write the maximum value of correlation coefficient (r).
   l) Give two uses of Poisson distribution.
   m) Define degree of freedom (d.f.).
   n) Give any two uses of index number.

UNIT-I

Q.2 Find the mean, median and mode to the following distribution:
Marks: 0-20 20-40 40-60 60-80 80-100
Frequency: 3 17 27 20 9

Q.3 a) Define geometric mean along with its applications.
   b) From the prices of share x and share y given below; state one is more stable:
      x: 41 44 43 48 45 46 49 50
      y: 91 93 96 92 90 97 99 94

UNIT-II

Q.4 a) Define correlation. How is it different from regression?
   b) Calculate rank correlation coefficient using following data:
      Marks in Economics: 40 46 54 60 70 80 82 85 85 90 95
      Marks in Statistics: 45 45 50 43 40 75 55 72 65 42 70

Q.5 a) Define regression lines.
   b) Calculate the regression line of x on y using following data:
      x (sales): 94 97 103 124 67 124 54 73 111
      y (purchase): 97 78 69 98 76 91 39 61 80
      Find the likely sales if purchase is 85 units.

UNIT-III

Q.6 Calculate the Fisher's ideal index from the following data and show that it satisfies
time reversal test:

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Year 2005 Qty</th>
<th>Year 2005 Price</th>
<th>Year 2012 Qty</th>
<th>Year 2012 Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>40</td>
<td>25</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>B</td>
<td>18</td>
<td>22</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>C</td>
<td>16</td>
<td>54</td>
<td>44</td>
<td>30</td>
</tr>
<tr>
<td>D</td>
<td>40</td>
<td>20</td>
<td>45</td>
<td>30</td>
</tr>
<tr>
<td>E</td>
<td>30</td>
<td>18</td>
<td>15</td>
<td>40</td>
</tr>
</tbody>
</table>

P. T. O.
Q.7  a) Define a time series. Explain its various components.
    b) Fit a straight line trend for the following data and estimate the likely sales for the
       year 2013:
       Year : 2006 2007 2008 2009 2010 2011 2012
       Sales : 80 90 83 94 99 92 105
       (in lacs)  

UNIT-IV

Q.8  a) Two dices are thrown simultaneously. Find the probability of getting a sum of 10
     or 11.
     b) On an average, one house in 1000, in a town, has a fire during the year. If there
        are 2000 houses, calculate the probability the exactly 3 houses will have the fire
        this year.

Q.9  a) State the qualities of a good sample.
     b) Data on income of parents and admission of children in Private and Government
        school is given below:
        Income Private School Government School
        Low 494 506
        High 162 438 (Number of children)
        Apply Chi square test to know whether high income families send their children to
        Private school. \( \chi^2 = 3.84 \) at \( d.f. = 1 \) and \( \alpha = 5\% \)
End Semester Examination, May, 2013
BBA (CAM) – First Semester
FINANCIAL ACCOUNTING (BCAM-104)

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

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

Q.1
a) Liabilities = __________ - ______________. 1
b) Journal is the book of ______ entry. 1
c) Error of commission is a ______ error. 1
d) Bad debts are shown on ______ side of profit and loss account. 1
e) LIFO and FIFO are the methods of ________. 1
f) Bank reconciliation statement is prepared to ________. 2
g) The system of recording transactions based on dual aspect concept is called ________. 1

Answer in brief:
h) What are the two basis of accounting? 1
i) Write two objectives of financial accounting. 2
j) What is a ledger account? 2
k) What is single entry system? 2

UNIT-I

Q.2 Discuss briefly the basic accounting concepts and fundamental accounting assumptions. 14

Q.3 Define accounting. Discuss in detail nature and objectives of accounting. 14

UNIT-II

Q.4 “Trial balance is not a conclusive proof of arithmetical accuracy of books of accounts.” Explain this statement and discuss the errors which are not disclosed inspite of agreement of trial balance. 14

Q.5 Enter the following transactions in journal and prepare cash account:

2011
June 1 A sum paid into bank as capital Rs.6,00,000/- and brought cash Rs.3,00,000/-.
June 3 Purchased goods in cash from Mukesh of list price Rs.2,00,000/- At 10% trade discount.
June 4 1/4th of the above goods returned for not being up to satisfaction.
June 7 Withdraw from bank Rs.2,50,000/- for office and Rs.10,000/- for personal use.
June 10 Purchased machinery for Rs.1,00,000/- and spent Rs.5,000/- on its installation.
June 12 Sold goods to Amar Rs.1,50,000/-.
June 14 Received cheque from Amar after reducing 2% cash discount.
June 16 Deposited above cheque into bank.
June 18 Salary due to clerk Rs.2,000/-.
June 30 Depreciate machinery @ 10% (Value of machinery Rs.3,00,000/-) 14

P. T. O.
UNIT-III

Q.6 Write short notes on the following and explain their treatment in preparation of final accounts:
   a) Accrued income.
   b) Provision for discount on debtors.
   c) Outstanding expenses.
   d) Interest on drawings.

Q.7 From the following particulars taken on 31st December, 2010, prepare a bank reconciliation statement:
   a) Balance as per pass book on 31st December, 2010 is overdraft of Rs.1027/-.
   b) 2 cheques drawn on 31st December but not cleared till January: Rs.12 and Rs.113.
   c) Interest on overdraft not entered into cash book: Rs.51/-.
   d) Cheque received on 31st December and entered in bank column of cash book but not deposited with bank: Rs.159/-.
   f) Discount allowed Rs.110/- has been included through mistake in bank column of cash book.
   g) Bank charges of Rs.15 had been debited in pass book twice erroneously.

UNIT-IV

Q.8 Write short notes on:
   a) Characteristics of receipt and payment account.
   b) Comparison of LIFO and FIFO.
   c) Advantages and disadvantages of single entry system.

Q.9 On January 1, 2009, a company purchased 5 machines for Rs.60,000/- each. The accounting year of the company ends on 31st December. Depreciation at the rate of 10% p.a. on initial cost is charged to profit and loss account and credited to a separate provision for depreciation account. On 1st January, 2011 one machine was sold for Rs.40,000/- and on 1st April, 2012 a second machine was sold for Rs.28,000/-. Another machine with higher capacity costing Rs.1,00,000/- was purchased on 1st July, 2012. Prepare machinery account and provision for depreciation account.
End Semester Examination, May 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) Information systems are composed of ______ basic components.
      i) Four  ii) Three  iii) Two  iv) Many
   b) What are the five main components of a computer system?
      i) CPU, CD-ROM, mouse, keyboard, sound card
         ii) Memory, Video card, Monitor, Software, Hardware
         iii) Modem, Keyboard, word processor, printer, screen
         iv) CPU, memory, system bus, input, output
   c) CD-ROM stands for:
      i) Compactable read only memory
         ii) Compact data read only memory
         iii) Compactable disk read only memory
         iv) Compact disk read only memory
   d) Which of the following is the 1's complement of 10?
      i) 01  ii) 10  iii) 11  iv) 10
   e) The difference between memory and storage is that the memory is _____ and
      storage is ________.
      i) Temporary, permanent  ii) Permanent, temporary
         iii) Slow, fast  iv) None of the above
   f) The chief reason why digital computers use complemenatal subtraction is that
      it:
      i) simplifies their circuitry
         ii) is a very simple process
         iii) can handle negative numbers easily
         iv) avoids direct subtraction
   g) Magnetic tapes are good storage media for:
      i) Backup and low volume data
         ii) Backup and high volume data
         iii) Storing original but low volume data
         iv) Storing original but high volume data
   h) In 1's complement, a number which is subtracted from other number is known
      as ________.
      i) Carry  ii) Subtrahend
         iii) Minuend  iv) None of these
   i) Multiple choice examination answer sheets can be evaluated automatically by:
      i) Optical mark reader
         ii) Optical character reader
         iii) Magnetic tape reader
         iv) Magnetic ink character reader

P. T. O.
j) Indicate which of the following, best describes the term "software":
   i) Systems programs only
   ii) Application programs only
   iii) Both i) and ii)
   iv) None of the above

UNIT-I

Q.2 What are the five generations of computer and how are they classified? 10

Q.3 Convert the following:
   a) 11110110 to decimal, octal and hexadecimal.
   b) 734.97 to binary, octal and hexadecimal. 5x2

UNIT-II

Q.4 What are peripheral devices? Why are they so called? 10

Q.5 Distinguish between a sequential access, a direct access and a random access storage device. Write one example of each. 10

UNIT-III

Q.6 What is an information system? Explain the information system function and its components. 10

Q.7 Explain the types of information systems. Discuss about the system trends in information system. 10

UNIT-IV

Q.8 Explain the concepts and components of information security. 10

Q.9 Define and distinguish between system software and application software. Explain application software for end user in detail. 10
End Semester Examination, May 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) Define business.
   b) What are the two types of business environment?
   c) In which year Industrial Licensing Policy was established?
   d) What is industrial sickness?
   e) Write three channels of globalization.
   f) Name any two types of NBFIs regulated by RBI.
   g) Name any three development banks running successfully in India.
   h) Mention any two components of balance of payment.
   i) Privatization 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) What are the two types of foreign investment?
   m) Specify two objectives of social audit.
   n) Write any two differences between Development Bank and Commercial Bank.

UNIT-I

Q.2 What do you understand by business environment? Explain the various components of business environment.

Q.3 Discuss the growth and problems of public sector in India.

UNIT-II

Q.4 Define industrial sickness. Critically examine the internal causes and external causes of industrial sickness.

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) IIGIC
   b) SIDBI

Q.7 Define stock exchange? What are the power and functions of SEBI?

UNIT-IV

Q.8 "The multinational corporations are doing extremely well since 1991". Do you agree? Discuss.

Q.9 Write short notes on the following:
   a) Achievements of IMF
   b) Functions of World Bank.
End Semester Examination, May 2013  
BBA (CAM) - Second Semester  
HUMAN RESOURCE MANAGEMENT (BCAM-202)

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 do you mean by human capital?  
b) Differentiate between HRM and HRD.  
c) What is meant by employment exchange?  
d) What is dearness allowance?  
e) What are the features of a sound promotion policy?  
f) Differentiate between fringe benefit and incentive payment.  
g) What is reference check?  

7x2

**UNIT-I**

**Q.2** What is the importance training to a worker? How and why the managers should also be trained along with the labour force? Briefly explain the different methods of development.  

14

**Q.3** What is the significance of proper selection of employees in an organization? Explain the steps followed in selection procedure.  

14

**UNIT-II**

**Q.4** Write short notes on:  
a) Profit sharing  
b) Job evaluator  

7x2

**Q.5**  
a) Explain the components of salary.  
b) Explain minimum wage, living wage and fair wage.  

7

7

**UNIT-III**

**Q.6** What do you understand by the following in connection with “Health of workers” as per Factories Act 1948?  
a) Artificial humidification  
b) Over crowding  
c) Lightening  

14

**Q.7** What are the effects of industrial accidents on the workers? Suggest measures for ensuring safety of workers. 

14

**UNIT-IV**

**Q.8** Discuss the various methods which can be employed in resolving labour management disputes.  

14

**Q.9** Write short notes on:  
a) Trade unions and their significance  
b) Cordial industrial relations  

7x2
End Semester Examination, May 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) Write the following set in the roster form:
   \[ A = \{ x : x \text{ is an integer and } -3 < x < 7 \}. \]
   b) If \[ A = \begin{bmatrix} 3x + 7 & 5 \\ 7 & 2 \end{bmatrix} \quad B = \begin{bmatrix} 0 & 5 \\ 7 & 2 \end{bmatrix} \] also \( A = B \), then find \( x \).
   c) Rajesh invests Rs. 9000 at 20% p.a. for 2 years, find S.I.
   d) Differentiate \((2x^3 + 9x^2 + 3)\) with respect to \(x\).
   e) If first term of an A.P. is 2 and common difference is 3. Find the formula for \(n^{th}\) term.
   f) Evaluate: \( \frac{\log \sqrt{8}}{\log 8} \).
   g) If \( 2^x + 2^{x+3} = 1024 \), then solve for \(x\). 2x7

UNIT-I

Q.2 a) The difference between simple interest and compound interest of a certain sum of money is Rs.22 at 20% p.a. for 2 years. Find the principal. 7
   b) At what rate of compound interest p.a. will Rs.250 amount to Rs.1800 in 2 years? 7

Q.3 a) Find the difference between simple interest and compound interest on Rs.2400 for 2 years at 5% p.a., compounded annually. 7
   b) If a bank pays 6% interest per year compounded quarterly, what equal deposits have to be made at the end of each quarter for 3 years if the a person wants to have Rs.15000 at the end of 3 years? 7

UNIT-II

Q.4 a) If \( m = a^{x^3} + a^{-x^3} \); prove that \( m^3 - 3m = a + \frac{1}{a} \). 4
   b) Prove that: \( 7\log \frac{16}{15} + 5\log \frac{25}{24} + 3\log \frac{81}{80} = \log 2 \). 5
   c) The sum of three numbers in A.P. is 21 and their product is 280. Find the numbers. 5

Q.5 a) The sum of three numbers in A.P. is 18. If the numbers are increased by 3,4,10 respectively, they form a G.P. Find the numbers. 7
   b) Solve for \(x\): \( \log_3 3 + \log_3 9 + \log_3 729 = 9 \) 7

P. T. O.
UNIT-III

Q.6  a) In a class, 18 students offered Physics, 23 offered Chemistry and 24 offered Mathematics. Of these 13 are in both Chemistry and Mathematics; 12 in Physics and Chemistry; 11 in Mathematics and Physics and 6 in all the three subjects.
Find: i) How many students are there in the class?
   ii) How many offered Mathematics and Physics but not Chemistry?
   iii) How many are taking exactly one of the three subjects?

b) If \( A = \begin{bmatrix} 3 & 1 \\ -1 & 2 \end{bmatrix} \), then find \( f(A) \); where \( f(A) = A^2 - 5A + 7I \).

UNIT-IV

Q.7  a) Using determinants solve the following system of linear equations:
\[
\begin{align*}
x + y + z &= -1 \\
x + 2y + 3z &= -4 \\
x + 3y + 4z &= -6
\end{align*}
\]

b) Prove that: \( A - (B \cap C) = (A - B) \cup (A - C) \).

Q.8  a) If \( y = x + \sqrt{x^2 - 1} \); proves that \( (y - x) \frac{dy}{dx} - y = 0 \).

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

c) Evaluate: \( \lim_{x \to 1} \frac{x^2 - 4x + 3}{x^2 + 2x - 3} \).

Q.9  a) Find the value of 'a' if the function 'f' is given by:
\[
f(x) = \begin{cases} 
2x - 1 & , x < 2 \\
a & , x = 2 \\
x + 1 & , x > 2 
\end{cases}
\]

b) Differentiate w.r.t. \( x \): \( \frac{\sqrt{x+a} + \sqrt{x-a}}{\sqrt{x+a} - \sqrt{x-a}} \).
End Semester Examination, May 2013  
BBA (CAM) - Second Semester  
INTERNET TECHNOLOGY (BCAM-204)

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 Choose the best choice in the following:

a) TCP/IP is:
   i) Abbreviation for transmission control protocol and internet protocol  
   ii) A suite of networking protocols  
   iii) A standard protocol that lets disparate types of computers communicate over the Net  
   iv) All the above  

b) A terminal emulation protocol that allows users to log-in to a host computer from remote computer is
   i) Telnet  ii) TCP/IP  
   iii) FTP  iv) Point-to-point protocol  

c) Which of the following is the correct HTML for inserting background image?
   i) <background img="background.gif">  
   ii) <img src="background.gif">  
   iii) <a href="background.gif">  
   iv) <body background="background.gif">  

d) Firewall is a specialized form of-
   i) Bridge ii) Printer  
   iii) Router iv) Disk  

e) If you wanted to be part of an online community that creates an educational web-site that allows its members to add to or change its information, what type of web-site would you need?
   i) Educational or.edu ii) Social networking site  
   iii) Wiki iv) Web 2.0  

f) What is the full form of http?
   i) HyperText Transmission Protocol  
   ii) HyperText Transfer Protocol  
   iii) HyperTerminal Transport Protocol  
   iv) HyperTerminal Transfer Protocol  

g) What would you use for immediate, real-time communication with a friend?
   i) Instant Messenger ii) E Mail  
   iii) Usenet iv) A Mailing list  

h) What do you call a computer on a network that requests files from another computer?
   i) Client ii) Host  
   iii) Router iv) Web server  

i) The purpose of an address book in an email package is:
   i) To attach an email signature to an email  
   ii) To attach a file like a word document to a message  
   iii) To keep a list of all contacts and their email addresses  
   iv) To keep a list of previously visited URL's  

P. T. O.
j) The term "Information Technology" can be summarized as:
   i) Computers + Connectivity
   ii) Computers + Network
   iii) Connectivity + Hardware
   iv) Hardware + Software

**UNIT-I**

Q.2 Explain the client server model of a local area network with the help of a diagram. 10

Q.3 a) List the requirements for sending an email.
    b) What do you understand by a browser? List the name of three browsers. 5

**UNIT-II**

Q.4 Discuss the following HTML tags with the help of an example:
   a) MARQUEE
   b) FORM
   c) TITLE
   d) HREF
   e) HEADING 10

Q.5 If you were in a position to hire a Web designer, how would you proceed? What would you look for? 10

**UNIT-III**

Q.6 The Internet is a medium and a market. Do you agree? Discuss. 10

Q.7 Distinguish between:
   a) Intranet and Extranet
   b) Firewall and Spamming 5x2

**UNIT-IV**

Q.8 a) What does Enterprise Collaboration System (ECS) mean?
    b) What are the benefits of using Enterprise Collaboration System? 5

Q.9 Discuss the collaborative work management tools. 10
End Semester Examination, May 2013
BBA (CAM) - Second Semester
OPERATING SYSTEMS AND NETWORKING (BCAM-205)

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 Answer the following:
    a) Explain CALENDER command in Unix.
    b) PCB stands for ____________.
    c) Define hub.
    d) Name any four network topologies.
    e) Define protocol.  

UNIT-I

Q.2 Explain any five commands with their syntax and examples.  

Q.3 In a multi process system, at any moment a process may be either of three states; running, ready or blocked. Explain these states and draw state transition diagram for them.  

UNIT-II

Q.4 Consider the following set of process:

<table>
<thead>
<tr>
<th>Process</th>
<th>Service time</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>10</td>
</tr>
<tr>
<td>P2</td>
<td>29</td>
</tr>
<tr>
<td>P3</td>
<td>3</td>
</tr>
<tr>
<td>P4</td>
<td>7</td>
</tr>
<tr>
<td>P5</td>
<td>12</td>
</tr>
</tbody>
</table>

    a) Illustrate the execution of process using FCFS and shortest job first 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.  

Q.5 What do you understand by page fault? Draw a neat diagram to illustrate the steps of page fault handled by operating system.  

UNIT-III

Q.6 Explain the following:
    a) Hardware and software requirement for the network.
    b) Bridges.  

Q.7 Explain major categories of network topologies. Draw the diagram for each.  

UNIT-IV

Q.8 Draw complete layered architecture of OSI reference model and explain its first four layers with their functionality.  

Q.9 Define the term protocol. Explain its major categories. What is the use of a protocol in data communication?
End Semester Examination, May 2013  
BBA (CAM) – Third Semester  
FINANCIAL MANAGEMENT (BCAM-302)

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 followings in brief (Max. 20 words):  
a) Define financial management.  
b) Write various decisions to be taken by finance managers in any firm.  
c) What is an investment?  
d) Define time value of money.  
e) What is EOQ?  

Fill in the blanks with appropriate term:  
f) Net working capital = Gross working capital - (______).  
g) Value of firm = Earnings before interest and tax (EBIT)/E (______).  
h) ________ refers to the mix of debt and capital that minimizes cost of capital.  
i) ________ is the use of fixed assets to increase profits.  
j) ________ is the source of long term finances for a firm.

UNIT-I

Q.2 Explain the role of finance managers in a modern enterprise.  

Q.3 Which goal of the organization should a finance manager consider in performing his role in the organization – profit maximization or wealth maximization? Explain.

UNIT-II

Q.4 What is capital budgeting? Explain various methods of capital budgeting with relative merits and demerits. 

Q.5 Select the machine (A or B) to be recommended to buy, using NPV method:  

<table>
<thead>
<tr>
<th></th>
<th>Cost (Rs)</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Machine A</td>
<td>56,125</td>
<td>10,000</td>
<td>15,000</td>
<td>15,000</td>
<td>15,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Machine B</td>
<td>56,125</td>
<td>15,000</td>
<td>15,000</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Discount rate is 10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

UNIT-III

Q.6 Define financial leverage. Discuss various factors that should be considered in determining the amount of debt in the capital invested.

Q.7 Explain in detail the net income (NI) approach to capital structure. Also discuss its limitations.

UNIT-IV

Q.8 Describe Walter model for determining dividend policy.  

Q.9 What is working capital? Discuss the factors affecting the requirement of working capital in any firm.
End Semester Examination, May 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 4Ps of marketing mix.
   b) Design distribution channel for:
      i) Vegetables and fruits  ii) Fertilizers
   c) State the difference between marketing and selling.
   d) State the marketing concept.
   e) State the difference between advertising and publicity. 2x5

   Answer the following in True or False (any four):
   f) Is market penetration a pricing strategy?
      i) True  ii) False
   g) The first step in consumer’s purchase decision process is alternative search.
      i) True  ii) False
   h) One of the requisite of effective segmentation is measurable and obtainable.
      i) True  ii) False
   i) Is packaging 5th P of marketing mix?
      a) True  ii) False
   j) Is sub-culture one of the determinant of consumer behavior?
      i) True  ii) False 1x4

   UNIT-I

Q.2 Give the meaning and benefits of market segmentations. Discuss its bases. 14

Q.3 What do you understand by product life cycle? What strategies should be followed during various stages of PLC? 14

   UNIT-II

Q.4 Explain the concept of distribution channel. Discuss the factors affecting channels. 14

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

   UNIT-III

Q.6 Define advertising. Discuss the various media used in advertising. Bring out their merits and demerits. 14

Q.7 Define sales promotion. What are its functions and methods? Explain. 14

   UNIT-IV

Q.8 What is meaning and scope of marketing research? Mention the steps in marketing research process. 14

Q.9 Write short notes on:
   a) Methods of sales forecasting
   b) Marketing information system 7x2
Q.1  
a) Choose the best alternative in the following:
   i) The ______ can help you choose a product.
      ii) Office automation system
      iii) Management information system
      iv) Transaction processing system
      v) Decision support system

b) Information is:
   i) Data
   ii) Processed data
   iii) Manipulated input
   iv) Computer output

c) Strategic information is needed for:
   i) Day-to-day operations
   ii) Meeting government requirements
   iii) Long range planning
   iv) Short range planning

d) Tactical information is required by:
   i) Middle managers
   ii) Line managers
   iii) Top managers
   iv) All workers

e) Every record stored in a master file has a key field because:
   i) It is the most important field
   ii) It acts as a unique identification of record
   iii) It is the key to the database
   iv) It is a very concise field

f) On-line transaction processing is used when:
   i) It is required to answer random queries
   ii) It is required to ensure correct processing
   iii) All files are available on-line
   iv) All files are stored using hard disk

g) A management information system is one which:
   i) Is required by all managers of an organization
   ii) Processes data to yield information of value in tactical management
   iii) Provides operational information
   iv) Allows better management of organizations

h) In the relational modes, cardinality is termed as:
   i) Number of tuples
   ii) Number of attributes
   iii) Number of tables

P. T. O.
iv) Number of constraints

i) In a hierarchical model records are organized as
   i) Graphs ii) Lists iii) Links iv) Trees

j) In an E-R diagram an entity set is represented by a
   i) Rectangle
   ii) Ellipse
   iii) Diamond box
   iv) Circle

**UNIT-I**

Q.2 a) What is an information system? How is information systems used at various levels of business management? 5

b) Discuss the strategic uses of information technology. 5

Q.3 What are the typical functional information subsystems in an organization? Explain with an example from petroleum refinery. 10

**UNIT-II**

Q.4 Which quality parameter are considered while developing software for information system? 10

Q.5 a) How will you ensure security of an information system? 5

b) Describe the critical success factor in implementation of information technology? 5

**UNIT-III**

Q.6 Construct an E-R diagram for a car-insurance company whose customers own one or more cars each. Each car has associated with it from zero to any number of recorded accidents. State any assumptions you make. 10

Q.7 Discuss the three database models using an example. 10

**UNIT-IV**

Q.8 Give a brief introduction on visual FoxPro describing its important features. 10

Q.9 Discuss:
   a) Advanced data models
   b) Object oriented databases 5x2
End Semester Examination, May 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) The study of the movements and motion of structure that have joints is called _______.
   b) ________ is the effect in which one image transforms into another.
   c) MPEG is acronym for ________.
   d) DVD stands for ________.
   e) The branch of physics that study sound is ________.
   f) ________ is the file format that uses a shorthand representation of musical notes.
   g) Multimedia is a combination of ________, ________, ________, _______ and _______.
   h) ________ is the spacing between character pairs.
   i) MIDI stands for ________.
   j) PELS stands for ________.

UNIT-I

Q.2 What is multimedia? Explain the various components of multimedia.
10

Q.3 Discuss the various applications of multimedia used in today’s life.
10

UNIT-II

Q.4 Explain fonts and faces and their use in multimedia. Discuss how and when you choose a text font? Also explain the concept of serif and sans serif.
10

Q.5 What is MIDI audio? Explain its features. How is MIDI audio different from digital audio?
10

UNIT-III

Q.6 Explain bitmaps and vector graphics.
10

Q.7 Write short notes on:
   a) Morphing
   b) Analog video
   5x2

UNIT-IV

Q.8 Discuss the process of making a multimedia project.
10

Q.9 How do you deliver a multimedia project?
10
End Semester Examination, May 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 questions briefly:
a) What do you mean by strategy?
b) What are the various approaches to problem solving?
c) Differentiate between Divestment and Disinvestment.
d) What is PEST analysis?
e) What are mission and vision?
f) Differentiate between strategic alliance and joint venture.
g) Give some examples of mergers and takeover. 2x7

UNIT-I

Q.2 a) Discuss various elements of strategic management process.
b) What are the different levels of strategy? 14

Q.3 Discuss the various approaches of decision-making commonly used by the practitioners. 14

UNIT-II

Q.4 Explain the different types of objectives? What are the areas on which long term objectives are fixed? 14

Q.5 Write short notes on:
a) Role of CEO in formulation of objectives
b) Hierarchy of objectives 7x2

UNIT-III

Q.6 Explain the stability and expansion strategy in detail. 14

Q.7 Write short notes on:
a) Relationship between an enterprise and its environment.
b) Strategic choice 7x2

UNIT-IV

Q.8 Why is "purity of mind" so essential to create an ethical system of strategic management within an organization? 14

Q.9 Write short notes on:
a) Strategic Evaluation
b) Different stages in case analysis process 7x2
End Semester Examination, May 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  
a) Answer the following questions in one or two sentences:  
   i) Write any two advantages of cost accounting.  
   ii) Define key factors.  
   iii) Write any two objective of budget.  
   iv) Explain the meaning of standard costing.  

b) Fill in the blank:  
   i) When sales increase from Rs. 40,000 to Rs. 60,000 and profit increased by Rs 5,000 the p/v ratio is _________ / ________.  
   ii) Debt Equity ratio is _________ / ________.  
   iii) Management Accounting is to assist _________ in performing various functions.  

2x4  

1x4

c) State True or False:  
   i) A fixed cost is fixed at per unit.  
   ii) The Breakeven point is calculated after adding the profit to fixed cost. 1x2

UNIT-I

Q.2 Define management accounting. Discuss the objective and tools used in management accounting.  
14

Q.3 Write short notes on:  
   a) Distinguish between management and cost accounting.  
   b) Scope and limitations of management accounting.  
7x2

UNIT-II

Q.4 Draw up balance sheet from the following ratios:  
   Current ratio —— 2:1  
   Liquidity ratio —— 1:4:1  
   Stock turnover Ratio —— 5 times  
   Fixed Asset turnover —— 2 times  
   Gross profit Ratio —— 20%  
   Working capital —— Rs. 40,000  
   Debtor’s collection period —— 73 days  
   Fixed assets to share holders —— 0.80  
   Reserve and surplus to capital —— 0.25  

14

Q.5 you are given the following information:  
   a) Years  
      Sales (Rs.)  
      2010  
      12,00,000  
      2011  
      14,00,000  
      Profit (Rs.)  
      80,000  
      1,30,000  
      Calculate:  
      i) Profit volume ratio (p/v ratio).  
      ii) Break even sales.  
      iii) Profit when sales is Rs. 18,00,000.  

b) Write a short note on fund flow statement.  

9  
5

P. T. O.
UNIT-III

Q.6  a) Distinguish between a fixed budget and a flexible budget.  
b) Discuss the method of preparing a cash budget.  

Q.7  With the following data for a 60% activity level, prepare a budget at 80% and 100% activity levels:  

<table>
<thead>
<tr>
<th>Item</th>
<th>At 60% activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td>600 units</td>
</tr>
<tr>
<td>Material</td>
<td>Rs. 100 per unit</td>
</tr>
<tr>
<td>Labour</td>
<td>Rs. 40 per unit</td>
</tr>
<tr>
<td>Expenses</td>
<td>Rs. 10 per unit</td>
</tr>
<tr>
<td>Factory expenses</td>
<td>Rs. 40,000 (40% fixed)</td>
</tr>
<tr>
<td>Administrative Expenses</td>
<td>Rs. 30,000 (60% fixed)</td>
</tr>
</tbody>
</table>

UNIT-IV

Q.8  The standard cost card shows the following details relating to material needed to produce 1 kg of groundnut oil:  

<table>
<thead>
<tr>
<th>Details</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity of groundnut required</td>
<td>3 kg</td>
</tr>
<tr>
<td>Price of groundnut</td>
<td>Rs. 2.50 per kg</td>
</tr>
</tbody>
</table>

Actual production data:  

<table>
<thead>
<tr>
<th>Details</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production during the month</td>
<td>1,000 kg</td>
</tr>
<tr>
<td>Quantity of material used</td>
<td>3,500 kg</td>
</tr>
<tr>
<td>Price of ground nut</td>
<td>Rs. 3 per kg</td>
</tr>
</tbody>
</table>

Calculate:  
i) Material cost variance.  
ii) Material price variance.  
iii) Material usage variance.  

Q.9  Write **short notes** on:  
a) Social accounting.  
b) Responsibility accounting.
End Semester Examination, May 2013
BBA (CAM) – Fourth Semester
QUANTITATIVE APPLICATION 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  a) What is degeneracy?
     b) What is saddle point?
     c) What are the limitations of graphical method in linear programming?
     d) Define artificial variables.
     e) What is an unbalanced problem in transportation?
     f) Traffic intensity \((\rho) = \frac{\lambda}{\mu}\). Explain the terminologies \(\lambda\) and \(\mu\).
     g) What are the basic assumptions of linear programming?  2x7

UNIT-I

Q.2  a) Explain briefly general linear programming (LP). How does LP helps managers
     in arriving at better decisions?  7
     b) Use graphical method to solve the following LP:
        \begin{align*}
        \text{Max} & \quad Z = 5x_1 + 7x_2 \\
        \text{Subject to} & \quad x_1 + x_2 \leq 4 \\
        & \quad 3x_1 + 8x_2 \leq 24 \\
        & \quad 10x_1 + 7x_2 \leq 35 \quad \text{and} \\
        & \quad x_1, x_2 \geq 0
        \end{align*}  7

Q.3  a) A manufacturer produces two types of models A and B. Model A requires 4
     hours of grinding and 2 hour of polishing; whereas model B requires 2 hours
     of grinding and five (5) hour of polishing. The manufacturer has 2 grinders
     and 3 polishers. Each grinder works for 40 hours a month and each polisher
     works for 60 hour a month. Profit on model is Rs.3 each and B model earns
     Rs.8/- (each). Formulate the give problem as a linear programming problem
     (No solutions required).  8
     b) What is graphical method of solving LPP? Briefly explain the steps involved.  6

UNIT-II

Q.4  Solve the following transportation problem and find the optimal solution using
     MODI technique:

     \begin{array}{c|ccc}
     \text{To} & 1 & 2 & 3 \\
     \hline
     \text{From} & & & \\
     A & 2 & 7 & 4 \\
     B & 3 & 3 & 1 \\
     C & 5 & 4 & 7 \\
     D & 1 & 6 & 2 \\
     \end{array}  


P. T. O.
Q.5 Using simplex method solve the given problem:

Max \ Z = 2x_1 + 5x_2 + 7x_3

Subject to

\[ \begin{align*}
3x_1 + 2x_2 + 4x_3 \leq 100 \\
x_1 + 4x_2 + 2x_3 \leq 100 \\
x_1 + x_2 + 3x_3 \leq 100
\end{align*} \]

UNIT-III

Q.6 Solve the following travelling salesman problem:

<table>
<thead>
<tr>
<th>From</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>∞</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>∞</td>
<td>7</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>7</td>
<td>∞</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>∞</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>8</td>
<td>∞</td>
</tr>
</tbody>
</table>

UNIT-IV

Q.7 Solve the following maximal assignment problem:

<table>
<thead>
<tr>
<th>Jobs</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>42</td>
<td>35</td>
<td>28</td>
<td>21</td>
</tr>
<tr>
<td>B</td>
<td>30</td>
<td>25</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>C</td>
<td>30</td>
<td>25</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>D</td>
<td>24</td>
<td>20</td>
<td>16</td>
<td>12</td>
</tr>
</tbody>
</table>

Q.8 Write short notes:

a) Rule of dominance.  

b) Customer's behavior in a queue.  

c) Service mechanism.

Q.9 Solve the following game using graphical method, the pay off matrix is given below:

<table>
<thead>
<tr>
<th>Player A</th>
<th>I</th>
<th>II</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1</td>
<td>-3</td>
</tr>
<tr>
<td>II</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Player B</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>-1</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td>-5</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
End Semester Examination, May 2013
BBA (CAM) – Fourth Semester
RDBMS (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. Q1 is compulsory. All questions carry equal marks.

Q1. Define the following in 20 words:
   a) What are main categories of data models?
   b) Define an attribute.
   c) What do you mean by term: aggregation?
   d) In what format the date is entered in SQL table?
   e) Write the names of various constraints used in SQL. 1x5

   Fill in the blanks by choosing the right answer:
   f) An attribute that can be broken into smaller parts is called an __________.
   g) __________ command is used to delete a table in SQL.
   h) Table structure can be viewed by command __________.
      i) Desc  ii) Alter  iii) Update  iv) None.
   i) A __________ is any key that identifies each entity uniquely.
      i) Super key  ii) Primary key  iii) Foreign key  iv) Both i) and ii).
   j) Which of the following is an assignment operator in Oracle? 1x5
      i) =  ii) :=  iii) ==  iv) None.

UNIT-I

Q2. How does RDBMS differ from DBMS? Explain the various components of RDBMS. 10

Q3. Explain all types of keys used in RDBMS with an example. 10

UNIT-II

Q4. Explain the various notations used in ER modeling with proper diagrams. 10

Q5. a) Explain the distinction between specialization and generalization concept.
    b) Identify and explain the different types of entities in ER modeling. 5x2

UNIT-III

Q6. Explain aggregate functions in Oracle with proper syntax and an example. 10

Q7. Explain the following statements in SQL:
   a) SELECT
   b) INSERT INTO
   c) CREATE
   d) ALTER 10

UNIT-IV

Q8. What is PL/SQL? How it is different from SQL? Explain the diagram of PL/SQL block. 10

Q9. What is the importance of error handling in SQL? How the exceptions are handled in SQL? Explain with an example. 10
End Semester Examination, May 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) To reconstruct a system, which key element must be considered?
   i) Output and Input  ii) Control
   iii) Feedback  iv) All of the above

b) The analyst may be viewed as an agent of change because:
   i) He may select various styles to introduce change to the user organization.
   ii) He reaches people, interprets their thoughts and assesses their behavior and draws conclusion from these interactions.
   iii) He deals logically with difficult problems and copes with new situations.
   iv) He prepares long-range plans for system projects.

1
c) System maintenance is necessary because:
   i) Human never gets it right the first time.
   ii) The deployment may change over time.
   iii) The user’s needs may change over time.
   iv) All of the above

1
d) Which of the following questions are useful in evaluating data flow diagrams?
   i) Are there any unnamed components in the data flow diagram?
   ii) Are there any processes that do not receive input?
   iii) Are there any data stores that are input but never referenced?
   iv) Both (i) and (ii) above
   v) All (i), (ii) and (iii) above.

1
e) The first step in the systems development life cycle (SDLC) is:
   i) Analysis
   ii) Design.

1
f) In an interview, ______ questions encourage spontaneous and unstructured responses.
   i) Open-ended
   ii) Closed-ended
   iii) Range-of-response
   iv) Feasibility

1
g) Which phase of the SDLC may involve a small group of testers?
   i) Maintenance
   ii) Needs analysis
   iii) Implementation
   iv) Development

1
h) On an entity-relationship diagram, a diamond represents a/an
   i) Data flow.
   ii) Entity.
   iii) Multi valued attribute.  iv) Repeating group.
   v) Relationship.

1
i) A change made periodically to a system, after its implementation, is known as
   system:
   i) Analysis
   ii) Design
   iii) Development
   iv) Maintenance
   v) None of the above

1

P. T. O.
j) Difference between Decision - Tables and Decision Trees is (are):
   i) Value to end user.
   ii) Form of representation.
   iii) One shows the logic while other shows the process.
   iv) All of the above.
   v) None of the above.

k) Define the following:
   (a) System.
   (b) Benchmarking.

UNIT-I

Q.2 What is structured analysis? List out various tools used for structured analysis 14
Q.3 Explain Spiral and Prototype model in detail. 14

UNIT-II

Q.4 Distinguish between technical, operational and economical feasibility with a suitable example 14

Q.5 Describe the concept and procedure used in constructing DFD. Use an example of your own to illustrate. 14

UNIT-III

Q.6 a) What are the important special considerations for user Interface design? Explain. 7
   b) What is benchmarking? Explain. 7

Q.7 "Structured Design provides the best partitioning of a program into small, independent module organized in a top down manner". Do you agree? Illustrate. 14

UNIT-IV

Q.8 Differentiate between unit testing and integration testing. 14
Q.9 What are the inputs to the various processes of system implementation phase and what are their deliverables? What is the main purpose of this phase? 14
End Semester Examination, May 2013
BBA (CAM) – Fifth Semester
PUBLIC RELATIONS AND APPLIED COMMUNICATIONS (BCAM-501)

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

Note: Attempt any 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) the followings:
a) Define public relation.
b) Explain the advantages of public relations.
c) What do you mean by selective media?
d) Name the organizations who are doing public relation for the Central Government.
e) Prepare a list of few public relation and advertising agencies of India.
f) What do you mean by inverted pyramid?
g) Discuss the elements of successful internal communication. 2x7

UNIT-I

Q.2 Write an essay on the development of public relation in India. 14
Q.3 Describe the role of communication in the external and internal public relations. 14

UNIT-II

Q.3 What is the difference between advertising and public relations? Describe the utility of advertising and other media in public relations. 14
Q.4 Explain the different tools of public relations which serve as an interaction between the management and employees. 14

UNIT-III

Q.5 How public opinion is formed and changed? Discuss in brief the role of public relations in formation and change of public opinion. 14
Q.6 Write short notes on:
a) Elements of public opinion process.
b) The major factors which determines public opinion. 7x2

UNIT-IV

Q.7 What is the role of public relations in public sector organizations? 14
Q.8 Write short notes on:
a) Seminars.
b) Lobbying. 7x2
End Semester Examination, May 2013
BBA (CAM) – Fifth Semester
MERCANTILE LAW (BCAM-502)

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

Note: Attempt any FIVE questions in all; taking at least ONE question from each Unit.
Q.No.1 is compulsory. All questions carry equal marks.

Q.1 Answer the following questions (in brief):
   a) Define contingent contract. 2
   b) What do you mean by subsidiary company? 2
   c) What do you mean by lock out? 2
   d) What do you mean by income from house property? 2
   e) An agreement with or by a minor is voidable. 1
   f) The concept of separate legal entity of a company can be disregarded in special situations. 1
   g) Overtime work is paid at the same rate of wages as for ordinary work hours. 1
   h) The lien of an unpaid seller depends upon _______. 1
   i) Income in India is taxed as per _______ Act. 1
   j) The minimum number of members to form a private company are _______. 1
   k) The Factories Act applicable to factories came into force in the year _______. 1

UNIT-I

Q.2 Describe the essentials of a valid contract. When does an agreement become void? 15

Q.3 How is a company formed under the Companies Act, 1956? Enumerate the various documents to be filed with the Registrar. 15

UNIT-II

Q.4 Who is an unpaid seller? Explain rights of an unpaid seller. 15
Q.5 Explain the conditions and warranties implied by law in a contract for the sale of goods. 15

UNIT-III

Q.6 State the provisions of Factories Act, 1948 with regard to health and safety of workers. 15

Q.7 Write short notes on:
   a) Industry. 7½x2
   b) Industrial Tribunals.

UNIT-IV

Q.8 a) “Income of a previous year is chargeable to tax in immediate following assessment year”. Is there any exception to this rule? Discuss. 10
   b) What are the different forms of salary? 5

Q.9 Write short notes on:
   a) Income from other sources. 7½x2
   b) Capital gains.
Q.1 Answer (in brief) the following:
   a) Define consumer buying motive.
   b) Define reference group.
   c) What are the components of attitude?
   d) What is consumer need hierarchy?
   e) Define pre-purchasing behavior of consumer.
   f) Write any five types of consumer feelings.
   g) Write two types of memory.
   h) Explain the term subculture.
   i) What is caveat emptor?
   j) Write four forms of consumer promotion.
   k) How many stages are there in family life cycle?
   l) Write the three elements of formal social clubs.
   m) Lifestyle implies a central _________
   n) ________ is a group phenomenon which influences others in the society. 1x14

UNIT-I

Q.2 What is consumer behavior? Discuss in detail the model and applications of consumer behavior. 14

Q.3 What is lifestyle and psychographics? Discuss in detail the VALS model of psychographics. 14

UNIT-II

Q.4 What are the environment factors influencing the consumer behavior? 14

Q.5 Write short notes on:
   a) Basic functions of family.
   b) Culture and globalization. 7x2

UNIT-III

Q.6 Briefly discuss the individuals determinants of consumer behavior with suitable examples. 14

Q.7 Write short notes on:
   a) Long term and short term memory.
   b) Positive and negative reinforcement of learning. 7x2

UNIT-IV

Q.8 Explain the process of consumer buying decisions. What are the problems faced by a consumer at the time of taking decision? 14

Q.9 a) Why post purchasing behavior is necessary to recognize for evaluation? 7
    b) "Does search and evaluation of decision process is effective?". Substantiate your answer. 7
End Semester Examination, May, 2013
BBA (GEN) – Fifth Semester
PROGRAMMING IN VISUAL BASIC (BCAM-504)

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

Note: Attempt any 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) Controls are:
i) Codes    ii) Part of the menus
iii) Rules   iv) Objects
b) In the IDE, which of following is used to design the payout of an application?
i) Form designer window    ii) Project explorer window
iii) Context Menu   iv) Form layout window
c) Visual Basic projects are identified by a:
i) ".vbp" suffix    ii) ".mak" suffix
iii) ".vbg" suffix   iv) All of the above
d) Visual Basic forms are identified by a:
i) ".frm" suffix    ii) ".mak" suffix
iii) ".for" suffix   iv) A special icon
e) To run an application in Visual Basic:
i) Click on the start button (blue arrow)    ii) Use the file menu
iii) Use the project menu to select run     iv) None of the above

Fill in the blanks:
f) ______ contains tools used to design a form.
g) The full form of MDI is ______.
h) The control used to make connectivity with database is called ______.
i) We can select ______ in combo box.
j) An example of container control is ______.  1x10

UNIT-I

Q.2 Explain the following controls:
a) Data control  
b) Frame  5x2

Q.3 What is a module? Explain the various ways a variable can be declared in a
module.  10

UNIT-II

Q.4 Why VB is called RAD tool?  10

Q.5 Explain the following terms:
a) Event  
b) Decision making statements  5x2

UNIT-III

Q.6 Differentiate between a static and a dynamic array in VB using suitable examples.  10

P. T. O.
Q.7  a) Explain the difference between procedure and function.  
   b) Write the advantages of using MDI.  

     **UNIT-IV**

Q.8  Explain the following terms:  
   a) Bound control  
   b) Database  

Q.9  a) Explain the various properties that are required to be set while connecting a textbox to a field in database in MS Access.  
   b) Explain the use of following controls:  
      i) Line control  
      ii) Shape control
End Semester Examination, May 2013
BBA (CAM) – Sixth Semester
ENTREPRENEURSHIP DEVELOPMENT (BCAM-601)

Time: 3 hrs

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 briefly:
   a) Define women entrepreneur.
   b) What is meant by feasibility study?
   c) Write down any two qualities of entrepreneurs.
   d) Define business plan.
   e) Write three components of creativity.
   f) What is the difference between convergent thinking and divergent thinking?
   g) Attitudes can be classified as _______ and _______ attitudes.
   h) Attitudes constitute an important psychological attribute of individuals which shape behaviour. (True/False)
   i) What are values?
   j) What are the business opportunities?
   k) An entrepreneur starts with environment scanning to generate _______.
   l) Write two phases of entrepreneurial process.
   m) What is an entrepreneurial barrier?
   n) What is the full form of EDP’s?

   **UNIT-I**

Q. 2 Explain the need and importance of entrepreneurship in the context of the Indian economy. 14

Q. 3 Write an essay on ‘McClelland’s psychological theory of entrepreneurship.’ 14

**UNIT-II**

Q. 4 Write notes on the following:
   a) Entrepreneurship environment.
   b) Impact of socio-economic factors on growth of entrepreneurs. 7x2

Q. 5 "Management of cash is very important in a new enterprise." Explain. 14

**UNIT-III**

Q. 6 Define entrepreneurship development programme. What are its objectives? 14

Q. 7 Write notes on:
   a) Technical innovation
   b) Incubation of idea 7x2

**UNIT-IV**

Q. 8 Define business planning and prepare a proposed business plan on behalf of a small entrepreneur. 14

Q. 9 What is market segmentation? How can it help the entrepreneur in shaping his marketing strategy? 14
End Semester Examination, May 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 a) Define international business. Why do nations trade with each other? 8
b) Discuss various components of business environment that may affect the software exporters in India. 7

Q.2 Discuss in detail the comparative cost advantage theory of international business. Use suitable examples. 15

UNIT-II
Q.3 “Foreign direct investment contributes towards development of an underdeveloped country leading to overpowering its economy.” Justify your statement. Suggest various measures to attract FDI in India. 15

Q.4 Write notes on:
   a) Multi-national corporations 8
   b) Globalization of business 7

UNIT-III
Q.5 What is EXIM Policy? Explain the role of EXIM Policies in economic development of a country. 15

Q.6 Explain the functions of various organizations/institutions involved in international business promotions in India. 15

UNIT-IV
Q.7 Differentiate between tariff and non-tariff barriers. Discuss various non-tariff barriers that may be used by the government to regulate international trade. 15

Q.8 Explain the followings:
   a) Functions of IMF
   b) Trading blocks
   c) Role of WTO in international trade 5x3
End Semester Examination, May 2013
BBA (CAM) – Sixth Semester
DISTRIBUTED DATABASE SYSTEMS AND E-COMMERCE
(BCAM-603)

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:
   a) What is a transaction in terms of database?
   b) List categories of E-Commerce.
   c) Define virtual organization.
   d) Define a schema.
   e) What do you mean by authorization id distributed database?
   f) Write down the types of fragmentation.
   g) Define data integrity.
   h) Redundancy means ____________.
   i) Two types of plastic money are ____________ and ____________.

UNIT-I

Q.2 Explain distributed database and its architecture briefly.

Q.3 How could an administrator maintain the distributed processing with respect to cost, speed and accuracy?

UNIT-II

Q.4 What is called fragmentation? Explain the effect of fragmentation on the performance of the database.

Q.5 Write notes on:
   a) Concurrency control.
   b) Translation of global queries.

UNIT-III

Q.6 What is e-commerce? Explain its application areas.

Q.7 Explain payment gateways and electronic payment systems in detail.

UNIT-IV

Q.8 Explain categories of e-commerce in detail.

Q.9 Write notes on the following:
   a) Technology used in e-commerce.
   b) Virtual organization.
End Semester Examination, May 2013
BBA (CAM) – Sixth Semester
ORGANIZATIONAL DEVELOPMENT (BCAM-604)

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 questions in brief:
   a) Define organizational development.
   b) Explain the goals of organizational development.
   c) Differentiate between mergers and acquisitions.
   d) Name the psychologist who developed Johari window.
   e) What do you understand by crossed transaction?
   f) Name the industries who are reserved for the public sector in India.
   g) What do you understand by sensitivity training? 2x7

UNIT-I

Q.2 Discuss in detail the origin of organizational development? 14

Q.3 What is action research in organizational development? 14

UNIT-II

Q.4 Write short notes on:
   a) Organizational level intervention.
   b) Intergroup level intervention. 7x2

Q.5 What do you mean by interpersonal intervention? Explain transactional analysis in detail. 14

UNIT-III

Q.6 Explain the impact of globalization and liberalization on developing countries. 14

Q.7 What is strategic alliance? Explain the different types of strategic alliances. 14

UNIT-IV

Q.8 What is organizational restructuring? Explain the symptoms which indicate the need for organizational restructuring. 14

Q.9 a) What is meant by conglomerate merger?
    b) Explain the reasons behind the failure of integration. 7x2
End Semester Examination, May 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) When the main function is called, it is called with the arguments:
   i) argc
   ii) argv
   iii) Both (i) & (ii)
   iv) None of the above
   b) Header file C contains:
   i) Library function
   ii) Compiler command
   iii) Header information of C program
   iv) None of the above
   c) The directives for the preprocessor begin with:
   i) #
   ii) &
   iii) //
   iv) None of the above
   d) “C” was primarily developed as a:
      i) System programming language
      ii) General purpose language
      iii) Data processing language
      iv) None of the above
   e) The format string %if is used for:
      i) long
      ii) double
      iii) int
      iv) None of the above
   f) Light pen is a Mechanical Device. (True/False)
   g) A variable which is visible only in the function, in which it is defined, is called
      Local Variable. (True/False)
   h) In an exit-controlled loop, if the body is executed n times, the test condition is
      evaluated n times. (True/False)
   i) A pointer variable can be returned by a function. (True/False)
   j) Algorithm and flowchart help us to specify the problem clearly and completely.
      (True/False)

UNIT-I

Q.2  a) What are the advantages of EBCDIC code?
    5
b) Name the display technologies used by the flat panel monitors. Which is the
   most commonly used technology in flat panel monitors and why?
    5
c) Convert the following (1001010.0011)2=(?)16
    5

Q.3  What is digital computer? Explain its anatomy and working of the same through its
     block diagram. Also distinguish between analog computers with digital computers.
     15

UNIT-II

Q.4  a) Define the following terms with reference to a magnetic disk.
   i) Access time
   ii) Seek time
   iii) Latency time
   iv) Transfer rate
    8
b) Explain the difference between hard disk and CD-ROM.
    7

P. T. O.
Q.5 a) Discuss the various stages in problem solving on a computer. State the importance of flowcharts in problem solving on a computer.

b) A utility company charges its customers based on their monthly utilization in terms of units as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>First 100 units</td>
<td>Rs.10/- per unit</td>
</tr>
<tr>
<td>Next 200 units</td>
<td>Rs.9/- per unit</td>
</tr>
<tr>
<td>Next 200 units</td>
<td>Rs.8/- per unit</td>
</tr>
<tr>
<td>Next units</td>
<td>Rs.7/- per unit</td>
</tr>
</tbody>
</table>

Draw the flowchart that reads monthly units of a customer and outputs the charge amount.

**UNIT-III**

Q.6 a) Write a program in C language to generate the pattern of digits:

```
12345678
1234567
123456
12345
1234
123
12
```

b) Explain getchar() and putchar() functions with examples.

Q.7 a) Compare the following:

i) Do-while and while

ii) Break and continue

b) What are case labels? What types of expressions must be used to represent a case label? Give examples.

**UNIT-IV**

Q.8 a) Write short notes on recursion.

b) Discuss giving examples for various storage classes in C.

Q.9 a) What is an array? Discuss the format and purpose of two dimensional arrays. Give examples.

b) Describe with examples the different ways of assigning values to structure members.
End Semester Examination, May 2013  
BCA -First Semester  
ELEMENTS OF MATHEMATICS (BCA-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) Let R be the relation in the set N given by R= {(a, b): a+b=2, b>6}. Choose the correct answer:  
i) (2, 4) ∈ R  
ii) (3, 8) ∈ R  
iii) (6, 8) ∈ R  
iv) (8, 7) ∈ R

b) If A={1,2,3,4,5} and B={2,3,6,7}, then the number of elements in the set (A×B)∩(B×A) =  
i) 4  
ii) 5  
iii) 10  
iv) 20

c) Which term of the A.P. 5, 8, 11,........ is 320?  
d) \( \log 8/\log 8 = \)
   i) 1/\sqrt{8}  
   ii) 1/8  
   iii) 1/4  
   iv) 1/4

e) The expression \((1 + \cos x)(1 - \cos x)\) is equivalent to:  
i) 1  
ii) \( \sec^2 \theta \)  
iii) \( \sin^2 \theta \)  
iv) \( \cos \sec^2 \theta \)

f) The expression \( \tan \theta / \sec \theta \) is equivalent to:  
i) \( \cos \theta \)  
ii) \( \sin \theta / \cos^2 \theta \)  
iii) \( \cos \theta \)  
iv) \( \sin \theta \)

g) What is the probability of getting a sum 9 from two throws of a dice?  
i) 1/6  
ii) 1/8  
iii) 1/9  
iv) 1/12

h) Find the domain of \((1,2), (2,3), (3,5), (4,5), (5,6))\). Is it a function?  
i) \( (2, 3, 5, 6) \), yes  
ii) \( (1, 2, 3, 4, 5) \), no  
iii) \( (1, 2, 3, 5, 4, 5) \), yes  
iv) \( (2, 3, 5, 6) \), no

i) Evaluate \( \lim_{x \to 2} 4x^2 - 8x \):
   i) 8  
   ii) 4  
   iii) undefined  
   iv) 2

j) \( \lim_{x \to 0} x^3 - 2x^2 + 3x - 4 \):
   i) 4  
   ii) 1  
   iii) 14  
   iv) 0

k) Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 3 or 5?  
i) \( \frac{1}{2} \)  
ii) \( \frac{2}{5} \)  
iii) \( \frac{3}{5} \)  
iv) \( \frac{9}{20} \)

l) Two dice are thrown simultaneously. What is the probability of getting two numbers whose product is even?  
i) 1/2  
ii) 1/4  
iii) 3/8  
iv) 5/16

m) The general term of a G.P. is:  
i) \( a(1-r^n)/(1-r) \)  
ii) \( a+(n-1)d \)  
iii) \( ar^n \)  
iv) \( ar^{n+1} \)

P. T. O.
n) 1,1,1,1... is ________.
   i) A.P. only      ii) G.P. only
   iii) A.P. and G.P. iv) Neither A.P. nor G.P.

o) Let Q be a set of rational numbers under ordinary addition (Q, +) then Q is
   i) Monoid        ii) Semi group
   iii) Quasi group iv) Group

UNIT-I

Q.2 a) If \( A = \{2,3\}, B = \{6,8\} \) and \( D = \{6,9\} \) then verify that:
   \((A \times B) \cap (C \times D) = (A \cap C) \times (B \cap D)\).

b) In the set of natural numbers, let \( R \) be the relation defined as \( a R b \) if and only if \( a, b \in R \) and \( a+2b=11 \). Write \( R \) as the set of ordered pairs. Find the domain and range of \( R \). Also write \( R^{-1}\).

c) If the map \( \mathfrak{g}: \mathfrak{r} \to \mathfrak{r} \) is given by \( f(x) = 4x+1 \) and the map \( \mathfrak{g} : \mathfrak{r} \to \mathfrak{r} \) is given by \( g(x) = x^2 + 2 \), find \( (gof) \) and \( (fog) \). Show that \( (gof) \neq (fog) \).

d) Find the sum of all two digit numbers, which leave 1 as remainder, when divided by 3.

Q.3 a) A college awarded wards 38 medals in football, 15 in basketball and 20 in cricket. If these medals went to a total of 58 sportsmen and only three sportsman got medals in all the three sports, how many sportsmen received medals in exactly two of these sports?

b) State and prove De-Morgan's law.

c) If \( R \) is the relation "is greater than" from \( A = \{2,4,5\} \) to \( B = \{1,3,4\} \). Write \( R \) as the set of ordered pairs and also write \( R^{-1}\).

UNIT-II

Q.4 a) Prove that: \( \cos 20^\circ \cos 40^\circ \cos 60^\circ \cos 80^\circ = 1/16 \)

b) Solve for \( x: \log(x + 5) - \log(x + 4) = \log 2 \)

Q.5 a) \( \sin A - \sin 3A + \sin 5A - \sin 7A) / (\cos A - \cos 3A - \cos 5A + \cos 7A) = \cot 2A \)

b) A married couple (husband and wife) appear for an interview or vacancies against the same post. The probability of husband's selection is 1/6 and the probability of wife's selection is 1/5. What is the probability that
   i) Both of them selected
   ii) Only one of them will be selected
   iii) None of them will be selected
   iv) At least one of them will be selected

UNIT-III

Q.6 a) Differentiate; the following w.r.t.x:
   i) \( \sin x + \cos x \sin x - \cos x \)
   ii) \( \sin(\sin(3x)) \)

b) For what value of \( k \) does \( \lim_{x \to 1} f(x) \) exist, where \( f(x) \) is defined by the rules:
   \[ f(x) = \begin{cases} 
   2kx + 3 & \text{if } x < 1 \\
   1 - kx^2 & \text{if } x \geq 1
   \end{cases} \]

Q.7 a) A particle moves along the curve \( x = 3t^2, y = t^2 - 2t, z = t^3 \). Find the velocity and acceleration at \( t = 1 \) in the direction of vector \( \vec{a} = \hat{i} + \hat{j} - \hat{k} \).

b) Test for local maxima and local minima, if any, for the function \( f(x) = (x - 3)^4 \).

UNIT-IV

Q.8 a) Evaluate: \( \int (x^4 + 1)/(x^2 + 1) \, dx \)

b) Show that the set \( I \) of all integers \( \ldots \ldots -4, -3, -2, -1, 0, 1, 2, 3, 4 \ldots \ldots \) is an abelian group with respect to the operation of addition of integers.

Q.9 a) Solve the following differential equations:
   i) \( xdy / dx = 2 \)
   ii) \( dy / dx = x \log x \)

b) Define the term vector space over field.
End Semester Examination, May 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) One word is wrong in every line. Find out the error and correct it.
      i) Taj Mahal was build by Shahjahan in
      ii) Memory of her wife. Construction began
      iii) In 1632 and was complete in 1553
      iv) The architect was Is a Khan, who is from Shiraz.
   
   b) Rearrange these words to form meaningful sentences.
      i) and/crown/character/the/glory/life is
      ii) gossip/not wasted/time/in/idle/should be
      iii) elders/and/obey/should/children/respect/to/their/learn
      iv) was/raining/night/last/heavily/it

   c) Combine the following sentences using’ too-to’ or enough:
      i) The roof is very high. I cannot reach it.
      ii) She is audible. Everyone could hear her.

   d) Your aunt had visited you and asked some questions. The questions are given below. Report these questions to your classmate.
      i) Which school do you go to?
      ii) Which class do you study in?
      iii) How many children are there in your class?

   e) Complete the following dialogue Teacher: Pooja, did you do your assignment?
      Pooja:__________________________________

Q.2 a) Each question is part of a dialogue which is missing a word or groups of words followed by four choices which may be used to used to complete the incomplete dialogue. Choose the option which is best suited for the conversation.
   i) Would you like to go to the movies tonight?
      “Yes, but I am ________ tired to have a good time.
      a) So much    b) Too    c) Very    d) Most
   ii) “ Hasin knows how to speak in Hindi, Urdu and Tamil.”
      “Really! I didn’t know that he ________ Tamil.”
      a) Speak    b) Tells    c) Spoke    d) Spoke.
   iii) Would you like to go to the movie tonight?
      “Yes, but I am ________ tired to have a good time.
      a) So much    b) Too    c) Very    d) Most
   iv) I am fond of ________ to jazz.
      a) Listening    b) Listen    c) to listen
   v) We ran as ________ as we could.
      a) quickly    b) the most quickly    c) most quickly    d) more quickly 1x5

P. T. O.
b) In each of the following questions, there is a certain relationship between the words. Choose the correct alternative.

i) Acting: Theater : : Gambling: ?
   a) Casino  b) Club  c) Bar  d) Gymn

ii) Growth : Death : : Increase : ?
   a) Ease  b) decrease  c) Tease  d) Cease

iii) Cobbler : Leather : : Increase : ?
     a) Furniture  b) wood  c) Hammer  d) Chair

iv) Meat : Vegetarian : : Liquor: ?
     a) Insane  b) Introvert  c) Teetotaler  d) Foolish

v) Illiteracy : Education : : Flood: ?
    a) Rain  b) Bridge  c) Dam  d) River 1x5

c) You are given a sentence followed by four words or phrases. You have to find the word or phrase that is the most similar in meaning to the underlined word:

i) I cannot concentrate, here is too much___________.
   a) detraction  b) distraction  c) people  d) contraction

ii) Ten thousand dollars__________ a lot of money.
    a) is  b) are

iii) All the students got drenched on their way to school.
     a) hurt  b) wet  c) tricked  d) lost

iv) The judges were amazed to see such fine work done by a mere_______.
    a) connoisseur  b) artist  c) teenager  d) amateur

v) Lisa was pleased by the accolades she received; like everyone else she enjoyed being_______.
    a) criticized  b) praised  c) entertained  d) liked 1x5

Q3 a) Do as directed in brackets:

i) "_________ earth is round." (article).

ii) "We saw a good film last night. It was _______ film you recommended." (article).

iii) "May I ask you a question _______ your family?" (preposition)

iv) "Our new boss is probably _______ 40." (preposition)

v) _______ of sheep. (collective noun) 1x5

b) Read the following passage carefully and answer the questions that follow:
The greatest advantage of rising early is that one can start one's work long before others. An early riser can do a large amount of hard work before other men have got out of the bed. The mind is fresh early in the morning and no sound or noise disturbs our attention. Exercising in the morning keeps him fit and exuberant throughout the day. By beginning so early, he knows that he has plenty of time to do his work. He does not have to hurry over any part of his work. He gets to sleep long before midnight as at that time sleep is most refreshing. After a sound sleep, he rises early in the morning filled with energy and is all ready for the labour of a new day.
Now answer these questions:

i) What advantages do a nearly riser has over others? 2

ii) Why should one do exercise in the morning? 2

iii) What are the uses of going to sleep long before midnight? 2

iv) Write the synonyms and antonyms for:
    a) exuberant  b) labour  c) refresh 3

v) Give suitable title to the passage. 1
UNIT-II

Q.4 While entering the college premises, you saw some parent at the gate, who is father of your classmate. Write the conversation between two of you with at least 3 relevant dialogues form each side. 15

Q.5 Write a paragraph on “An unforgettable dream” or “An unwelcome guest.” 15

UNIT-III

Q.6 a) List out various benefits of effective listening. Also mention ways to improve your listening skills. 7½
   b) Name and explain the “big five” personality factors. 7½

Q.7 a) Describe various steps involved in goal setting and its follow up. 7½
   b) Suggest various ways of “How to talk so that others will listen.” 7½

UNIT-IV

Q.8 Write a cover letter for the application of “Marketing Representative for Softwares.” Design your resume for the same for a Multi-national Company (MNC) covering.
   a) Career objectives
   b) Educational qualification
   c) Interests and hobbies
   d) Personal details 15

Q.9 What is an interview? What are its various types and their respective roles? Explain. 15
End Semester Examination, May 2013
BCA -First Semester
PC SOFTWARE (BCA-104)

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) State True/False:
   i) Format command cannot be used on a new disk.
   ii) The prompt message displayed by DOS can include the current date and time.
   iii) One can format a disk using window explorer.
   iv) The ruler bar helps you to set and clear tab stop positions.
   v) By default, Excel right aligns all entries.

b) Fill in the blanks:
   i) The ______ command can be used to hide a file.
   ii) The ______ command displays the amount of used and free memory in the PC.
   iii) =ABS(-15.3) displays ______.
   iv) A worksheet page can be setup in two different orientations. These are landscape and ______.
   v) When a window is maximized, it’s maximizing button changes to the ______ button.
   vi) In wordpad, the ______ keys move the cursor to the beginning of the document.
   vii) When you select the overtype mode, word displays_______ in the status bar.
   viii) To change the margins for your document, use the ______ dialog box.
   ix) Excel displays the address of the active cell in the ______.
   x) ^1 opens the ______ dialog box.

UNIT-I

Q.2 a) Why wild cards are used in DOS commands? Explain all types of wild cards by choosing appropriate example.
   b) What is the purpose of autoexe.bat? Discuss.

Q.3 a) Discuss the role of recycle bin.
   b) Give an abstract view of an operating system. What are the roles of a good operating system to manage a computer? Explain.

UNIT-II

Q.4 a) How can one set line spacing and character spacing in paragraph? Give examples.
   b) What is the purpose of page setup command? Explain the various options with example.

Q.5 Explain the following:
   i) Gutter margin
   ii) Hanging paragraph
   iii) Indent settings

P. T. O.
UNIT-III

Q.6  a) Differentiate between row-range and column-range with suitable examples.  
     b) What is data validation in MS-Excel? Write down the steps to validate date with 
        suitable examples.  

Q.7  a) What is a spreadsheet? What are the advantages of a spreadsheet? Explain.  
     b) How a chart is inserted in MS-Excel? Explain through an example.  

UNIT-IV

Q.8  Discuss the procedure to create a graph in a power-point slide.  

Q.9  Explain the various visual effects that can be added to a presentation.
End Semester Examination, May 2013
BCA - Second Semester
DATA STRUCTURE (BCA-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) A Mathematical model with a collection of operations defined on that model is called:
   i) Data structure  
   ii) Abstract data type
   i) Primitive data type  
   iv) Algorithm
b) Queue can be used to implement:
   i) Radix sort  
   ii) Quick sort
   iii) Recursion  
   iv) Depth first search
c) Sparse matrices have:
   i) Many zero entries  
   ii) Many non-zero entries
   iii) Higher dimension  
   iv) Non of above
d) The postfix expression for \( (a + b) \cdot (c - d) \) is:
   i) \( ab + cd - \cdot \)  
   ii) \( ab cd + - \cdot \)
   iii) \( ab + cd * - \)  
   iv) \( ab + - cd * \)
e) Two main measures for the efficiency of an algorithm are:
   i) Processor and memory  
   ii) Complexity and capacity
   iii) Time and space  
   iv) Data and space
f) Which of the following case does not exist in complexity theory?
   i) Best case  
   ii) Worst Case
   iii) Average case  
   iv) Null case
g) Which of the following data structure is not a linear data structure?
   i) Arrays  
   ii) Linked lists
   iii) Both of above  
   iv) Non of above
h) The operation of processing each element in the list is known as:
   i) Sorting  
   ii) Merging
   iii) Inserting  
   iv) Traversal
i) Two dimensional arrays are also called:
   i) Tables arrays  
   ii) Matrix arrays
   iii) Both of above  
   iv) None of above
j) Which of the following data structure cannot store the non-homogeneous data elements?
   i) Arrays  
   ii) Records
   iii) Pointers  
   iv) None

UNIT-I

Q.2 a) What do you understand by stack? Write a program to implement stack. What are the various applications of stack?  
    b) What do you mean by time space complexity?

Q.3 a) Write an algorithm to add an element in the middle of an array.  
    b) What is the need of data structure? Explain various types of data structures in details.

P. T. O.
UNIT-II

Q.4 Write an algorithm to perform the following operation on a circular link list:
   a) Adding an element.
   b) Deleting an element.  \[ 7\frac{1}{2} \times 2 \]

Q.5 a) Show the memory allocation for the given polynomial \((3x^2-2x^2+5x+10=0)\) using Link list.
    b) Evaluate the given postfix expression \((3, 1, +, 2, ^, 7, 4, -, 2, *, +, 5, -)\).  \[ 7\frac{1}{2} \times 2 \]

UNIT-III

Q.6 Write an algorithm for bubble sort and sort \((23,11,24,67,32,01,47,28,76,39,65)\) using bubble sort.  \[ 15 \]

Q.7 a) Sort the following numbers \((23, 31, 78, 43, 90, 87, 56, 41, 28, 44)\) using quick sort.
    b) Write an algorithm for binary search.  \[ 9 \]

UNIT-IV

Q.8 a) What are the different methods to handle collision? Explain in detail.  \[ 6 \]
    b) What is the difference between fixed length and variable length record?  \[ 9 \]

Q.9 Write short notes on the following:
   a) Hashing function
   b) Sequential file organization
   c) Basic files operations  \[ 5 \times 3 \]
End Semester Examination, May 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) A self-complemented, distributive lattice is called __________________.  
d) What is shaded in the Venn diagram below?

![Venn Diagram](image)

i) \( A \cup B \)  
ii) \( A' \)  
iii) \( A \setminus B \)  
iv) \( B \setminus A \)  
c) What Boolean expression describes the output \( X \) of this arrangement?

![Logical Circuit](image)

i) \( X = (A \cdot B) + C \)  
ii) \( X = A \cdot (B + C) \)  
iii) \( X = A + (B \cdot C) \)  
iv) \( X = A + B + C \)  
v) \( X = A + B + C \)  
d) Which of the diagrams defines a function \( A = \{a, b, c, d\} \) into \( B = \{1, 2, 3\} \)?

![Diagram Options](image)

i)  
ii)  
iii)  
iv)  

P. T. O.
e) A spanning tree is:
   i) Undirected tree consisting of only those edges necessary to connect all
      nodes in original graph.
   ii) Trees containing more than 2 leaves at every node.
   iii) Tree of depth more than $n+1$.
   iv) All of the above.

f) Find distance between A and B.

![Graph with points A and B]

g) Find the number of subsets of the set. $\{X \mid X \text{ is a day of the week}\}$

h) Let $R$ be the set of real numbers and let the function $f: R \to R$ be defined by
   $f(x) = \begin{cases} 
   4x + 5 & \text{if } x \leq 5 \\
   25 & \text{if } x > 5 
   \end{cases}$.
   Find the values of $f(5)$.

i) Let the functions $f : R \to R$ be defined by $f(x) = x^2$. Find $f(27)$.

j) Let $C = \{1, 2, 3, 4\}$ and $D = \{1, 3, 5, 7, 9\}$. How many elements does the set
   $C \cup D$ contain? How many elements does the set $C \cap D$ contain?

UNIT-I

Q.2 a) A survey on a sample of 25 new cars being sold at a local auto dealer was
   conducted to see which of three popular options, air-conditioning (A), radio (R)
   and power station (W), were already installed. The survey found:
   - 15 had air-conditioning
   - 12 had radio
   - 11 had power windows
   - 5 had air-conditioning and power windows
   - 9 had air-conditioning and radio
   - 4 had radio and power windows
   - 3 had all three options
   Find the number of cars that had:
   i) Only power windows
   ii) Only air conditioning
   iii) Only radio
   iv) Radio power windows but not air conditioning
   v) Air conditioning and radio but not power windows

b) Using mathematical induction proves that:
   $1 + 4 + 7 + \ldots + (3n - 2) = 2n(3n - 1)$

Q.3 a) Let $A = \{1, 2, 3\}, B = \{a, b, c\}$, and $C = \{x, y, z\}$. Consider the following relations $R$
   and $S$ from $A$ to $B$ and from $B$ to $C$, respectively.
   $R = \{(1, b), (2, a), (2, c)\}$ and $S = \{(a, y), (b, x), (c, y), (c, z)\}$
   i) Find the composition $R \circ S$.
   ii) Find the matrices $M_R$, $M_S$ and $M_{R\circ S}$ of the respective relation $R$, $S$ and $R\circ S$,
   and compare $M_{R\circ S}$ to the product $M_R M_S$.

b) Find the value of $m$ and $n$ if $\text{gcd}(595, 252) = 252m + 595n$. 


**UNIT-II**

Q.4  
(a) Use a Karnaugh map to find a minimal sum for Boolean expression:  
\[ E = XYZ' + X'YZ + X'Y'Z \]  
(b) Simplify the Boolean expression \( xyz + x'y'z + xyz' \) using Boolean postulates and laws of Boolean algebra.  

Q.5  
(a) Define Lattice. Explain all types of lattices along with suitable examples.  
(b) Show that the lattice \( D_2 \) is complemented.  

**UNIT-III**

Q.6  
(a) A \((3, 4)\), B \((-3, 0)\) and C \((7, -4)\) are the vertices of a triangle. Show that the line joining the mid points of AB and AC is parallel to BC and is half of it.  
(b) Solve the recurrence relation \( a_n = 2a_{n-1} - a_{n-2}, n \geq 2 \), where \( a_0 = 1, a_1 = 4 \).  

Q.7  
(a) Define LHRR. Write the characteristics equation of LHRR and give an example.  
(b) The three vertices of a rhombus taken in order are \((2, -1), (3, 4)\) and \((-2, 3)\). Find the forth vertex.  

**UNIT-IV**

Q.8  
(a) Find Minimum Spanning Tree for the given graph using Prim's Method:  

![Graph](image)

(b) Explain the following terms with example.  
   i) Loop  
   ii) Path  
   iii) Weighted graph  
   iv) Binary tree  
   v) Isolated vertex  

Q.9  
Explain Dijkstra's algorithm and use the algorithm to find the shortest path from \( a \) to \( g \):  

![Graph](image)
End Semester Examination, May 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) Visual Basic is considered to be a ______________.
    b) Which type of procedure returns a value?
    c) In Windows applications, a _______ control is commonly used to perform an immediate action when clicked.
    d) One feature of Event-Driven Programming is ________.
    e) Finding and fixing programming errors is called ________.
    f) Which looping statement is used to repeat a statement or procedure a specific number of times?
    g) The function that returns the number of characters in a control named txtName is ________.
    h) The first item in a list box has a Selected Index value of ________.
    i) To add items to a list box at design time use the property ________.
    j) To display the number of items in a list box, use the ________ property.

UNIT-I

Q.2 a) Explain the difference between Procedural programming and Event Driven programming.
    b) Explain the purpose of the following:
       i) Project Explorer window
       ii) Properties window

UNIT-II

Q.3 a) What features of VB make it suitable for designing GUIs (Graphical User Interface)?
    b) What is the difference between Code window and Design window in VB?

Q.4 a) Explain the various data types available in VB.
    b) Give five built-in String functions available in VB with examples showing their use.

Q.5 a) What are decision making statements in a programming language? Give examples in support of your answer.
    b) What is the purpose of Exit statement in a programming language? Explain with a code in VB.

UNIT-III

Q.6 Explain the following terms:
    a) Textbox
    b) List box
    c) MsgBox

UNIT-IV

Q.7 a) What are arrays? What are the two different types of arrays available in VB?
    b) Explain the difference between Check box and Option button in VB.

Q.8 What is a report? Explain all the steps required to make a data report in VB.

Q.9 a) What is the purpose of data control in VB?
    b) How will you create a menu on a form in VB? Explain the steps required with the help of a labeled diagram.
End Semester Examination, May 2013
BCA - Second Semester
DIGITAL DESIGN AND COMPUTER ORGANIZATION (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 format used to present the logic output for the various combinations of logic inputs to a gate is called a/an:
   i) Boolean constant  ii) Boolean variable
   iii) Truth table iv) Input logic function
b) 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
c) If a signal passing through a gate is inhibited by sending an LOW into one of the inputs, and the output is HIGH, the gate is a/an:
   i) AND  ii) NAND
   iii) NOR iv) None of these
d) When grouping cells within a K-map, the cells must be combined in groups of
   i) 2s  ii) 1, 2, 4, 8, etc
   iii) 4s  iv) 3s
e) Which Boolean algebra property allows us to group operands in an expression in any order without affecting the results of the operation [for example, \(A + B = B + A\)]?
   i) Associative  ii) Commutative
   iii) Boolean  iv) Distributive
f) CISC machines:
   i) Have fewer instructions than RISC machines
   ii) Use more RAM than RISC machines
   iii) Have medium clock speeds
g) Exclusive-OR (XOR) logic gates can be constructed from what other logic gates?
   i) OR gates only
   ii) AND gates and NOT gates
   iii) AND gates, OR gates, and NOT gates
   iv) OR gates and NOT gates d) use variable size instructions
h) In immediate addressing the operand is placed:
   i) In the CPU register  ii) After OP code in the instruction
   iii) In memory  iv) In stack
i) The NAND or NOR gates are referred to as "universal" gates because 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) were the first gates to be integrated
j) The device which is used to connect a peripheral to bus is called:
   i) Control register  ii) Interface
   iii) Communication protocol iv) None of these

1½x10

P. T. O.
UNIT-I

Q.2 What are Hamming codes? A 7 bit Hamming code is received as 0110110. What is its correct code? 15

Q.3 a) Convert the following:
\((11011.0101)_{2} = ( \quad \quad )_{8} = ( \quad )_{10} \quad 9
b) Explain about Gray codes and Excess 3 codes. \quad 6

UNIT-II

Q.4 Why NAND and NOR gates are known as universal gates? Simulate NAND and NOR gates to all basic gates. \quad 15

Q.5 Simplify the following expression using KMaps:
a) \(F(A,B,C) = \Sigma(0,2,3,6)\)
\(D(A,B,C) = \Sigma(1,5)\) \quad 7
b) Convert the following expression into its equivalent POS expression:
\(F(A, B, C) = \pi(1, 2, 3, 7)\) \quad 8

UNIT-III

Q.6 Explain instruction format? What are the various types of instruction format? Discuss them with suitable examples. \quad 15

Q.7 Write short notes on:
a) RISC v/s CISC
b) Memory Hierarchy \quad 7\frac{1}{2} \times 2

UNIT-IV

Q.8 Write short notes on:
a) Isolated vs memory mapped I/O
b) I/O versus memory bus
c) I/O interface \quad 5 \times 3

Q.9 a) Compare and contrast DMA programmed I/O and Interrupt driven I/O. \quad 7
b) What are handshaking signals? Explain the handshake control of data transfer during input and output operation. \quad 8
End Semester Examination, May 2013
BCA -Second Semester
WORKSHOP IN ENVIRONMENTAL STUDIES (BCA-206)

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) Biotic environment includes
   i) Producers  ii) Consumers   iii) Decomposers  iv) All the above
b) Decomposers include
   i) Bacteria  ii) Fungi  iii) Both  iv) Animals
c) Abiotic environment does not include
   i) Air  ii) Water  iii) Soil  iv) Plants
d) Vermicomposting is done by
   i) Fungus  ii) Bacteria  iii) Worms  iv) Animals
e) Which one the following is not biodegradable?
   i) Vegetables  ii) Fruits  iii) Earthworm  iv) Aluminum foil
f) Animal(s) which is/are active at night
   i) Owl  ii) Rat  iii) Cockroach  iv) All the above
g) If waste materials contaminate the source of drinking water, which of the following diseases will spread?
   i) Scurvy  ii) Typhoid  iii) Malaria  iv) Anaemia
h) Write full Form of MRI.
   i) Expand PAN.
   j) What is meant by Biodiversity? 1x10

UNIT-I

Q.2 a) Explain environmental studies. Mention the scope and importance of environmental studies. 6
   b) What are the environmental impacts of mineral extraction? Explain. 4

Q.3 a) What are the measures recommended for conservation of natural resources? 5
   b) Mention the advantages and disadvantages of modern agriculture. 5

UNIT-II

Q.4 a) What is an ecosystem? Describe the structure and functions of various components of an ecosystem. 6
   b) Explain the biodiversity at national and global level. 4

Q.5 a) Describe the types, characteristics features, structure and function of forest ecosystem. 5
   b) Explain the two models of energy flow in an ecosystem. 5

UNIT-III

Q.6 a) Explain the various methods of controlling air pollution. 5
   b) Discuss briefly the disposal of municipal solid waste management. 5

Q.7 Write explanatory notes on:
   a) Biochemical Oxygen demand
   b) Radioactive waste disposal 5x2

UNIT-IV

Q.8 a) Explain the role of IT in environment and human health. 6
   b) Discuss the factors influencing the family size. 4

Q.9 “Deterioration of environment leads to deterioration of human health”, Justify 10
End Semester Examination, May 2013
BCA - Third Semester
MATHEMATICS-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 State True /False:
   a) A sequence can be divergent or convergent.
   b) Multiplication of matrices is not necessarily commutative.
   c) Greatest lower bound of a set if it exits is not unique.
   d) Set of all rational numbers is uncountable.
   e) Every square matrix is a diagonal matrix.
   f) In Every term of bi-nominal theorem, the sum of indices of (x) and (a) is (n).
   g) Set Q cannot be neighborhood of any of its points.
   h) Union of finite number of closed sets is a open set.

Fill in the blank:
   i) Fundamental principal of counting is----------- of events.
   j) In A*B, B is called--------------.

UNIT-I

1½x10

Q.2 a) Find the rank of the matrix A:
\[
\begin{bmatrix}
3 & 2 & -1 \\
4 & 2 & 6 \\
7 & 4 & 5
\end{bmatrix}
\]

b) Verify Cayley -Hamilton theorem for the given matrix and hence find the
   Inverse of A:
\[
\begin{bmatrix}
13 & -3 & 5 \\
0 & 4 & 0 \\
-15 & 9 & -7
\end{bmatrix}
\]

UNIT-II

Q.3 a) Find the 8th term of \((1+3x^2)^{103}\).

b) How many odd numbers less than 1000 can be formed by using the digits
   0,2,5,7 when the repetition of digit is allowed.

c) A man has six friends In how many ways may he invite one or more of them to
   dinner?

UNIT-III

Q.4 a) Prove that the set(R) of all real numbers is uncountable.

b) State and prove 'Archimedian property 'of real numbers.

Q.5 a) Prove that the union of number of closed sets is a closed set.

b) Show that set (Q) cannot be neighborhood of any of its points. Also prove that
   the superset of a neighborhood of a point (\(x\)) is also neighborhood of (\(x\)).

UNIT-III

Q.6 a) Give the statement and proof of the 'Fifth' form of comparison test of two
   series.

b) Show that the series \(\sum_{n=1}^{\infty} \frac{1}{3^n} + x, x > 0\) is convergent.

P. T. O.
Q.7  a) Prove that, a sequence converges if and only if it is a Cauchy's sequence.  
     b) State and prove D'Alembert's ratio test.  

UNIT-IV

Q.8  a) State and discuss the working rule of the Taylor's Theorem with example  
     b) Expand \( \frac{e^t}{(e^t + 1)} \) in power of \( x \) with Maclaurin's Theorem as far as \( x^3 \).  

Q.9  a) If \( f(x) = x^2 - 2x + 5 \), calculate the value of \( f(2.01) \) by the application of Taylor's  
     series up to four places of decimals.  
     b) Evaluate: \( \lim_{x \to 0} \frac{x - \sin x}{x^3} \).
End Semester Examination, May 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  a) In an assignment statement:
    \[ a=b; \]
    Which of the following statement is true?
    i) The variable \( a \) and the variable \( b \) are equal.
    ii) The value of \( b \) is assigned to variable \( a \) but the later changes on variable \( b \) will not effect the value variable \( a \).
    iii) The value of \( b \) is assigned to variable \( a \) and the later changes on variable \( b \) will effect the value of variable \( a \).
    iv) The value of variable \( a \) is assigned to variable \( b \) and the value of variable \( b \) is variable \( a \).

b) Which of the following is not a valid relational operator?
    i) \( == \)
    ii) \( => \)
    iii) \( >= \)
    iv) \( > = \)

c) Which inheritance type is used in the class given below?
   Class A :public X,public Y{}
    i) Multilevel Inheritance
    ii) Multiple Inheritance
    iii) Hybrid Inheritance
    iv) Hierarchical Inheritance

d) Which of the following access specifier is used as a default in a class definition?
    i) Protected
    ii) Private
    iii) Public
    iv) Friend

e) Which of the following is not a type of constructor?
    i) Copy constructor
    ii) Friend constructor
    iii) Default constructor
    iv) Parameterized constructor

f) Which of the following is not the member of class?
    i) Static function
    ii) Friend function
    iii) Const function
    iv) Virtual function

g) 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

h) Which of the following concept of OOPS means exposing only necessary information to client?
    i) Encapsulation
    ii) Abstraction
    iii) Data hiding
    iv) Data binding

i) Which of the following is an abstract data type?
    i) Int
    ii) String
    iii) Double
    iv) Class

j) Which of the following concept means wrapping up of data and functions together?
    i) Abstraction
    ii) Inheritance
    iii) Encapsulation
    iv) Polymorphism

1½x10

P. T. O.
UNIT-I
Q.2  a) What do you understand by object oriented programming? Explain the use of object oriented programming. Mention at least 3 object oriented languages.  
     b) Explain the concept of encapsulation and polymorphism in relation to object oriented design.  

Q.3  Explain the concept of procedural paradigm. How is oriented paradigm different from procedural? What are the relative advantages and disadvantages of procedural paradigm? Give examples of at least 2 languages which support procedural and object oriented paradigm. 

UNIT-II
Q.4  a) What are inline functions? How are they different from normal functions?  
     b) What are default arguments? Is there any restriction on default arguments? 

Q.5  a) How can we dynamically create arrays? 
     b) Explain the use of static variables in a class. 
     c) Give the advantage of using static variable in a user defined function. 

UNIT-III
Q.6  a) Define a class string. Use overloaded == operator to compare two strings.  
     b) Explain destructor with static members. 

Q.7  Write short on the following: 
     a) Overloading of unary operator  
     b) Late Binding  
     c) Abstract class 

UNIT-IV
Q.8  a) What is an ambiguity in inheritance? Explain ambiguity in single and multiple inheritances.  
     b) What is the order of execution of constructors and destructors? 

Q.9  Write short notes on the following: 
     a) Virtual base class  
     b) Virtual functions  
     c) Overriding member function
End Semester Examination, May 2013  
BCA – Third Semester  
DATABASE SYSTEMS (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) The view of total database content is:  
   i) Conceptual view  
   ii) Internal view  
   iii) External view  
   iv) Physical view  
b) An entity set that does not have sufficient attributes to from a primary key is a:  
   i) Strong entity set  
   ii) Weak entity set  
   iii) Simple entity set  
   iv) Primary entity set  
c) The database schema is written in:  
   i) HLL  
   ii) DML  
   iii) DDL  
   iv) DCL  
d) Checkpoints are a part of:  
   i) Recovery measures  
   ii) Security measures  
   iii) Concurrency measures  
   iv) Authorization measures  
e) The most popular commercial DBMS is:  
   i) Microsoft SQL Server  
   ii) Microsoft access  
   iii) Oracle  
   iv) None of the above  
f) The ascending order of a data hierarchy is:  
   i) bit-byte-record-field-file-database  
   ii) Byte-bit-field-record-file-database  
   iii) Bit-byte-field-record-file-database  

State the following whether True or False:  
g) When the DBMS does a commit, the change made by the transaction is made is permanent.  
h) DBA is Responsible for defining procedures to recover the database from failures.  
i) An Instance of a relation is a set of tuples, also called records.  
j) The common column is eliminated in Natural join.  

UNIT-I  

Q.2  
a) What three main types of actions involving database? Briefly discuss these.  
b) What is the difference between a database schema and database state?  
c) Discuss the main categories of data model.  

Q.3  
In an organization several projects are undertaken. Each project can employ one or more employees. Each employee can work on one or more projects. Each project is undertaken on the request of client. A client can request for several projects. Each project has only one client. A project can use a number of items and an item may be used by several projects. Draw an E-R diagram and convert it to a relational schema.  

P. T. O.
UNIT-II

Q.4  a) What are the various characteristics of SQL? Discuss five aggregate functions with a suitable example. 9
     b) What is Union Compatibility? Why do the union, intersection and difference operations require that the relations on which they are applied be Union Compatible? 6

Q.5  a) Discuss the various reasons that lead to the occurrence of null values in relations. 7
     b) Discuss: Foreign key, candidate Key, alternate Key, primary Key. 8

UNIT-III

Q.6  a) Discuss Insertion, deletion and modification anomalies. Why are they considered bad? Illustrate with examples. 9
     b) What is multivalve dependency? What type of constraint does it specify? When does it arise? 6

Q.7  What is normalization? Explain 1NF, 2NF, 3NF, BCNF with the help of suitable examples. Also, explain the advantages of normalization. 15

UNIT-IV

Q.8  a) What is meant by the term heuristic optimization? Discuss the main heuristics that are applied during query optimization. 8
     b) Discuss the UNDO and REDO operation and the recovery techniques that use each. 7

Q.9  Write short notes on the following:
     a) Usefulness of granting privileges to the users
     b) Advantage of distributed databases 7½x2
End Semester Examination, May 2013
BCA - Third Semester
BUSINESS ORGANIZATION AND PRINCIPLES OF MANAGEMENT
(BCA-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 Choose the most appropriate alternative.
   a) The purpose of job enrichment is to:
      i) Expand the number of tasks an individual can do
      ii) Increase job efficiency
      iii) Increase job satisfaction of middle management
   b) Organization structure primarily refers to:
      i) How activities are coordinated and controlled
      ii) How resources are allocated
      iii) The location of departments and office space
      iv) The policy statements developed by the firm
   c) Employees are also known as:
      i) Internal customers
      ii) stock holders
      iii) Investors
      iv) shareholders
   d) Strategic goals and plans generally involve time periods of:
      i) 1 to 3 years
      ii) 3 to 5 Years
      iii) 1 week
      iv) 6 months to 1 year
   e) Which of the following is a document that summarizes the business strategy and Structure?
      i) Business plan
      ii) Letter of credit
      iii) Article of association
      iv) Memorandum
   f) The Process of assigning authority and responsibility to subordinates to manage a project is called:
      i) Centralization
      ii) Supervision
      iii) Delegation
      iv) Specialization
   g) Rules, Procedures and policies are most suitable for which of the following problems?
      i) Well structured
      ii) Ill-structured
      iii) programmed
      iv) Non-Programmed

   State true or false:
   h) A high employee turnover rate is not good for the efficient functioning of any organization.
   i) The top level management function is to monitor and control the operating performance.
   j) Human skill refers to the ability of managers to work effectively as a group member and to build cooperative effort in the team he leads.

UNIT-I

Q.2 a) Sketch a line diagram for the types of business organization on the basis of ownership.
    10
   b) What are the objectives of business?
    5
Q.3  
a) Take an organization that you know and identify its purpose and mission.  
b) Identify the element of the external environment that are likely to be the most  
important to each of the following: a company president, a sales manager, a  
production manager, a controller, a personnel manager.  

UNIT-II  
Q.4  Explain briefly about the various types of organizational structures.  
Q.5  Discuss the individual and group behavior in an organization.  

UNIT-III  
Q.6  
a) How do the required managerial skills differ in the organizational hierarchy?  
b) Differentiate between management and administration.  

Q.7  
a) Explain briefly about the various function of management.  
b) Give the main importance of management  

UNIT-IV  
Q.8  What do you understand by Human Resource Management? Discuss the scope and  
significance of HRM.  

Q.9  Discuss the concept of training and development. What is the need for training  
and development? Also discuss the benefit of it  


End Semester Examination, May 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) _______ is simply defined as e-commerce between companies
   b) Business plan is to set its _______ and _______
   c) An intranet is limited to an _______
   d) Web hosting means storing your web site on a _______
   e) A _______ name is a unique name for your website.
   f) _______ is a term that identifies any system used to transfer payments electronically.
   g) One of the disadvantages of E-Commerce is that we can't _______ the product.
   h) A security policy outlines _______ your company takes in order to ensure safe transactions.
   i) A computer _______ is a self – replicating program that explicitly copies itself.
   j) An _______ facilitates the acceptance of electronic payment for online transactions.

UNIT-I

Q.2 a) Define e-commerce. Discuss various advantages and disadvantages of e-commerce. In what way is security a limitation 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 e-business.
   b) Value chain and supply chain management.
   c) Intranet and extranet. 5x3

UNIT-II

Q.4 Who uses EDI? What are the business advantages of EDI? 15
Q.5 Write short notes on the following:
   a) Models of B2B EC
   b) Just-in-time delivery
   c) Electronic marketing in B2B. 5x3

UNIT-III

Q.6 Explain the key features of e-cash. What is the main difference between credit cards and debit cards? Why is one type of card favored over the other? 15
Q.7 a) Give an example of an unethical act that is not necessary illegal.
     b) Explain the security schemes in electronic payment system. 7

UNIT-IV

Q.8 a) List and briefly explain the key components of a network.
     b) Distinguish between:
        i) LAN and WAN
        ii) Application software and system software 8
Q.9 Write short notes on the following:
   a) Virtual communities
   b) Digital economy
   c) The future of EC 5x3
End Semester Examination, May 2013
BCA -Fourth Semester
OPERATING SYSTEM (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 Choose the best alternative
a) SPOOL Stands for:
   i) Simultaneous peripheral operation on line
   ii) Simple peripheral operation on line
   iii) Single process operation on line
   iv) Single process on operation line
b) PCB stands for ________:
   i) Process control block
   ii) Program control block
   iii) Process control body
   iv) Process capture block
c) A solution of starvation is ________:
   i) Aging
   ii) Multiprocessor
   iii) Scheduling
   iv) Multitasking
d) A logical address generated by the CPU consists of two parts:
   i) Page number, page offset
   ii) Page, address
   iii) Page numbering, paging
   iv) Index table, table
e) Virtual Memory is commonly implemented by ________:
   i) Segmentation
   ii) Swapping
   iii) Demand paging
   iv) None of the above
f) What are the requirements for the solution to critical section problem?
   i) Mutual exclusion
   ii) Progress
   iii) Bounded waiting
   iv) All of the above
g) The Banker's algorithm is used:
   i) To prevent deadlock in operating systems
   ii) To detect deadlock in operating systems
   iii) To rectify a deadlocked state
   iv) None of the above
h) In "Worst-Fit" algorithm of memory management:
   i) It allocates the smaller hole than required memory hole
   ii) It allocates the smallest hole from the available memory holes
   iii) It allocates the largest hole from the available memory holes
   iv) It allocates the exact same size memory hole
i) In memory management, a technique called as paging, physical memory is
   broken into fixed-sized blocks called ________:
   i) Pages
   ii) Frames
   iii) Blocks
   iv) Segments
j) A tree structured file directory system:
   i) Allows easy storage and retrieval of file names
   ii) Is a much debated unnecessary feature
   iii) Is not essential when we have millions of files
   iv) None of the above

1½x10

P. T. O.
UNIT-I

Q.2 Briefly discuss the view of an OS as a resource manager. 15
Q.3 What are distributed systems? Explain the same with reference to parallel systems. 15

UNIT-II

Q.4 a) Which algorithm will be used for CPU scheduling in:
   i) Batch OS.
   ii) Interactive OS.
   iii) Real time OS. Why?  6
   b) In which of the algorithms of process scheduling, starvation may occur? What can be the solution to this starvation? 9

Q.5 What is the average turnaround time for the following processes using:
   a) FCFS
   b) SJF non-preemptive
   c) Preemptive SJF

<table>
<thead>
<tr>
<th>Process</th>
<th>Arrival Time</th>
<th>Burst Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>0.0</td>
<td>8</td>
</tr>
<tr>
<td>P2</td>
<td>0.4</td>
<td>4</td>
</tr>
<tr>
<td>P3</td>
<td>1.0</td>
<td>1</td>
</tr>
</tbody>
</table>
15

UNIT-III

Q.6 What is memory allocation? Explain First Fit, Best Fit and Worst Fit with the help of examples. 15
Q.7 When do page fault occurs? Describe the action taken by operating system when page fault occurs. 15

UNIT-IV

Q.8 Explain the various directory structures used in operating system for storing files. Give merits and demerits of all directory structures. 15
Q.9 What do you understand by a file? What are various operations that can be performed on a file? Also discuss the access mechanisms of a file. 15
End Semester Examination, May 2013
BCA -Fourth Semester
WEB DESIGNING AND INTERNET APPLICATIONS (BCA-403)

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) World Wide Web is
   i) Another name for internet
   ii) Worldwide connection for computers
   iii) A collection of linked information residing on computers connected by the internet
   iv) A collection of worldwide information
b) IP addresses are converted to
   i) A binary string
   ii) Alphanumeric string
   iii) A hierarchy of domain names
   iv) A hexadecimal string
c) Each computer connected to the internet must
   i) be an IBM PC
   ii) be internet compatible
   iii) have a unique IP address
   iv) have a modem connection
d) A world wide web contains web pages
   i) Residing in many computers
   ii) With links to other web pages
   iii) Residing in many computers linked together using HTML
e) HTML stands for
   i) Hyper Text Making Links
   ii) Hyper Text Markup Language
   iii) Higher Textual Marking of Links
   iv) Hyper Text Mixer of Links
f) JavaScript is mainly used with:
   i) Databases
   ii) Text
   iii) Web Pages
   iv) Programs
g) For getting information from the users, we use:
   i) Forms
   ii) Tables
   iii) Macros
   iv) Frames
h) The tag used in HTML to link it with other URL’s is:
   i) <A>
   ii) <H>
   iii) <U>
   iv) <L>
i) ___________________ is a simple Language to design and develop Web pages.
   i) C
   ii) basic
   iii) HTML
   iv) Visual Basic
j) <I>------</I> indicates
   i) Insert
   ii) Italics
   iii) Indent
   iv) Increase Font

UNIT-I

Q.2 Write a short notes on:
   a) Search Engine
   b) Telnet
   c) SMTP

Q.3 Discuss various tools available for connecting to Internet.

UNIT-II

Q.4 a) What are different types of lists supported by HTML?
   b) How do you include an image in HTML document?

P. T. O.
Q.5 Answer the following:–
   a) How paragraphs can be managed in HTML document?
   b) How fonts can be managed in HTML document?
   c) What are various tags used in HTML Header Section?  

   **UNIT-III**

Q.6 a) Write an HTML program using Web Form to display a table with 4 rows and 5 columns. Give appropriate heading to the form.  
   b) Differentiate BLOCK QUOTE and PREFORMATTED TEXT.

Q.7 a) Explain the Following:–
   i) CITATION    ii) SUPERSCRIPT    iii) SUBSCRIPT
   iv) BIG       v) SMALL  
   b) Differentiate <Frame> and <Frameset>

   **UNIT-IV**

Q.8 What is CSS? Explain different types of CSS with examples.

Q.9 a) Write a program in JavaScript for swapping of two images.
   b) What is the use of load and unload events in JavaScript? Give an example.
End Semester Examination, May 2013
BCA -Fourth Semester
BUSINESS COMMUNICATION II (BCA-404)

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) _______ Interviews are conducted to assess the work of an employee:
      i) Open ii) Personal
      iii) Common iv) Appraisal
   b) The involvement of nods and gestures while giving interview comes under which behaviour:
      i) Body language ii) Establishing rapport
      iii) The greeting iv) Vocalic
   c) To improve one's emotional intelligence which is NOT to be followed:
      i) Pay attention to self and other's body language.
      ii) Listen more; speak less- develops empathy
      iii) Get furious.
     iv) Elicit pride in others.
   d) Challenging goals usually lead to ________ performance from individuals and groups.
      i) Higher ii) Lower
      iii) Excellent iv) None of the above
   e) A variation of the electronic meeting that links together media from different locations is ________.
      i) E-commerce ii) The Delphi technique
      iii) Video conference iv) E-conference
   f) The SWOT approach assesses an organization's:
      i) Speed, Wants, Order, Timing.
      ii) Structure, Workforce, Organization, Types.
      iii) Strengths, Weaknesses, Opportunities, Threats.
      iv) Signs, Worries, Objectives, Technique.
   g) A person with high moral values and business ethics is much more successful than a business minded person.
      i) True. ii) False
   h) While interviewee one should:
      i) Adopt a positive attitude ii) Prepare in advance
      iii) Dressed up casually iv) Enter decently
      i) Fax and Telegrams ii) Telegrams and e-mails
      iii) Fax and letter iv) Fax and e-mails
   j) When participating in a group presentation, it is imperative to:
      i) Ensure everyone makes equal contributions.
      ii) Solve the problem or issue as quickly as possible.
      iii) Incorporate every suggestion.
      iv) Ensure everyone understands the assignment.

UNIT-I

Q.2 What are the principles of effective writing? Explain.  

Q.3 Who is your role model as a leader? Mention various characteristics of him thereby making him a distinguished leader.  

P. T. O.
UNIT-II

Q.4  a) What do you mean by an attitude? What are its three components?  
     b) Who has the best mental health: the optimist or the realist? Justify.

Q.5  Solve:
     a) The sum of all natural numbers with 2-digits is ________.
     b) Find the greatest 5-digit number which is exactly divisible by 175.
     c) The total number of prime numbers occurring between 20 and 60 are.
     d) A man was born in 1937. How old will he be in 1989?
     e) A person crosses a 600 metre long path in 5 min. What is his speed in Km/hr?
     f) Arrange the words given below in a meaningful sequence:
        1) Key   2) Door   3) Lock   4) Room   5) Switch on
        i) 5,1,2,4,3    ii) 4,2,1,5,3
        iii) 1,3,2,4,5   iv) 1,2,3,5,4
     g) Paw: Cat :: Hoof : ?
        i) Lamb ii) Elephant iii) Lion iv) Horse
     h) Which of the following diagrams indicates the best relation between Hockey
        Football and Cricket?
        i)  
        ii)  
        iii)  
        iv)  
     i) Five girls are sitting on a bench to be photographed. Seema is to the left of
        Rani and to the right of Bindu. Mary is to the right of Rani. Reeta is between
        Rani and Mary.
        Who is sitting immediate right to Reeta?
        i) Bindu ii) Rani iii) Mary iv) Seema
     j) REASON : SFBTPO :: THINK : ?
        i) KNIGHT ii) UIJOL iii) HTNIK iv) SGHMJ

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, MAY 2013

BCA -Fifth Semester

INFORMATION AND COMMUNICATION TECHNOLOGY
(BCA-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 Fill in the blanks:
   a) The two keys used in digital signatures are ________, ________
   b) ________ is a social issue referring to the differing amount of information between those who have access to the internet and those who do not have access.
   c) ________ is used to store the name, email, contact address of a person.
   d) The two types of address book are ________ and ________.
   e) The HTTP is used in transmission of data over ________.
   f) Bluetooth is a wired technology.
   g) Wikis provide collaborative, easy to use Web based authoring.
   h) A virus is a program that don’t self replicates but replicate the data on the system.
   i) ATM is an example of ICT application in manufacturing industry.
   j) Cyber audit is to protect the data using remote login.

UNIT-I

Q.2 a) What do you understand by address book? Write down at least 5 websites which support online address books. What can be the necessary features of an address book? 10
   b) Teleworking is preferred by many these days. Justify. 5

Q.3 a) Draw the flowchart to demonstrate the process of e-filing. Explain the roll of digital signatures in e-filing. 10
   b) Explain Bluetooth technology. Compare Bluetooth with Wi-Fi. Are the two terms same or different? 5

UNIT-II

Q.4 a) What do you understand by WWW? Explain the various applications, advantages and disadvantages of WWW. 9
   b) Differentiate internet and extranet. 6

Q.5 Write short notes on the following:
   a) Blogs
   b) Wikis
   c) Search Engine 5x3

UNIT-III

Q.6 a) What do you mean by cyber crimes? Give examples.
   b) List some ethical issues related to the use of Internet.
   c) Give two reasons why data is encoded and give an example of a possible problem with encoding of data. 5x3

P.T.O.
Q.7 A bookseller wishes to evaluate a new software package for selling online. Explain why the bookseller might need to establish the following evaluation criteria:
   a) Functionality
   b) Usability
   c) Performance
   d) Robustness
   e) Portability

**UNIT-IV**

Q.8 Write on *any three* the applications of ICT in the following fields:
   a) Retail Industry
   b) Manufacturing industry
   c) Sports
   d) Bank
   e) Hospitals

Q.9 Control applications are very important application of ICT. Explain the use of ICT in turtle graphics, microwaves, flights and burglar alarms.
End Semester Examination, May 2013  
BCA -Fifth Semester  
SOFTWARE ENGINEERING (BCA-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) State True/False:  
   i) Risk management is the feature of spiral model.  
   ii) SRS document describes how to design the system.  
   iii) COCOMO modes was developed by B.W. Boehm.  
   iv) Validation process is checking the product with respect to the specifications.  
   v) Alpha and beta testing techniques are related to acceptance testing.  

b) Choose the correct option:  
   i) During software development, which factor is most crucial?  
      a) Product  
      b) People  
      c) Process  
      d) Project  
   ii) Which is not a process metric?  
      a) Productivity  
      b) Functionality  
      c) Quality  
      d) Efficiency  
   iii) SRS stands for:  
      a) Software requirement specification.  
      b) Software requirement solutions.  
      c) System requirement specification.  
      d) None of these.  
   iv) If the requirements are frequently changing, which model is to be selected?  
      a) Waterfall model.  
      b) Prototyping model.  
      c) Rapid application development model.  
      d) Iterative enhancement model.  
   v) Requirement elicitation means:  
      a) Gathering of requirements.  
      b) Capturing of requirements.  
      c) Understanding of requirements.  
      d) All of the above.  
   vi) Which is not type of requirement?  
      a) Known requirements  
      b) Unknown requirements  
      c) Undercount requirements  
      d) Complex requirements  
   vii) In function point analysis, numbers of complexity adjustment factors are:  
      a) 10  
      b) 20  
      c) 14  
      d) 12  
   viii) The worst type of coupling is:  
      a) Content coupling  
      b) Common coupling  
      c) External coupling  
      d) Data coupling  
   ix) The relationship of data elements in a module is called:  
      a) Coupling  
      b) Cohesion  
      c) Modularity  
      d) None of these  
   x) Beta testing is carried out by:  
      a) Users  
      b) Developers  
      c) Testers  
      d) All of the above  

P. T. O.
UNIT-I

Q.2 a) What do you mean by software engineering? Also discuss the software crisis with reference to software engineering discipline.  
    b) Write down and discuss the steps of requirement engineering with the help of a diagram.

Q.3 a) Explain the advantages and disadvantages of waterfall model, build and fix model and also discuss the selection process of a life cycle model.  
    b) List down the major parameters of human factor engineering.

UNIT-II

Q.4 Consider a project with following parameters:
   - External input → 15 with low complexity
   - 18 with average complexity
   - 20 with high complexity
   - External output → 12 with low complexity
   - 25 with high complexity
   - External inquires → 6 with average complexity
   - 8 with high complexity
   - Internal logical files → 4 with low complexity
   - 9 with average complexity
   - External interfaces files → 12 with high complexity
   In addition to the system requires code design to be reusable as significant and other complexity adjustment factors are average. Compute the function point of a project.

Q.5 a) Discuss the different types of activity networks. Illustrate through an example.  
    b) What do you mean by software project management plan? State its usefulness.

UNIT-III

Q.6 a) Discuss the objectives of software design, how do we transform an informal design to a detailed design.  
    b) Discuss the various benefits of code inspection process.

Q.7 a) What do you mean by modularity? Define module cohesion and explain different types of cohesion.  
    b) Discuss the various elements of good programming style.

UNIT-IV

Q.8 What is meant by test case design? Discuss its objectives and indicate the steps involved in test case design.

Q.9 a) Explain the functional testing with its types.  
    b) Discuss software testing process.
End Semester Examination, May 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) The graphics can be:
   i) Drawing
   ii) Photograph movies
   iii) Simulation
   iv) All of these

b) Pixel can be arranged in a regular:
   i) One dimensional grid
   ii) Two dimensional grid
   iii) Three dimensional grid
   iv) None of these

c) Each pixel has _______ basic color components:
   i) Two or three
   ii) One or two
   iii) Three or four
   iv) None of these

d) The quantity of an image depend on:
   i) No. of pixel used by image
   ii) No. of line used by image
   iii) No. of resolution used by image
   iv) None.

e) Each pixel has_______ basic color components:
   i) Two or three
   ii) One or Two
   iii) Three or four
   iv) None of these

f) Higher the number of pixels_______ the image quality:
   i) Bad
   ii) Better
   iii) Smaller
   iv) None of above

g) The amount of time the phosphor produce light or shine is controlled by:
   i) Persistence
   ii) Resistance
   iii) Generators
   iv) None

h) A shadow mask CRT has________ phosphor color dots at each pixel position:
   i) 1
   ii) 2
   iii) 3
   iv) None of these

i) Raster scan is ________ expensive than random scan:
   i) More
   ii) Less
   iii) Both (i) and (ii)
   iv) None

j) Two basic technique for producing color display with a CRT are:
   i) Shadow mask and random scan
   ii) Beam penetration method and shadow mask method
   iii) Random scan and raster scan
   iv) None of above

UNIT-I

Q.2  Explain CRT in details. How is it different from flat panel devices?

Q.3  Differentiate between the following:
   a) Random scan and raster scan monitors.
   b) QUI and GUI.
   c) Shadow mask and beam penetration.

P. T. O.
UNIT-II

Q.4 Explain DDA line drawing algorithm. What would be the activated pixel location if a line is drawn between A(2,2) and B(9,9)?

Q.5 What do you mean by clipping? Explain Cohen Sutherland line drawing example with an example.

UNIT-III

Q.6 What would be the new points of a triangle A(1,1), B(5,1) and C(7,3) if it is firstly scale by 2 unit along x axis and then shifted 3 points away from the origin?

Q.7 Explain the following:
   a) Projection.
   b) Transformation from WCS to VCS.

UNIT-IV

Q.8 What is the role of a graphics driver? How can you handle a graphics error? What are different steps we need to check before using graphics with turbo C compiler?

Q.9 Write a program to draw National Flag.
End Semester Examination, May 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) Which method is used for interpolation with equal intervals?
   i) Newton's forward
   ii) Lagrange's
   iii) Newton divides difference
   iv) None of these

b) Rounding off 48.2131 up to 3 decimal places is ________.

c) For the following table find \( \Delta y_5 \):

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>1</td>
<td>4</td>
<td>17</td>
<td>46</td>
<td>97</td>
<td>176</td>
<td>28</td>
</tr>
</tbody>
</table>

i) 3
ii) 13
iii) 29
iv) 51

d) When values of \( \phi \) lies between \( \frac{1}{4} \) and \( \frac{3}{4} \), which formula is used:
   i) Lagrange's
   ii) Bessel's
   iii) Newton forward
   iv) None of these

e) \( P(B/A) \) is:
   i) \( \frac{n(A \cap B)}{n(A)} \)
   ii) \( \frac{n(A \cup B)}{n(A)} \)
   iii) \( \frac{n(A) + n(B)}{n(A)} \)
   iv) None of these.

f) Binomials distribution is:
   i) \( P(x = r) = nC_r \cdot p^r \cdot q^{n-r} \)
   ii) \( P(x = r) = e^{-\mu} \cdot \frac{\mu^r}{r!}; r = 0, 1, 2, \ldots, \infty \)
   iii) Both i) and ii)
   iv) None of above

g) Chi-square distribution is ________.

h) Sampling distribution tend to be what in shape:
   i) Positively skewed
   ii) Bimodal
   iii) Flat
   iv) Normal

i) An important application of chi-square distribution is:
   i) Making inferences about a single population variance.
   ii) Testing for goodness fit.
   iii) Testing for the independence of 2 variables.
   iv) All of these alternatives are correct.

j) In hypothesis testing, the hypothesis tentively assumed to be true is:
   i) The alternative hypothesis
   ii) The null hypothesis
   iii) Either the null or the alternative
   iv) None of above

UNIT-I

Q.2
a) Give \( x = 0.007699 \). Determine the absolute error if \( X \) is truncated to three decimal places.

b) Explain Newton Raphson method and hence find the real root of \( x^3 - 4x - 9 = 0 \) by Newton Raphson method.

Q.3 Using Bisection method, find \( \sqrt{18} \) correct up to at least 2 decimal places.

P. T. O.
UNIT-II

Q.4 a) Given:
\[
\begin{array}{cccccccc}
  x & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \\
  y & 1 & 8 & 27 & 64 & 125 & 216 & 343 & 512 \\
\end{array}
\]
Find the value of \( y(7.5) \)

b) By means of Newton's divide difference formula, find value of \( f(8) \):
\[
\begin{array}{cccccc}
  x & 4 & 5 & 7 & 10 & 11 & 15 \\
  y & 48 & 100 & 294 & 900 & 1210 & 2028 \\
\end{array}
\]

Q.5 a) Use Lagrange's formula to find \( f(6) \) from the following data:
\[
\begin{array}{cccccc}
  x & 2 & 5 & 7 & 10 & 12 \\
  f(x) & 18 & 180 & 448 & 1210 & 2028 \\
\end{array}
\]

UNIT-III

Q.6 a) Obtain the least square straight line fit to the given data regarding \( x \) as the independent variable.
\[
\begin{array}{ccccccc}
  x & 1 & 2 & 3 & 4 & 5 & 6 \\
  y & 1200 & 900 & 600 & 200 & 110 & 50 \\
\end{array}
\]

b) Evaluate \( \int e^x \, dx \) by Simpson's rule using the data
\( e = 2.72, \ e^2 = 7.39, \ e^3 = 20.09, \ e^4 = 54.60 \) and compare it with the actual value.

Q.7 a) Evaluate \( \int_0^a \frac{1}{1+x^2} \, dx \) by using:
   i) Trapezoidal Rule
   ii) Simpson's \( \frac{1}{3} \text{rd} \) Rule

b) Explain method of least square. Derive the least square straight line.

UNIT-IV

Q.8 a) What is chi-square distribution? What are its applications?

b) A bag contains 3 white and 4 red balls. 3 balls are drawn one by one with replacement. Find the probability distribution of the number of red balls.

Q.9 a) Find the value of chi-square for the following table:
\[
\begin{array}{cccccc}
  \text{Class} & A & B & C & D & E \\
  \text{Observed frequency} & 8 & 29 & 44 & 15 & 4 \\
  \text{Expected frequency} & 7 & 24 & 38 & 24 & 7 \\
\end{array}
\]

b) A die is thrown 6 times. Getting an odd number is a success. What is the probability of:
   i) 5 success
   ii) Atleast 5 success
   iii) Atmost 5 success
   iv) No success
End Semester Examination, May 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) Java is designed for the distributed environment of the internet because it handles_______ protocols.
   i) UDP             ii) TCP/IP
   iii) FTP           iv) Telnet
b) Which is a valid declaration of a string?
   i) String s1=null;
   ii) String s2=abc;
   iii) String s3=(string)abc;
   iv) None of the above.
c) Which of the following is not an exception in Java?
   i) Arithmetic exception.
   ii) Logical exception.
   iii) Null pointer exception.
   iv) None of the above.
d) _______ is a compiled Java program that can be executed by _______ command.
   i) Class file and JavaC.
   ii) Source file and JavaC.
   iii) Source file and Java.
   iv) Class file and Java.
e) What is an instance variable?
   i) An instance or object of a class.
   ii) The field of an object.
   iii) Any variable of a class.
   iv) None of the above.
f) In order to fetch stream of data from file, _______ data type is used.
   i) Byte           ii) int       iii) double    iv) char
g) Which method of Component class is used to set the position and size a component?
   i) setMaximum Size(Dimension maximumSize).
   ii) setMinimum(Dimension minimumSize).
   iii) None of the above.
   iv) Both (i) and (ii).
h) Multiple Inheritance can be implemented in Java with the help of interfaces, i.e. an interface can extend more than one interfaces. (True/False)
i) A class that implements an interface should always be concrete. (True/False)
j) An abstract class cannot contain a method with a body, i.e. every method in an abstract class should be declared as abstract. (True/False)

UNIT-I

Q.2 a) Describe the genesis of Java. Also write brief overview of Java. 5
b) Why Java is called machine independent language? 5
c) Write the rules involved in framing variable names. 5

Q.3 a) The main subroutine of a program begins with the line public static void main (string[]args). Explain the words “public”, “static” and “args”. Why are they necessary? 5
b) What is the significance of Java byte code in Java programming language? 3
c) Write short note on Java Tokens. 7

P. T. O.
UNIT-II
Q.4  a) Discuss Conditional and Bitwise operators.
     b) What is an array? Give the syntax, purpose and example of Two Dimensional
        Arrays.
Q.5  a) Can you convert a for loop to a while loop? Give examples. List the advantages
     of using for loops.
     b) Are the following code segment correct? If so, find the output.
        i) int count=10;
           Boolean isEmpty =(count<=0);
           System.out.println(isEmpty);
        ii) int a=5;
            If(a>0)
            Int b=a-5;
            System.out.println(b);
        c) What is the significance of int [][]an array[]? Is it allowed in Java?
UNIT-III
Q.6  a) Differentiate between class variable and instance variable. How can a class
     variable be accessed?
     b) Describe that major features of Java exception handling.
     c) How Throws and Throw are different? Explain.
Q.7  Write a program in Java to handle predefined and user-defined exceptions.
UNIT-IV
Q.8  a) Explain the reason to use Inheritance. Illustrate by an example that a
     protected feature is more accessible than private and less accessible than
     public feature.
     b) Why multiple inheritance should be avoided? How is this achieved in Java?
Q.9  a) What is AWT? Explain the difference between a component and container.
     What is the purpose of add() method?
     b) Write a short note on packages.
Q.1 Choose the correct alternative:

a) Rank the following transmission media (optical fibre, coaxial cable and twisted pair) according to their channel capacity from the highest to the lowest.
   i) Optical Fibre, Coaxial Cable, Twisted Pair.
   ii) Optical Fibre, Twisted Pair, Coaxial Cable.
   iii) Twisted Pair, Coaxial Cable, Optical Fibre.
   iv) Coaxial cable, Optic Fiber, Twisted Pair.

b) A television (TV) transmission is an example of which type of transmission?
   i) Simplex.
   ii) Half duplex.
   iii) Full duplex.
   iv) Automatic.
   v) None of the above.

c) Which of the following protocol is used for mail transfer?
   i) FTP
   ii) HTTP
   iii) SMTP
   iv) TFTP

d) Different data inputs lines united into a single line is called _______
   i) De-multiplexing.
   ii) Multiplexer.
   iii) Multiplexing.
   iv) Concentrator.

e) The primary difference between a LAN and a WAN is:
   i) The number of software programs available.
   ii) Distance.
   iii) The variety of hardware devices.
   iv) The number of hardware devices.

f) Computer bits must be __________ to travel over phone lines.
   i) Analog signals.
   ii) Digital signals.
   iii) Modem signals.
   iv) Converted to bytes.

g) What is the term for the amount of information transmitted through a communication medium in a certain amount of time?
   i) DPI
   ii) BPS
   iii) Bandwidth
   iv) Baud rate

h) Encryption can be used as a means as of authentication because
   i) The authentication challenge cannot be seen.
   ii) Everyone can see public keys.
   iii) An encrypted challenge can only be decrypted by the owner of a key.
   iv) Encrypted keys are formed from information about user identity.

i) Match the following terms to their meanings:
   i) Modem
   ii) Bandwidth
   iii) Bps
   iv) Broadband
   v) Analog signal
   vi) Digital signal connection
   vii) NIC
   Continuous wave of bits.
   Modulator/demodulator.
   Stream of bits.
   Measured in kilobits or megabits per second.
   How modems measure the transmission speed of a modem.
   DSL, cable modem, high-speed wireless, satellite.
   A card inserted into a slot that is designed for direct connection to a network.
UNIT-I

Q.2  a) How does synchronous data differ from asynchronous data? Give a benefit of each type.
     b) Explain the term data transmission. Also discuss various transmission modes.

Q.3) What are the different transmission mediums over which data communication equipment can provide service?

UNIT-II

Q.4  What do you understand by error detection? Discuss in detail with the help of a suitable example.

Q.5  a) Discuss frequency division multiplexing. What is the purpose of a guard band in FDM?
     b) What do you understand by Modulation?

UNIT-III

Q.6  Discuss the following:
     a) Bridges  b) Routers  c) Gateways

Q.7  What do you understand by a network topology? Explain the various types of network topologies with their advantages and disadvantages.

UNIT-IV

Q.8  Define Switching System and what is the need for a Switching System? Distinguish between virtual-circuit and datagram type packet switching.

Q.9  a) What is a block cipher?
     b) How can Data Compression be used with Encryption?
     c) What do you understand by DES?
Q.1 Choose the correct option:

a) The text color in a presentation should contrast with the ________ color.
   i) CPU ii) Frame  iii) Stack iv) Background

b) Images included in many software titles are called ________.
   i) Clipart ii) Pop ups iii) .jpg files iv) .tiff files

c) A smaller version of an image is called a:
   i) Clipart ii) Bitmap iii) Portable network graphic iv) Thumbnail

d) ________ is the special effect used to introduce each slide in a slide presentation.
   i) Animation ii) Bulleting iii) Transition iv) Mapping

e) When text is highlighted to create a hyperlink, the Insert Hyperlink dialog box is used to ________.
   i) Choose the particular location of the slide, file, or web site for the link.
   ii) Create Action Buttons.
   iii) Number links.
   iv) Rearrange the link order.

f) Which of the following statements about motion paths is NOT correct?
   i) Motion paths are an animation effect.
   ii) A motion path defines the line of travel that an object can follow as part of an animation effect.
   iii) Motion paths can only be added to graphic elements.
   iv) Motion paths can be added using the Custom Animation task pane.

g) ________ refers to any type of application or presentation that involves more than one type of media, such as text, graphics, video, animation, and sound.
   i) An executable file ii) Desktop publishing iii) Multimedia iv) Hypertext

h) In general, the animation may appear jerky and slow if each frame is displayed for more than about:
   i) 1/30 of a second ii) 1/15 of a second iii) 1/4 of a second iv) 1/2 of a second

i) Vector-drawn objects are used for all of the following except:
   i) Lines ii) Circles iii) Polygons iv) Photographs v) Boxes

j) A 24 bit image is capable of representing how many different colours?
   i) 2 ii) 16 iii) 256 iv) 65536 v) 16777216

1½x10

P. T. O.
UNIT-I

Q.2 Describe several different environments in which multimedia might be used. Elaborate on several different aspects of multimedia that provide a benefit over other forms of information presentation.

Q.3 a) Describe the primary multimedia delivery methods-the internet, wireless, CD-ROM and DVD.
   b) Cite the history of multimedia and important projected changes in the future of multimedia.

UNIT-II

Q.4 a) Discuss the importance of text and ways text can be leveraged in multimedia presentation.
   b) Describe the difference between typeface and a font. List at least three attributes of a font.

Q.5 a) Define hypermedia, hypertext, links, anchors and nodes.
   b) Discuss both the potential and limitations of hypertext and hyper linking systems.

UNIT-III

Q.6 Differentiate among bitmap, vector and 3D images and describe the capabilities and limitations of all three.

Q.7 Write short notes on any three of the following:
   a) Lossless and lossy compression.
   b) Compression principles.
   c) Multimedia I/O technologies.
   d) Entropy encoding.

UNIT-IV

Q.8 a) Define animation and describe how it can be used in multimedia
   b) Differentiate between 2D and 3D animation.

Q.9 a) Discuss the principles of animation and the concepts that go into creating these animations.
   b) Write short notes on:
      i) Key frame       ii) Morphing       iii) Kinematics       iv) Pixel

     2x4
End Semester Examination, May 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) State true/false:
   i) Function can't return more than one value at a time.
   ii) We can use switch statement to switch or strings.
   iii) Range of float is -2.25e-308 to 2.25e+308.
   iv) Union can't be nested in a structure.
   v) The modulus operator is an arithmetic operator.
      1x5

   b) Select any one:
      i) Which of the following is not logical operator:
         a) & b) && c) // d) !
      ii) How will you free allocated memory:
         a) remove b) tree c) delete d) dealloc
      iii) If two strings are identical then strcmp() return:
         a) -1 b) 1 c) 0 d) none
      iv) sqrt() defined in which header fill:
         a) math.h b) stdio.h c) conio.h d) none
      v) Function calling itself is called:
         a) calling b) defining c) recursion d) none
      1x5

   c) Fill in the blanks:
      i) __________ function is used to concatenate two strings.
      ii) It occupies __________ bytes in memory.
      iii) Program can be defined are set of __________.
      iv) 2-D array is also called __________.
      v) Left shifting a number by 1 is always equivalent to __________ it by 2.
      1x5

UNIT-I

Q.2  a) Explain the following input output function:
   i) getchar() ii) putchar()
   iii) scanf() iv) gets()
   v) puts()
   b) What do you mean by preprocessor directive?
      10

Q.3  a) What do you mean by an algorithm and flowchart? Which one is better and why?
      10

   b) Draw a flowchart for sum of a natural numbers.
      5

UNIT-II

Q.4  a) Differentiate between call by value and call by reference. Explain with examples.
     7

   b) Write a program to find reverse of a number and check whether it is palindrome or not.
     8

Q.5  Explain the following:
   a) Conditional operator
   b) Unary operator
   c) Logical operator
      5x3

P. T. O.
UNIT-III

Q.6  a) Write a program to find all vowels from a string and print at which location they are.  
    b) What do you mean by an array? What are the disadvantages of an array?  

Q.7  a) Explain the following string functions:  
    i) strlen()  
    ii) strrev()  
    iii) strcat()  
   b) Write short notes on:  
    i) Function  
    ii) Array of pointers  
    iii) Dynamic memory allocation  

UNIT-IV

Q.8  a) What do you understand by nested structures? Explain with an example.  
    b) Differentiate between a union and a structure.  

Q.9  a) Write a program to write a structure to a file.  
    b) What are unformatted data files?
End Semester Examination, May 2013  
MCA - First Semester  
DISCRETE STRUCTURE (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 relation R whose matrix representation is:  
\[
\begin{bmatrix}
1 & 0 & 0 \\
0 & 1 & 1 \\
1 & 1 & 0
\end{bmatrix}
\]
b) The statement "A function from one finite set to a smaller finite set cannot be one-one function" is called:  
i) Addition principle  
ii) Lagrange's theorem  
iii) Principle of duality  
iv) Pigeonhole principle  
c) State absorption law for mathematical logic.  
d) Give an example to show that union of two subgroups of a group G need to be a subgroup of G.  
e) Write down the atoms of \(D_{24}\).  
f) Find the consensus of \(xyz's\) and \(xy'z\).  
g) Show that the following graph has an Eulerian path.  

h) Chromatic number of a bipartite graph is equal to:  
i) 1  
ii) 2  
iii) 3  
iv) 4  
j) Is there a binary tree with height 6 and 65 leaves?  
j) Define context free grammar.  

1\(\frac{1}{2}\)x10

UNIT-I

Q.2  
a) Show that the Cartesian square \(N \times N\) of the set \(N\) of positive integers is countable.  

b) If \(p\) and \(q\) are propositions, show that:  
\[p \rightarrow q \equiv q \rightarrow p\]  

UNIT-II

Q.3  
a) Derive recurrence relation for Fibonacci sequence and solve it.  

b) Let \(A = \{1,2,3,4\}\) and \(R = \{(1,2),(2,3),(3,4),(2,1)\}\) be a relation on \(A\). Find the transitive closure of \(R\).  

UNIT-III

Q.4  
a) Let \(G\) be a group and let:  
\[Z = \{ax : xa = xa \; \text{for all} \; x \in G\}\]  
Show that \(Z\) is a normal subgroup of \(G\).  

b) Let \(P(A)\) be power set of a set \(A\). Show that \((P(A),\subseteq)\) is a bounded, complemented and distributive lattice.
Q.5  a) Find the Boolean function \( E(x, y, z) \) corresponding to the truth table:
\[
T(E)=01001001
\]
b) Design a three-input-minimal AND-OR circuit with the following truth table:
\[
T = \{[00001111, 00110011, 01010101; 11001101]\}
\]

UNIT-III

Q.6  a) Show that the graph \( G \) shown below is not Hamiltonian:

b) Draw the graph that has the following adjacency matrix:
\[
\begin{bmatrix}
1 & 2 & 1 & 2 \\
2 & 0 & 2 & 1 \\
1 & 2 & 1 & 0 \\
2 & 1 & 0 & 0
\end{bmatrix}
\]

UNIT-IV

Q.7  a) Find all the spanning tree of the complete graph \( k_6 \).
b) Find Kuratowski subgraph of the graph given below:

Q.8  a) Let \( M = (Q, S, A, s_0, f) \) be a NDFSA with \( A = \{s_2, s_3\} \) and the transition table given by:

<table>
<thead>
<tr>
<th>( S )</th>
<th>( I )</th>
<th>( 0 )</th>
<th>( 1 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>( S_0 )</td>
<td>( {s_0, s_3} )</td>
<td>( {s_0, s_3} )</td>
<td></td>
</tr>
<tr>
<td>( S_1 )</td>
<td>( \phi )</td>
<td>( {s_2} )</td>
<td></td>
</tr>
<tr>
<td>( S_2 )</td>
<td>( {s_2} )</td>
<td>( {s_2} )</td>
<td></td>
</tr>
<tr>
<td>( S_3 )</td>
<td>( {s_3} )</td>
<td>( \phi )</td>
<td></td>
</tr>
<tr>
<td>( S_4 )</td>
<td>( {s_3} )</td>
<td>( {s_4} )</td>
<td></td>
</tr>
</tbody>
</table>

determine whether \( M \) accepts the word \( \omega = 01001 \)
b) Find the language \( L(G) \) over \{a, b\} generated by the grammar with productions:
\[
\sigma \rightarrow b\sigma, \sigma \rightarrow aA, A \rightarrow bA, A \rightarrow b,
\]
where \( \sigma \) is the starting symbol?

Q.9  a) Design finite state automation that accepts those strings over \{0, 1\} such that the number of zeros is divisible by 3.
b) Is the language \( L = \{a^n b^n, n = 1, 2, 3, \ldots\} \) over \{a, b\} context free? Give details.
End Semester Examination, May 2013
MCA - First Semester
COMPUTER FUNDAMENTALS AND IT TOOLS (MCA-103)

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) Portrait and landscape are:
   i) Page orientation
   ii) Paper size
   iii) Page layout
   iv) All of above

b) Which of the following is not a valid size of a floppy disk?
   i) 3 ½”
   ii) 5 ¼”
   iii) 5 ½”
   iv) 8”

c) What is gutter margin?
   i) Margin that is added to the left margin when printing
   ii) Margin that is added to 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

d) Algorithm and flow chart help us to:
   i) Know the memory capacity
   ii) Specify the problem completely and clearly
   iii) Direct the output to a printer
   iv) Identify the base of a number system

e) EPROM can be used for:
   i) Reconstructing the contents of ROM
   ii) Duplication ROM
   iii) Erasing the contents of ROM
   iv) Erasing and reconstructing the contents of ROM

f) The basic operations performed by a computer are:
   i) Arithmetic operation
   ii) Logical operation
   iii) Storage and relative
   iv) All the above

g) Memory unit is one part of:
   i) Central processing unit
   ii) Input device
   iii) Control unit
   iv) Output device

h) Which of the following is not a valid storage medium?
   i) Zip disk
   ii) Floppy disk
   iii) Hard disk
   iv) None of these

i) Background color or effects applied on a document is not visible in:
   i) Web layout view
   ii) Print layout view
   iii) Reading view
   iv) Print view

j) What is portion of a document in which you set certain page formatting options?
   i) Page
   ii) Document
   iii) Section
   iv) Page setup

\[1\frac{1}{2}\times10\]

UNIT-I

Q.2
a) Differentiate between microcomputers, minicomputers and mainframes.
   8

b) Define the term parallel processor. Explain the four categories of parallel processors.
   7

P. T. O.
Q.3  
a) Explain the four categories of programming languages. Also, indicate the category that is perceived to be the hardest to program. 
b) Define fragmentation. Explain the need of defragmentation on hard disk.

UNIT-II

Q.4  
a) What are document templates? List their uses. Explain the format of at least three commonly used document templates and write the steps to use them in your document.
b) What are macros? Mention the uses of macros. Write steps for recording and running a macro with the help of an example.

Q.5  
Explain following with respect to MS-Excel:  
a) Goal seek and auditing command  
b) Explain any five numeric functions  
c) What is the use of range option? Explain it.  
d) Explain different views in your workbook

UNIT-III

Q.6  
a) Write the steps involved in creating a presentation using PowerPoint to include the following tasks and by selecting the corresponding slide layout(s):  
   i) To include a title for the presentation  
   ii) To include a chart and text on the same slide  
   iii) Bulleted lists  
   iv) Media clip and some text  
   v) Text over some objects  
   vi) Text in the form of columns  
b) Write short notes on any two:  
   i) Paintbrush  
   ii) Notepad  
   iii) Calculator

Q.7  
Answer the following questions with respect to MS-Access:  
a) What is MS-Access?  
b) Define sorting.  
c) What are attributes?  
d) What is primary key?  
e) What are the differences between a form and a report?  
f) What are the ten field types in Access?

UNIT-IV

Q.8  
a) Explain the measures to be taken to provide network security.  
b) With the help of diagram, explain the synchronous and asynchronous modes of transmission.

Q.9  
Define computer virus. How does a virus infect and spread in a computer system? Explain at least three categories of viruses on the basis of their mode of existence. Give three examples of computer viruses.
End Semester Examination, May 2013
MCA - First Semester
PRINCIPLES OF MANAGEMENT (MCA-104)

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 Attempt any ten of the following:
State true or false:
   a) Every manager is not responsible for co-ordination of activities.
   b) Manager are needed only in business firms.
   c) Motivation can be only monetary.
   d) Human needs may be classified into two categories.
   e) Communication is a part of the 'directing' function of management.

Select the best alternative:

f) Which of the following skills combinations is required for top management in descending order?
   i) Technical, human, conceptual
   ii) Conceptual, human, technical
   iii) Technical, conceptual, technical
   iv) Human, conceptual, technical

   g) One of the major elements of planning process is:
      i) Development leadership qualities
      ii) Selecting right personnel
      iii) Perception of opportunities
      iv) Designing organization structure

   h) Which of the following is a technique for improving group decision making?
      i) Brainstorming
      ii) Decision tree
      iii) Game theory
      iv) Queuing theory

   i) From which combination is matrix structure created?
      i) Functional and divisional
      ii) Functional and project
      iii) Functional and line
      iv) Divisional and line

   j) Which one of the following theories is a process theory of motivation?
      i) Maslow's need hierarchy
      ii) Vroom's valence expectancy
      iii) Motivation hygenie
      iv) Equity theory

   k) Answer in brief:
      i) Write any four principles of management.
      ii) What is vision statement?
      iii) Mention the objective of "performance appraisal".
      iv) Give any one example of autocratic leader.
      v) Give any one example of decentralization.

1½x10

P. T. O.
UNIT-I

Q.2  a) Define management. Describe the role of a manager in modern business enterprise.
     b) Discuss various steps of planning.

Q.3  a) Write a comparative note on the contributions of Taylor and Fayol.
     b) What is the significance of decision making? What procedure should be followed in arriving at a correct decision?

UNIT-II

Q.4  a) Distinguish between centralization and delegation of authority.
     b) What is manpower planning? Discuss about the scope and significance of the concept of human resource management.

Q.5  a) Explain the nature and process of organizing. What are the benefits of departmentation?
     b) Write explanatory notes on the following:
         i) Line and staff organization structure
         ii) International human resource management

UNIT-III

Q.6  a) Define motivation. Set out importance of motivation in any organization.
     b) What are the leadership qualities that you would look for in a manager?

Q.7  a) Define communication. Discuss the importance of effective communication for accelerating the productivity of the organization.
     b) Write short notes on the following:
         i) Prerequisite of an effective control system
         ii) Use of computers in handling the information

UNIT-IV

Q.8  What are business ethics? Discuss the advantages of ethical behaviour.

Q.9  Write explanatory notes on the following:
     a) Cyber laws and cyber crimes
     b) Teamwork
End Semester Examination, May 2013
MCA – First Semester
DIGITAL DESIGN AND COMPUTER ORGANIZATION (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) Give the decimal value of binary 10010.
   i) 6
   ii) 9
   iii) 18
   iv) 20

b) A flip-flop has ___________
   i) One stable state
   ii) No stable states
   iii) Two stable states
   iv) None of the above

c) The systematic reduction of logic circuits is accomplished by:
   i) Using Boolean algebra
   ii) Symbolic reduction
   iii) TTL logic
   iv) Using a truth table

d) Solving -11+(-2) will yield which two’s-complement answer?
   i) 111101101
   ii) 11111001
   iii) 11111001
   iv) 11101001

e) The bit sequence 0010 is serially entered (right-most bit first) into a 4-bit parallel
   out shift register that is initially clear. What are the Q outputs after two clock
   pulses?
   i) 0000
   ii) 0010
   iii) 1000
   iv) 1111

f) 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

g) A J-K flip-flop is in a "no change" condition when __________.
   i) J=1, K=1
   ii) J=1, K=0
   iii) J=0, K=1
   iv) J=0, K=0

h) The ALU carries out arithmetic and logic operations. It processes __________
   numbers rather than decimal number.
   i) Decimal
   ii) Hexadecimal
   iii) Binary
   iv) All of the above
   v) None of the above

i) The clock signals are used in sequential logic circuits:
   i) to tell the time of the day
   ii) tell how much time has elapsed since the system was turned on
   iii) to carry serial data signals
   iv) None of the above

j) The two parts of a microprocessor instruction are called operation and the:
   i) Operator
   ii) Operand
   iii) Observable
   iv) None of the above

UNIT-I

Q.2
Simplify the following using K-map. Also draw the circuit diagram using Nano gates:
a) \[ F(A, B, C, D) = \Sigma (0, 3, 5, 6, 9, 11, 13, 14, 15) \]
   \[ D(A, B, C, D) = \Sigma (1, 2, 8) \]  8

b) \[ F(w, x, y, z) = \Pi (1, 5, 7, 9, 10, 12, 14) \]  7

P. T. O.
Q.3  a) What are universal gates? Simulate NAND and NOR gates to all gates.  
b) A seven bit Hamming code is received as 1111001. Locate the error position and find the correct code.

UNIT-II

Q.4  What is a decoder? Construct a 5 to 32 line decoder with four 3 to 8 line decoder and with enable and one 2 to 4 line decoder.

Q.5  Write short notes on:
   a) Tristate logic
   b) TTL

UNIT-III

Q.6  What is triggering of flip-flops? Explain the negative edge and positive edge triggered flip-flops. Explain race around condition.

Q.7  Differentiate between synchronous and asynchronous counters. Show that an n bit binary counter connected to n to 2^n decoder is equivalent to a ring counter with 2^n flip-flops. Draw the block diagram for n=2.

UNIT-IV

Q.8  A computer uses memory unit of 256 K words of 32 bits each. A binary instruction code is stored in one word of memory. The instruction has four parts: an indirect bit, a register code part to specify one of 64 registers, and an address part.
   a) How many bits are there in the operation code, the register code part, and the address part?
   b) Draw the instruction word format and indicate the number of bits in each part.
   c) How many bits are there in the data and address inputs of memory?

End Semester Examination, May 2013  
MCA - Second Semester  
DATA AND FILE STRUCTURE 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) How many nodes in a tree have no ancestors?  
   i) 0  
   ii) 1  
   iii) 2  
   iv) n  
b) In order to get the contents of a binary search tree in ascending order, one has to traverse it in:  
   i) pre-order  
   ii) in-order.  
   iii) post order  
   iv) not possible  
c) The worst case occurs in linear search algorithm when  
   i) Item is somewhere in the middle of the array  
   ii) Item is not in the array at all  
   iii) Item is the last element in the array  
   iv) Item is the last element in the array or is not there at all  
d) The complexity of merge sort algorithm is:  
   i) O(n)  
   ii) O(log n)  
   iii) O(n^2)  
   iv) O(nlog n)  
e) Linked lists are best suited:  
   i) for relatively permanent collections of data  
   ii) for the size of the structure and the data in the structure are constantly changing  
   iii) for both of above situation  
   iv) for none of above situation  

Q.2  
a) How can one measure the efficiency of an algorithm? What is time space complexity trade off? Explain with the help of an example.  
b) What are different ways to represent priority queue in memory?

Q.3  
a) Write algorithm to insert an element into an array at the location given by User?  
b) Write algorithm to insert and delete the element at the beginning of single linked list.

UNIT-II

Q.4  
a) What do you mean by Binary Search Tree (BST)? Construct a BST with the given data:  
15, 12, 6, 8, 24, 18, 9, 35.  
b) Differentiate between Complete Binary tree and Extended Binary Tree.  
c) Differentiate between B tree and B+ Tree.

P. T. O.
Q.5  a) What do you mean by AVL Tree? 
    b) Construct a tree with the given data.

<table>
<thead>
<tr>
<th>Inorder</th>
<th>C D E B G H F K L P Q M N J A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postorder</td>
<td>E D C H G Q P N M L K J F B A</td>
</tr>
</tbody>
</table>

**UNIT-III**

Q.6  a) What are various ways to represent graph in memory? 
    b) Write algorithm to insert element in a graph.

Q.7  Find the shortest path using Dijkstra's algorithm for the given graph. Consider node 1 as a source node.

![Graph Diagram]

**UNIT-IV**

Q.8  a) Write the recursive procedure for Binary search. 
    b) Differentiate between following: 
       i) Inverted list and Multilist file organization 
       ii) Sequential file and Index sequential file 

Q.9  a) Explain various collision resolution methods. 
    b) Write the algorithm for selection sort. Also evaluate its complexity.
End Semester Examination, May 2013
MCA - Second Semester
DATABASE MANAGEMENT SYSTEM (MCA-202)

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 Choose the correct answer:

a) Data dictionary is used for:
   i) Accessing database about databases
   ii) The contents of files
   iii) Access details
   iv) None

b) Every weak entity set is to be a part of the:
   i) One-to-one relationship set
   ii) Many-to-many relationship set
   iii) One-to-many relationship set
   iv) None of the above

c) The entity integrity rule states that:
   i) No primary key attribute can be null
   ii) Referential integrity must be maintained across all entities
   iii) Each entity must have a primary key
   iv) A primary key must have only one attribute

d) Traditional set operators include:
   i) Union
   ii) Difference
   iii) Intersection
   iv) All

e) A WFF (Well Formed Formula) is constructed from:
   i) Conditions
   ii) Boolean Operators
   iii) Quantities
   iv) All

f) SQL functions include:
   i) Single-row functions
   ii) Group functions
   iii) Both i) and ii)
   iv) None

g) BCNF refers to:
   i) Atomicity
   ii) Primary Key
   iii) Overlapping candidate key
   iv) None

h) The normalization can be carried out:
   i) Flattening the table
   ii) Decomposition of the table
   iii) Both i) and ii)
   iv) None

i) Access control is carried out by:
   i) Privilege
   ii) Role
   iii) Both i) and ii)
   iv) None

j) Data security risks include:
   i) Data Tempering
   ii) Data Theft
   iii) Password Guessing
   iv) All

UNIT-I

Q.2 a) What is the difference between database schema and database state? 7

b) What are the three main types of actions involve in databases? Briefly discuss each. 8

P. T. O.
Q.3 a) Differentiate between data administration and database administration. 7
    b) With what other computer system software does a DBMS interact? Discuss. 8

UNIT-II

Q.4 a) Discuss the naming conventions used for ER schema diagrams. 8
    b) Describe when is the concept of a weak entity used in the data modeling? 7

Q.5 a) Differentiate between tuple oriented and domain oriented calculus. 8
    b) All candidate keys can be primary key. Do you agree with this statement? Justify. 7

UNIT-III

Q.6 a) Define functional dependencies. Write Armstrong rule and show that other rules are derived from Armstrong rule. 10
    b) Why are certain functional dependencies called 'Trivial Functional Dependencies'? Explain. 5

Q.7 a) What is lossless join property of a decomposition? Why is it important? Explain. 5
    b) What is normalization? Discuss its advantages and take a relation to normalize it upto 3 NF, explaining each step. 10

UNIT-IV

Q.8 What is a log file? What does it contain? How can a log file can be used for recovery? Describe this with the help of an example that includes all recovery operations. 15

Q.9 a) Compare and contrast sequential and index sequential file organization. 6
    b) Define hashing. Discuss various hashing techniques. 9
End Semester Examination, May 2013
MCA - Second Semester
OBJECT ORIENTED PROGRAMMING USING C++ (MCA-203)

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) Elements in an array are identified by a unique _____.
      i) Data type  ii) Order
      iii) Subscript  iv) Symbol
   b) The body of a C++ function is surrounded by _____.
      i) Parentheses  ii) Angle brackets
      iii) Curly brackets  iv) Square brackets
   c) Which of the following type casts will convert an integer variable named amount to a double type?
      i) (double) amount  ii) (int to double) amount
      iii) int to double(amount)  iv) int (amount) to double
   d) Which of the following is a string literal constant?
      i) "Visual C++"  ii) "137.45"
      iii) "A"  iv) "2,365"
      v) All of the above
   e) A ________ is a special method used to initialize the instance variable of a class.
      i) Member function  ii) Destructor
      iii) Constructor  iv) Structure
   f) Which of the following is user defined data type?
      i) Public  ii) Private
      iii) Class  iv) i) and ii) both
   g) Which of the following statements are correct for a static member function?
      1. It can access only other static members of its class.
      2. It can be called using the class name, instead of objects.
      i) Only 1 is correct
      ii) Only 2 is correct
      iii) Both 1 and 2 are correct
      iv) Both 1 and 2 are incorrect.
   h) A base class may also be called a:
      i) Child class  ii) Subclass
      iii) Derived class  iv) Parent class
   i) If no constructors can be specified for a derived class, objects of the derived class will use the constructors in the base class:
      i) True
      ii) False
   j) Compared with the classes from which they are derived, inherited classes may have ________.
      i) Additional data members  ii) Additional member functions
      iii) Both i) and ii)  iv) Neither i) nor ii)

UNIT-I

Q.2 What are the basic principles of Object Oriented Programming? Explain with examples. How are they implemented in C++?

1 1/2x10

P. T. O.
Q.3  
a) What do you meant by overloading of a function? When do we use them?  
b) Explain enumeration data types with an example.  

UNIT-II

Q.4  Write a program to implement constructors, copy constructor and destructor.  

Q.5  
a) When do we declare a member of a class static? Explain with examples.  
b) What is operator overloading? How many arguments are required in the definition of overloaded unary and binary operator?  

UNIT-III

Q.6  
a) Give the difference between virtual function and pure virtual functions.  
b) What are friend functions? What are the demerits and merits of using friend functions?  

Q.7  In what order the class constructor are called when the derived class’ object is created? Explain with an example.  

UNIT-IV

Q.8  Define manipulators and also mention the manipulators that are used in C++.  

Q.9  
a) Describe the role of keywords try, catch and throw in exception handling.  
b) What are templates? Explain function templates.
End Semester Examination, May 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) Define basis of a vector space.
   b) Which of the following is not a linear transformation?
      i) Projection  ii) Reflection
      iii) Rotation about origin  iv) Translation
   c) Define projection of V3 on xy-plane.
   d) What are eigenvalues of A² if:
      \[
      A = \begin{bmatrix}
      3 & 0 & 0 \\
      1 & 2 & 0 \\
      0 & 1 & 5
      \end{bmatrix}
      \]
e) Does the following system of equations possess a non-trivial solution?
   \[x_1 - x_2 + x_3 = 0\]
   \[x_1 + 2x_2 - x_3 = 0\]
   \[2x_1 + x_2 + 3x_3 = 0\]
f) What will be the rank of the cost matrix of a transportation problem having m origins and n destinations?

h) If \[\sum_{i=1}^{x} x_i = 15\], \[\sum_{j=1}^{y} y_j = 44\] and \[\sum_{i=1}^{x} x_i^2 = 49\], find regression sufficient of y on x.

i) How many elements will be there in the sample space if two fair dices are thrown simultaneously?

j) What is the mean of 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>0.1</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
<td>0.1</td>
</tr>
</tbody>
</table>

UNIT-I

Q.2 a) Find the matrix of the reflection operator about the yz-plane on \( R^3 \).

b) Using Gauss-Jordon method, find the inverse of the matrix:
\[
\begin{bmatrix}
1 & 1 & 3 \\
1 & 3 & -3 \\
-2 & -4 & -4
\end{bmatrix}
\]

Q.3 a) Show that the following system of equations is consist. Also solve it:
   \[x + 2y - z = 3\]
   \[3x - y + 2z = 1\]
   \[2x - 2y + 3z = 2\]
   \[x - y + z = -1\]

b) Reduce the following matrix to normal form and find its rank:
\[
\begin{bmatrix}
3 & 2 & -1 \\
4 & 2 & 6 \\
7 & 4 & 5
\end{bmatrix}
\]

P. T. O.
UNIT-II

Q.4  a) Show that the eigenvalues of a unitary matrix are of unit modulus.
     b) Diagonalize the matrix:
         \[
         \begin{bmatrix}
         1 & 2 \\
         2 & 1 \\
         \end{bmatrix}
         \]

Q.5  a) Find the characteristic roots and the corresponding characteristic vectors of the
     matrix:
         \[
         \begin{bmatrix}
         3 & 1 & 0 \\
         0 & 3 & 1 \\
         0 & 0 & 3 \\
         \end{bmatrix}
         \]
     b) Show that the following transformation is orthogonal:
         \[
         y_1 = \frac{\sqrt{3}}{3} x_1 + \frac{\sqrt{3}}{3} x_2 + \frac{\sqrt{2}}{3} x_3 \\
         y_2 = \frac{\sqrt{3}}{3} x_1 + \frac{\sqrt{3}}{3} x_2 - \frac{\sqrt{2}}{3} x_3 \\
         y_3 = \frac{\sqrt{3}}{3} x_1 - \frac{\sqrt{3}}{3} x_2 - \frac{\sqrt{2}}{3} x_3
         \]

UNIT-III

Q.6  a) Two distinct dices are thrown simultaneously. What is the probability of getting a
     total of 7?
     b) The probability that a bomb dropped from a plane will strike the target is \(\frac{1}{5}\). If six
     bombs are dropped; find the probability that at least two will strike the target?

Q.7  a) The mean height of 500 students is 151 cm and the standard deviation is 15 cm.
     Assuming that the heights are normally distributed, find the number of students
     whose heights lie between 120 cm and 155 cm.
     b) A certain stimulus administered to each of 12 patients resulted in the following
     change in blood pressure:
        5, 2, 8, -1, 0, -2, 1, 5, 0, 4, 6
        Can it be concluded that the stimulus will increase the blood pressure?

UNIT-IV

Q.8  a) Use corner point method to solve the LPP
     Max \( z = 2x + 3y \)
     subject to the constraints
     \( 3x + 6y \leq 24 \)
     \( 2x + y \leq 10 \)
     \( x, y \geq 0 \)

b) Use simplex method to solve the LPP
     Max \( z = 4x_1 + 10x_2 \)
     subject to the constraints
     \( 2x_1 + x_2 \leq 50 \)
     \( 2x_1 + 5x_2 \leq 100 \)
     \( 2x_1 + 3x_2 \leq 90 \)
     \( x_1, x_2 \geq 0 \)
Q.9  a) Determine an initial basic feasible solution to the following transportation problem using Vogel's approximation 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>$S_1$</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td>$S_2$</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>$S_3$</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>9</td>
<td>20</td>
</tr>
<tr>
<td>Demand</td>
<td>20</td>
<td>40</td>
<td>30</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

b) Using VAM and MODI, obtain the optimal solution to the following transportation problem:

<table>
<thead>
<tr>
<th></th>
<th>$D_1$</th>
<th>$D_2$</th>
<th>$D_3$</th>
<th>$D_4$</th>
<th>Supply</th>
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<tbody>
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<td>$S_1$</td>
<td>5</td>
<td>1</td>
<td>7</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>$S_2$</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>$S_3$</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Demand</td>
<td>75</td>
<td>20</td>
<td>50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
End Semester Examination, May 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) In cyclic redundancy checking, what is the CRC?
   i) The divisor
   ii) The quotient
   iii) The dividend
   iv) The remainder
b) Transmission media can be usually categorized as ________
   i) Fixed or unfixed
   ii) Guided or unguided
   iii) Determinate or indeterminate
   iv) Metallic or nonmetallic
c) ________ is the protocol suite for the current Internet.
   i) TCP/IP
   ii) NCP
   iii) UNIX
   iv) ACM
d) The ________ is the physical path over which a message travels.
   i) Protocol
   ii) Medium
   iii) Signal
   iv) All the above
e) A ________ LAN allows several LANs to be connected.
   i) Backbone
   ii) Wireless
   iii) Wired
   iv) None of the above
f) A repeater is a connecting device that operates in the ________ layer of the Internet model.
   i) Physical
   ii) Data link
   iii) Network
   iv) All of the above
g) As the data packet moves from the upper to the lower layers, headers are
   i) Added
   ii) Removed
   iii) Rearranged
   iv) Modified
h) ARQ stands for ________
   i) Automatic repeat quantization
   ii) Automatic repeat request
   iii) Automatic retransmission request
   iv) Acknowledge repeat request
i) IP is ________ datagram protocol.
   i) An unreliable
   ii) A connectionless
   iii) Both i) and ii)
   iv) None of the above
j) In distance vector routing, each node periodically shares its routing table with ________ and whenever there is a change.
   i) Every other node
   ii) Its immediate neighbors
   iii) One neighbor
   iv) None of the above

UNIT-I

Q.2

a) Differentiate between LAN, WAN and MAN on the basis of configuration, data rate, transmission media, topologies, no of users etc.

b) Differentiate between wired and wireless media? Explain any two wireless transmission media.

P. T. O.
Q.3  a) A receiver receives the code 110011001111. When it uses the Hamming encoding algorithm, the result is 0101. Which bit is in error? What is the correct code?  
    b) What do you mean by sampling? Explain PAM and PCM in sampling with proper diagram?

UNIT-II

Q.4  a) What is packet switching? How datagram approach is different from virtual circuit approach. Justify your answer.  
    b) Compare a Layer-3 switch with a router.

Q.5  Explain IEEE 802.5 standard of project 802 giving all the details related to frame format, access method, addressing and electrical specification. What happens if the Token is lost?

UNIT-III

Q.6  Differentiate the following:  
    a) LLC and MAC  
    b) X.25 and frame relay  
    c) Static LAN and dynamic LAN

Q.7  Explain HDLC protocol. How do the three HDLC frames types differ from one another? Describe the three HDLC station types?

UNIT-IV

Q.8  a) Explain the architecture of SNMP V3.  
    b) Explain the advantages of SNMPV2 over SNMP V1.

Q.9  a) What is the purpose of Proxy server in SNMP V1 and V2? How proxy Server of V1 is different from V2?  
    b) Discuss the conceptual model of TM Networks and also explain the reference points.
Q.1 Choose the best alternative in the following:
   a) Virtual memory is ___________
      i) An extremely large main memory.
      ii) An extremely large secondary memory.
      iii) An illusion of extremely large main memory.
      iv) A type of memory used in super computers.
   b) Multiprogramming systems__________
      i) Are easier to develop than single programming systems.
      ii) Execute each job faster.
      iii) Execute more jobs in the same time.
      iv) Are used only on large main frame computers.
   c) Which is not the state of the process?
      i) Blocked.        ii) Running.
      iii) Ready.        iv) Privileged.
   d) A critical region:
      i) Is a piece of code which only one process executes at a time.
      ii) Is a region prone to deadlock.
      iii) Is a piece of code which only a finite number of processes execute.
      iv) Is found only in Windows NT operating system.
   e) Which directory implementation is used in most Operating System?
      i) Single level directory structure.  ii) Two level directory structure.
      iii) Tree directory structure.        iv) A cyclic directory structure.
   f) The Banker's algorithm is used
      i) To prevent deadlock in operating systems.
      ii) To detect deadlock in operating systems.
      iii) To rectify a deadlocked state.
      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) 'LRU' page replacement policy is
      i) Last Replacement Unit.
      ii) Last Restored Unit.
      iii) Least Recently Used.
      iv) Least Required unit.
   i) The main reason to encrypt a file is to
      i) Reduce its size.
      ii) Secure it for transmission.
      iii) Prepare it for backup.
      iv) Include it in the start-up sequence.
   j) The memory allocation scheme subject to "external" fragmentation is
      i) Segmentation.
      ii) Swapping.
      iii) Pure demand paging.
      iv) Multiple fixed contiguous partitions.

\[1\frac{1}{2}\times10\]
**UNIT-I**

Q.2 Enumerate the basic functions of an operating system and explain its each function in brief.  

Q.3 a) Differentiate between tightly coupled systems and loosely coupled systems.  
b) What is real time system? List out and discuss their types.  

**UNIT-II**

Q.4 Assume that following jobs have arrived in the order 1, 2, 3, 4 and 5:

<table>
<thead>
<tr>
<th>Job</th>
<th>Arrival Time</th>
<th>Burst Time</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>15</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
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</tbody>
</table>

Give Gantt chart and calculate Average turnaround time and waiting time for:

a) FCFS  
b) SRTF  

**UNIT-III**

Q.5 a) Explain the working of Banker’s algorithm for deadlock avoidance with suitable examples.  
b) Differentiate between pre-emptive and non-pre-emptive scheduling.  

**UNIT-IV**

Q.6 Give memory partition of 100k, 500k, 200k, 300k, and 600k (in order). How would each of the first fit, best fit and worst fit algorithm place process of 212k, 417k, 112k, and 426k (in order)? Which algorithm makes the most efficient use of memory?  

Q.7 a) How address calculation is done in segmentation?  
b) Explain differences between:
   i) Logical and physical address.  
   ii) Internal and external fragmentation.  

**UNIT-IV**

Q.8 a) What are interrupts? How are they handled by an operating system?  
b) List the different types of files?  

Q.9 a) What are the advantages and disadvantages of continuous, linked and indexed allocation method?  
b) Describe the different types of access methods.
Q. 1  Multiple choice questions:
   a) In immediate addressing the operand is placed
      i) in the CPU register
      ii) after OP code in the instruction
      iii) in memory
      iv) in stack
   b) Pipeline implements
      i) fetch instruction
      ii) decode instruction
      iii) fetch operand
      iv) calculate operand
      v) execute instruction
      vi) all of above
   c) A time sharing system imply
      i) more than one processor in the system
      ii) more than one program in memory
      iii) more than one memory in the system
      iv) None of above
   d) A cache block is written into the main memory when
      i) valid bit is not set
      ii) every cycle
      iii) dirty bit is set
      iv) none of the above
   e) The communication bus which is used to fetch the address of an instruction
      from memory is called the ______
      i) Address bus
      ii) Control bus
      iii) Data bus
      iv) Fetch bus
   f) Under relative addressing, a program’s memory reference is added to the
      content of a (n) ______ to calculate the corresponding physical memory
      address.
      i) Instruction register
      ii) Program counter
      iii) Instruction pointer
      iv) Offset register
   g) When the control unit fetches an instruction from memory, it stores in the __
      i) instruction pointer
      ii) program status word
      iii) op code
      iv) instruction register

P.T.O.
h) MIMD stands for
  i) Multiple instruction multiple data
  ii) Multiple instruction memory data
  iii) Memory instruction multiple data
  iv) Multiple information memory data

i) A stack-organized computer uses instruction of
  i) Indirect addressing
  ii) Two-addressing
  iii) Zero addressing
  v) Index addressing

j) An address in main memory is called
  i) Physical address
  ii) Logical address
  iii) Memory address
  iv) Word address

UNIT-I

Q.2 Show the step-by-step multiplication process of 10 x -14 using booth algorithm. Assume 5-bit registers to hold signed numbers. 15

Q.3 Describe the various instruction code formats. Which one is better explain with suitable reasoning? 15

UNIT-II

Q.4 a) What is the difference between isolated I/O and memory mapped I/O? What are the advantages and disadvantages of each? 7
   b) Why interface is required between input and output devices and computer? Explain. 8

Q.5 Explain various modes of transfer? Why does DMA have priority over the CPU when both request a memory transfer? Why read and write lines of DMA controller are bidirectional? 15

UNIT-III

Q.6 What is a cache memory? What are the various types of mapping procedure? Also explain writing into cache. 15

Q.7 a) How many 128X8 RAM chips are needed to provide a memory capacity of 4096 bytes?
   b) How many lines of the address bus must be used to access 4096 bytes of memory? How many of these lines will be common to all the chips?
   c) How many lines must be decoded for chip select? Specify the size of the decoder. Draw the memory connection to CPU. 5x3

UNIT-IV

Q.8 Explain Flynn’s classification of computers. Describe four segment instruction pipelines with an example. 15

Q.9 Write short notes on:
   a) Interleaved memory organization,
   b) Reservation table. 7 1/2 x 2
End Semester Examination, May 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 Select the correct option:
a) Software is:
   i) Superset of programs
   ii) Subset of programs
   iii) Set of programs
   iv) None of the above

b) Project risk factor is considered in:
   i) Waterfall model
   ii) Prototype model
   iii) Spiral model
   iv) Iterative enhancement model

c) SRS document is for:
   i) What of a system
   ii) How to design system
   iii) Cost and scheduling of system
   iv) Systems requirement

d) The worst type of cohesion is:
   i) Temporal
   ii) Co-incidental cohesion
   iii) Logical cohesion
   iv) Hierarchical system

e) A system that does not interact with external environment is called:
   i) Closed system
   ii) Logical system
   iii) Open system
   iv) Hierarchical system

f) In reliability model, our emphasis is on:
   i) Error
   ii) Faults
   iii) Failures
   iv) Bugs

g) How many quality factors have been proposed in McCall quality model?
   i) 2
   ii) 3
   iii) 11
   iv) 6

h) Software mistakes during coding are known as:
   i) Failure
   ii) Defects
   iii) Bugs
   iv) Errors

i) Site of Beta testing is:
   i) Software company
   ii) User’s site
   iii) Any where
   iv) All of the above

j) Testing the software is basically:
   i) Verification
   ii) Validation
   iii) Verification and validation
   iv) None of above

UNIT-I

Q.2 a) Define software and software engineering. Give at least two definitions of software engineering.
   b) What are the various principle of software engineering.

Q.3 Explain the four major phases of spiral model of software development. What are limitations of such a model?

UNIT-II

Q.4 a) Write down definition of software metrics given by IEEE.
   b) Discuss the process of calculating function points (FPs) using suitable example.
Q.5 Explain all levels of COCOMO model. Assume that the size of an organic software product has been estimated to be 32,000 lines of code. Determine the effort required to develop the software product and the nominal development time using basic model.

**UNIT-III**

Q.6  
(a) Differentiate between logical and physical design.  
(b) Explain all types of coupling with suitable example. What problems are likely to arise if two modules have high coupling.

Q.7  
(a) Discuss the objectives of software design.  
(b) What are the factors that affect software reliability? Explain basic execution time model of software reliability.

**UNIT-IV**

Q.8 Consider a program to determine whether a number is 'odd' or 'even' and print message 
Number is EVEN or number is ODD. The number may be any valid integer. Design boundary value equivalence class test cases.

Q.9  
(a) Discuss the importance of path testing during structural testing.  
(b) What is cyclomatic complexity? Explain with the help of an example.
End Semester Examination, May 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. Q1 is compulsory. All questions carry equal marks.

Q.1
a) How many types of procedures are there in VB?
b) Clear property is available in ______ and ______ control.
c) What is the difference between MsgBox Statement and MsgBox function?
d) What is the full form of OLE?
e) What is the difference between a function and a sub (method)?
f) What is the difference in passing values ByRef or ByVal to a procedure?
g) How do we register a component in VB?
h) _______ and _______ are container controls.
i) There are _______ types of array in VB.
j) The use of OLE is to _______.

UNIT-I

Q.2
a) What do you mean by IDE? Explain the IDE of Visual Basic in detail.
b) Explain the following terms:
   i) Tool Box
   ii) Menu Bar

Q.3 What is GUI? What are the basic features required for any language to be suitable for making GUIs?

UNIT-II

Q.4
a) What is a module? Explain its use with the help of an example.
b) What is ActiveX? What are ActiveX controls? Explain some of the advanced ActiveX controls in VB.

Q.5
a) Explain why VB is called event driven language?
b) Give the differences between:
   Procedure level and form level variables.

UNIT-III

Q.6
a) What is the advantage of dynamic array over static array in VB?
b) Explain the need of user defined data types in a programming language. Also explain the term UDT in VB.

Q.7
a) How constants are declared in VB? Give an example in support of your answer.
b) Explain some of the inbuilt date functions available in VB.
c) Explain the decision making statements in VB.

UNIT-IV

Q.8
a) Explain all the steps required to generate the Data Report in VB.
b) How will you connect an Excel sheet to the controls on a VB form? Explain briefly.

Q.9
Explain the following terms:
a) ADO (ActiveX Data Object)
b) SQL (Structured Query Language)
c) RDO (Remote Data Object)
End Semester Examination, May 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 Choose the best alternative:
   a) A search algorithm is complete if it.
      i) always finds the optimal solution.
      ii) always finds a solution if there is one.
      iii) finds all possible solutions.
      iv) never finds a solution.
   b) Which of the following is a problem that occurs in hill climbing?
      i) Cliff  ii) Ridge iii) Valley iv) Rock slide
   c) An utility function is used in game playing to
      i) estimate the expected utility of the game from a given position.
      ii) computes the winner of the game based on number of pieces left.
      iii) computes the utility of a terminal leaf in a game tree.
      iv) computes the best move for the successor function.
   d) Why is it important in the minimax algorithm to generate the values of the
      evaluation function “bottom-up” rather than calculating them for each node
      when the node is visited first (“top-down”)?
      i) Minimax also works top-down, but the bottom-up method is more efficient.
      ii) This is the foundation for considering the possible countermoves by the
          opponent.
      iii) Because the value of the utility function can only be computed for leaf nodes.
      iv) Otherwise Minimax would have to be called Maximin.
   e) Expert systems use fuzzy logic, which allows users to respond to questions in a
      very humanlike way.
      i) True ii) False
   f) Which of the following statements characterizes predicate logic (in contrast to
      propositional logic)?
      i) The world is described through sentences consisting of constants, symbols,
         connectives, and parentheses.
      ii) A simple logic in which truth tables are the only way of proving sentences.
      iii) The world is described through sentences specifying individual objects with
           properties, and relations between the objects.
      iv) A logic that relies on resolution as the only sound inference rule.
   g) AND and OR operations are defined on ‘fuzzy set-
      i) True ii) False

State True or False:
   h) Resolution produces proof by refutation.
   i) Fuzzy logic is a superset of Boolean logic.
   j) A non-deterministic parser permits only one choice for each category. 1½x10

UNIT-I

Q.2 Define the following problems. What type of control strategy is used in the following
problems?
   a) The tower of Hanoi
   b) The Missionaries and cannibals problems
   c) 8-puzzle problem

P. T. O.
Q.3 Discuss the following search techniques with the help of examples. Also discuss the benefits and shortcoming of each.
   a) Breadth First Search.
   b) Depth First Search.

UNIT-II

Q.4 Discuss various approaches and issues in knowledge representation. Also discuss various problems in representing knowledge.

Q.5 Consider a knowledge base (KB) that contains the following propositional logic Sentences:
   \[ Q \rightarrow P \]
   \[ P = \neg Q \]
   \[ Q \lor R \]
   a) Construct a truth table that shows the truth value of each sentence in KB and indicate the models in which the KB is true.
   b) Does KB entail Q \rightarrow R? Justify your answer.

UNIT-III

Q.6 What are steps in natural language processing? List and explain them briefly.

Q.7 Explain the basic architecture of an expert system. Also give its applicability in different areas with suitable examples.

UNIT-IV

Q.8 What is perceptron? Explain structure of a simple perceptron and compare it with biological neuron. Draw the figure of perceptron.

Q.9 a) Define fuzzy logic. How does it differ from the crisp logic.
   b) List five applications of fuzzy logic.
   c) What are the basic limitations of the fuzzy systems?
End Semester Examination, May 2013
MCA - Fourth Semester
ADVANCED JAVA TECHNOLOGIES (MCA-403)

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 True or false:
   a) A function cannot be defined inside another function.
      i) True
      ii) False
   b) Functions cannot return more than one value at a time.
      i) True
      ii) False
   c) If return type for a function is not specified, it defaults to int.
      i) True
      ii) False
   d) Functions can be called either by value or reference.
      i) True
      ii) False
   e) A function may have any number of return statements each returning different values.
      i) True
      ii) False
   f) It is mandatory to declare class as public.
      i) True
      ii) False
   g) Boolean is a data type in java.
      i) True
      ii) False
   h) String is immutable in java
      i) True
      ii) False
   i) Do while loops cannot be nested.
      i) True
      ii) False
   j) Outer class in Java can only be public or default.
      i) True
      ii) False

1½x10

UNIT-I

Q.2 a) What is a constructor? How do we invoke a constructor? 7
   b) Define garbage collection? On what criterion, objects are deemed eligible for garbage collection? 8

Q.3 List the important features of Java programming language. How Java provides better application development environment than C++. 15

UNIT-II

Q.4 Write short notes on the following:
   a) TCP/IP
   b) Socket
   c) Java bean

5x3

P. T. O.
Q.5  a) Explain inheritance. How is inheritance implemented in Java? What are the common problems associated with inheritance? 8
    b) In which class are the methods wait, notify, notifyAll defined and why? 7

UNIT-III

Q.6  a) Explain the life cycle of Applet in detail. Give suitable example to support your answer.  7
    b) What is the difference between character oriented I/O and byte oriented I/O. 8

Q.7  Give differences between the following:
    a) Applet and frame  5x3
    b) MouseListener and MouseMotionListener
    c) FileInputStream and FileReader

UNIT-IV

Q.8  What is JDBC? What are the different classes used in JDBC? Write a program to execute a select statement on student (given below) table (Assume any database and login credentials)
    create table student { id int, name varchar(30), age int, address varchar(100)}. 15

Q.9  a) What are servlets? Explain the life cycle of servlet in detail. 8
    b) Explain the architecture of RMI in detail. 7
End Semester Examination, May 2013
MCA - Fourth Semester
ADVANCED DATABASES (MCA-404)

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 Choose the right answer:
   a) How many types of integrity rules:
      i) 1
      ii) 2
      iii) 3
      iv) 4
   b) A DBMS provides users with the conceptual representation of:
      i) Register
      ii) Data
      iii) Logical view
      iv) Physical view
   c) A Functional dependency is a relationship between or among:
      i) Tables
      ii) Rows
      iii) Relations
      iv) Attributes
   d) E-R stands for:
      i) Entry relationship
      ii) Entity relationship
      iii) Both
      iv) None
   e) The heading of a relation is also referred to as ________.
      i) Relation schema
      ii) Intension
      iii) Both
      iv) None
   f) Which are main commands for DDL in SQL?
      i) CREATE
      ii) ALTER
      iii) DROP
      iv) All of these
   g) Which command that allows the removal of all rows from a table but flushes a table more efficiently since no rollback information is retained?
      i) TRUNCATE command
      ii) Create command
      iii) Drop table command
      iv) Alter table command
   h) Which is derived from mathematical theory?
      i) IBM
      ii) SQL
      iii) ANSI
      iv) FD
   i) Which NF is based on multi-valued dependency?
      i) First
      ii) Second
      iii) Third
      iv) Fourth
   j) Which command is used to add the views to the database?
      i) DATABASE VIEW
      ii) CREATE VIEW
      iii) CREATE OPTION
      iv) None of these

1½x10

UNIT-I

Q.2 What is meant by normalization? Why we normalize the database? Explain its different techniques.

Q.3 Define RDBMS with example. Explain all Codd's rule for a good relational design.

UNIT-II

Q.4 a) Explain all relational constraints with proper syntax and a suitable example.
    b) Explain the major categories of SQL statements.

P. T. O.
Q.5 Explain the following commands with examples:
   a) CREATE
   b) UPDATE
   c) ALTER
   d) DESC
   e) RENAME

**UNIT-III**

Q.6 Discuss all control structures used in PL/SQL with their syntax and examples.
   15

Q.7 What does trigger mean? What are its uses and explain its working? Explain all types of trigger with suitable examples.
   15

**UNIT-IV**

Q.8 a) Explain the procedure to create a login screen with the help of an example.
    b) Write a short note on form builder.
       10
       5

Q.9 Create a student record with following fields (Roll number, Name, Marks in five subjects and Result) apply list, alerts, formulas appropriately.
   15
End Semester Examination, May 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) A ______ is anything that cause harm.  
     |   | i) Vulnerability ii) Phish  
     |   | iii) Threat iv) Spoof  
     | b) A Hacker contacts you my phone or email and attempts to acquire your password. This is called:  
     |   | i) Snooping ii) Fishing  
     |   | iii) Spamming iv) Bugging  
     | c) The phrase _______ describes.  
     |   | i) Viruses ii) Worms  
     |   | iii) Trojan horse attack applets iv) Attack scripts  
     | d) Which of the following is not a binary operation?  
     |   | i) Addition ii) Multiplication  
     |   | iii) Subtraction iv) Division  
     | e) Which of the following methods do not use the GCD concept to find the solution?  
     |   | i) Euclidean Algorithm ii) Linear Diophantine equation  
     |   | iii) Linear Congruence iv) Quadratic Congruence  
     | f) Which of the following is the general solution equation for linear diophantine equation?  
     |   | i) \( x = x_0 + k(b/d) \) ii) \( x = x_0 - k(b/d) \)  
     |   | iii) \( x = x_0 + k(b/d) \) iv) \( x = x_0 + k(c/d) \)  
     | g) What is cipher text?  
     | h) Define malicious software.  
     | i) Define replay attack.  
     | j) Write difference between Conventional encryption and public key encryption.  
     | k) List out parameters of AES.  
     | l) Name three defence models.  

UNIT-I

| Q.2 | Illustrate three common firewall configurations with necessary diagrams.  
     |   | 15

| Q.3 | Write short notes on:  
     | a) Security Attack  
     | b) Security Services  
     |   | 8  
     |   | 7

UNIT-II

| Q.4 | How hash functions are used in message authentication? Discuss.  
     |   | 15

| Q.5 | Explain in detail the basic techniques for password selection strategies.  
     |   | 15

UNIT-III

| Q.6 | Explain key generation encryption and decryption of SDES algorithm in detail.  
     |   | 15

| Q.7 | Explain digital signature algorithm with an example and its applications.  
     |   | 15

UNIT-IV

| Q.8 | Describe about groups, rings, modular arithmetic and finite field with examples.  
     |   | 15

| Q.9 | a) State and prove Fermat's theorem.  
     |   | 7  
     | b) Find GCD and multiplicative inverse of \((550 \mod 1759)\).  
     |   | 8
End Semester Examination, May 2013
MCA - Fifth Semester
ANALYSIS AND DESIGN OF ALGORITHMS (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) Two dimensional arrays are also called:
   i) Table arrays
   ii) Matrix arrays
   iii) Both of above
   iv) None of above
b) The complexity of merge sort algorithm is:
   i) O(n)
   ii) O(logn)
   iii) O(n^2)
   iv) O(nlogn)
c) The restriction while using the binary search is:
   i) List should be small in number
   ii) List should be large in number
   iii) List should be sorted
   iv) No restriction
d) Which of these in the convert big O' notation expression for 1+2+3+.........+n:
   i) O(logn)
   ii) O(n)
   iii) O(nlogn)
   iv) O(n^2)
e) Which of the following is not divide and conquer algorithm?
   i) Merge sort
   ii) Quick sort
   iii) Heap sort
   iv) None of above
f) Which algorithm solves all pairs shortest path problem?
   i) Dijkstra's algorithm
   ii) Floyd's algorithm
   iii) Prim's algorithm
   iv) Warshall algorithm
g) In the following graph, minimum cost-spanning tree has the cost:

   ![Graph Image]

   i) 18
   ii) 20
   iii) 24
   iv) 22
h) Which of the following in not a characteristic of an algorithm?
   i) Definiteness
   ii) Finiteness
   iii) Dividing in multiple task
   iv) Efficiency
i) The average number of comparison in sequential search is:
   i) \( \frac{n(n-1)}{2} \)
   ii) \( \frac{n(n+1)}{2} \)
   iii) \( \frac{n+1}{2} \)
   iv) \( n^2 \)
j) Minimum number of colours needed to colour a graph of \( n > 3 \) vertices and 2 edges is:
   i) 4
   ii) 3
   iii) 2
   iv) 1

1\frac{1}{2} \times 10

P. T. O.
UNIT-I

Q.2 Explain merge sort algorithm with complexity using recurrence relation. Consider the following list of elements:
70, 80, 40, 50, 60, 11, 35, 85
Sort the above list using merge sort.

Q.3 Let: $A = \begin{bmatrix} 4 & 2 & 0 & 1 \\ 3 & 1 & 2 & 5 \\ 3 & 2 & 1 & 4 \\ 5 & 2 & 6 & 7 \end{bmatrix}$ and $B = \begin{bmatrix} 2 & 1 & 3 & 2 \\ 5 & 4 & 2 & 3 \\ 1 & 4 & 0 & 2 \\ 3 & 2 & 4 & 1 \end{bmatrix}$
Find multiplication of A and B using Strassen's matrix multiplication. Also analyse the complexity.

UNIT-II

Q.4 Show that snapshots of Prim's and Kruskal algorithm for finding minimum weight spanning tree for the following graph:

Q.5 Explain OBST (optical binary search tree) algorithm with an example.

UNIT-III

Q.6 Devise an algorithm for n colouring problem case using Backtracking technique. Applying Backtracking technique to solve the 3 colouring problem for the graph shown below:

Q.7 Explain branch and bound technique. Apply this technique for solving TPS (travelling salesman problem) problem for the following graph:

UNIT-IV

Q.8 Prove that Hamiltonian path problem is NP complete.
Q.9 Prove that TSP (travelling salesman problem) is NP complete.
End Semester Examination, May 2013
MCA - Fifth Semester
DATA MINING AND DATA WAREHOUSING (MCA-503)

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 star schema has what type of relationship between a dimension and fact table.
   i) Many-to-many
   ii) One-to-one
   iii) One-to-many
   iv) All of the above
   b) __________ will answer questions you did not think to ask of your data.
      i) Data mining
      ii) Data extrapolation
      iii) Knowledge discovery
      iv) Data enlightenment
   c) How support and confidence are represented in association rules in data mining?
   d) Web mining is the technique to mine the contents of ________.
   e) In clustering the data which shows abnormal behavior is called ________.
   f) What parameter is represented by confusion matrix?
   g) Formula to calculate error rate is __________.
   h) The famous algorithm used to mine association rules is ________.
   i) Give two techniques to remove noise from data.
   j) Give two schemas for multidimensional database.  1½x10

UNIT-I

Q.2  a) Explain in detail the schemas for a multidimensional database.  10
    b) Explain the difference between ROLAP and MOLAP server architecture.  5

Q.3  a) Differentiate between distributed and virtual data warehouse.
    b) Explain the following terms:
       i) Data mart
       ii) Schema

UNIT-II

Q.4  a) What is data preprocessing? Explain its need.
    b) Give some techniques to clean the data.  10

Q.5  a) Explain the ways through which we can transform the data.
    b) Explain ETL in detail.  10

UNIT-III

Q.6  a) Explain the two steps required for association rule mining.
    b) Explain Apriori algorithm of finding association rules using example.  10

Q.7  a) What is an outlier? Explain the use of outlier analysis in medical field.
    b) Why clustering is known as unsupervised learning?  10

UNIT-IV

Q.8  a) Explain the application of web mining in real life.
    b) Give some social impacts of data mining.  10

Q.9  a) What do you think can be the disadvantages of data mining?
    b) Differentiate between time series and sequence data.  10
Q.1 Explain any ten of the following very briefly:  

(i) What do you mean by Secular State?  
(ii) What do you mean by Federalism?  
(iii) Which party is ruling in West Bengal?  
(iv) India is a republic country. True/false 
(v) Write two regional parties name.  
(vi) Write two national parties name.  
(vii) Who has the right to convene the Joint Session of the two Houses of Parliament in India?  
(viii) What are the Organs of State  
(ix) The Chairman of the Planning Commission in India is the President. (True/False)  
(x) UPA government is Coalition Government. True/False 
(xi) Vice President of India presides over Lok Sabha. (True/False)  
(xii) The Comptroller and Auditor General of India acts as the Chief Accountant and Auditor for the Union and State Governments (True/False)  
(xiii) Who is the Speaker of Lok Sabha?
PART-A

Write briefly about any five of the following: (6x5=30)

Q.2 Write the basic features of Lok Sabha

Q.3 Explain the right to freedom.

Q.4 Write the short notes on JP movement.

Q.5 Explain the Multi political party system of India.

Q.6 What are the duties of Election Commission of India?

Q.7 What is the eligibilities for the Governor of state?

Q.8 What do you mean by Panchayt Raj?

Q.9 What is difference between national party and regional party?

PART-B

Answer any two of the following: (17.5x2=35)

Q.10 What do you mean by Local Self Government. Discus the merit and demerit of Local Self Government.
Q.11. What are the eligibilities for the President of India? Write the power of Governor President of India.

राष्ट्रपति बनने के लिए क्या योग्यता होनी चाहिए? राष्ट्रपति की शक्तियाँ का वर्णन करें

Q.12 What are the salient features of Indian constitution? Discuss.

भारतीय संविधान की मुख्य विशेषताएं क्या हैं? चर्चा करें
Q.1 Explain any ten of the following: (1.5x10=15)

(i) Who was Surdas?
सुरदास कौन थे?

(ii) Tulsidas was devotee of Lord Ram. True/false
तुलसीदास प्रेमी राम के महर्षि थे. सत्य / गलत

(iii) What is Female Feticide?
क्षुद्राण्य हत्या क्या है?

(iv) Write the Major religion of India
भारत के मुख्य धर्मों का नाम लिखो.

(v) What is modernization?
आधुनिकीकरण क्या है?

(vi) Bible is the holy book of........
बाइबल पवित्र पुस्तक क्या है?

(vii) What do you mean by Subsidy?
सहायता से आप क्या समझते है?

(viii) What is Private sector?
निजी क्षेत्र क्या है?

(ix) What is Define Public Sector?
राजकीय क्षेत्र क्या है?

(x) What do you mean by primary activity?
प्राथमिक कार्य से आप क्या समझते है?

(xi) Write any two causes on illiteracy
नाराजगी के दो कारण लिखो।

(xii) What do you mean by Share Market?
शेयर बाजार से आप क्या समझते है?

(xiii) What do you men by customs?
पर्यावरण क्या समझते है?
PART-A

Write briefly about any five of the following: (6x5=30)

Q.2) What are the features of cast system?
भारत की जाति व्यवस्था की व्याख्या किए याद की है?
Q.3) What do you mean by Women empowerment?
महिला सशक्तिकरण से आप क्या समझते हैं?
Q.4) Write a short note on female feticide in India.
क्या भूमिका पर एक लघु परियोजना लिखें।
Q.5) What are the features of Indian society?
भारतीय समाज की विशेषताएं क्या हैं?
Q.6) Write a short note on the budget of India.
भारतीय अर्थव्यवस्था पर बजट के क्या प्रभाव है?
Q.7) Write a short on unemployment and poverty?
बेरोजगारी और गरीबी पर एक लघु परियोजना लिखें।
Q.8) Discuss the features of economic activities.
भारतीय अर्थव्यवस्था के विशेषताओं पर चर्चा करें।
Q.9) What do you mean by Bhakti movement?
भक्ति आंदोलन से आप क्या समझते हैं?

PART-B

Answer any two of the following: (17.5x2=35)
किसी दो के उत्तर दे।

Q.10) Write a detailed note on the modernization of India culture..
भारतीय संस्कृति के आधुनिकीकरण पर विश्वासपूर्वक विषय पर लिखें।
Q.11) What are the advantages and disadvantages of globalization? Discuss in detail.
भूमिका के लाभ और हानियाँ क्या हैं? विश्वासपूर्वक चर्चा करें।
Q.12) What is the role of public and private sectors in development of Indian economy?
भारतीय अर्थव्यवस्था के विकास में निजी और सरकारी क्षेत्र की क्या भूमिका है?
Manav Rachna International University  
End-Semester Examination, May, 2013  
BJMC-I Semester  
Introduction to Communication and Media (BJ-103)

Time: 3 Hours  
Max. Marks: 80

Note: Q. 1 is compulsory. Attempt any five questions from Part-A and two questions from Part-B

Q1 Attempt any 10 of the following (1.5X10=15)

a) Give any two examples of non-verbal communication

b) Define Intra personal communication

c) Name any two social networking sites

f) SITE stands for

g) Name any two sports magazine.

h) Define edutainment

i) AFP stands for...

j) What is the name of Hindi wing of UNI?

k) What is feedback?

l) Name any two type of radio programme

m) Name any two film magazines.

n) Television plays an important role in spreading education. (True/False)
Radio is an audio visual medium of communication. (True/False)
(5 marks)

PART-A

Answer any five of the following:

Q2 Write a short note on Interpersonal communication.
   संभालने के साधन का उपयोग करें
   व्यक्तिगत संचार पर एक लघु निबन्ध लिखें
   (6x5=30)

Q3 Discuss the process of communication in detail.
   संचार के प्रवाह की विस्तारपूर्वक चर्चा करें
   (5 marks)

Q4 Explain briefly the advantages and disadvantages of internet.
   इंटरनेट के लाभ और हानि की व्याख्या करें
   (5 marks)

Q5 Write a short note on e-newspaper
   ए-न्यूज़पेपर पर लघु निबंध लिखें
   (5 marks)

Q6 Write a short note on news agency.
   न्यूज़ एजेंसी पर लघु निबंध लिखें
   (5 marks)

Q7 Differentiate between verbal and non-verbal communication.
   व्यक्तिगत और न्यूज़ पर लघु निबंध लिखें
   (5 marks)

Q8 Discuss the scope of magazine in India.
   भारत में मैगजीन के स्थान की चर्चा करें
   (5 marks)

Q9 Write a short note social networking sites
   सामाजिक संचाल साइट पर लघु निबंध लिखें
   (5 marks)

PART-B

Answer any two of the following:

Q10 What is mass communication? How is it different from group communication? Clarify the difference by citing suitable examples.
   मैस एक्स्चेंज क्या है? जमीन संचार से यह किस प्रकार भिन्न है? सदाभार सहित अंतर स्तर करें
   (17.5x2=35)

Q12 Discuss in detail the role of communication in the development of society.
   समाज के विकास में संचार के भूमिका की विस्तारपूर्वक चर्चा करें
   (5 marks)

Q13 Trace the growth of radio in India since 1927.
   भारत में 1927 से रेडियो के विकास की चर्चा करें
   (5 marks)
Manav Rachna International University
End Semester Examination, May, 2013
BJMC – I Semester
Basic Language Skills (BJ-104)

Time: 3 Hours  Max Marks: 80

Note: Q. No. 1 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. (1.5X 10 = 15)

   A. Correct the following sentences:

   a) How many players is there?
   b) He go to school.
   c) Why do not he play?
   d) They told me that they will come.
   e) They has been waiting for them.
   f) It is a achievement.
   g) We are to busy to do this work.
   h) India has win the match.
   i) Why didn’t they went there?
   j) He has been doing his work for morning.

   B. Write Out the Verb Patterns in respect of the following sentences:

   a) Has he gone to school?
   b) He played Hockey.
   c) I gave him notes.
   d) The student is honest
   e) The students are punctual.

Part A

Answer any five of the following. (6 X 5 = 30)

1. Three examples of Hard news
2. Three examples of Soft news.
3. What are the different types of feature?
4. Coherency and correctness
5. Concept of News.
6. Sentence fluency
7. What are the different types of letter?
8. Prepare a CV.

Part B

Answer any two of the following. (17.5 X 2 = 35)

1. What are the basic elements of writing?
2. Discuss the importance of grammar in writing.
3. Write an essay on Surajkund Mela
Manav Rachna International University
End Semester Examination, May-2013
BJMC – II Semester
Press Laws and History of Journalism (BJ-201)

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. Answer any ten of the following:

(1x10=10)

a) The first hour of every sitting of the Lok Sabha is called –
बैठक का पहला घंटा को क्या कहा जाता है?
b) How many spokes are there in our national emblem 'Ashoka Chakra'?
कितने प्रकार के समय बिंदु हैं?
c) How many Fundamental Rights have been incorporated in the Constitution of India?
कितने मूलिक अधिकार भारत के संविधान में शामिल किए गए हैं?
d) The Press Council of India was first constituted on___.
भारतीय प्रेस परिषद पहले गठित कब हुआ था?
e) The Press Council shall consist of a Chairman and 22 other members. True/False
प्रेस परिषद में एक अध्यक्ष और 22 अन्य सदस्य होंगे. यह सच है?
f) The Government passed the “Gagging Act” on___.
सरकार "चेतना अधिकार "कब पारित हुआ था?
g) The Act which regulates printing presses and newspapers and makes registration with an appointed Authority compulsory for all printing presses is termed as___.
प्रिंटिंग प्रेस और समाचार पत्रों को नियंत्रित करने वाला एवं एवं प्रिंटिंग प्रेस के लिए अनिवार्य एक नियुक्त प्राधिकरण के साथ पंजीकरण करता है जो अधिकारियों करार दिया था.
h) What do you mean by ‘Convergence’?
कंक्वर्जेंस का क्या मतलब है?
i) Which is the largest news agency of India?
भारत की सबसे बड़ी समाचार एजेंसी का नाम लिखें?
j) In which year Television came to India?
किस वर्ष टेलीविजन भारत में आया था?
k) Who started ‘The Calcutta General Advertiser’?
‘कलकत्ता जनरल विज्ञा पत्रिका’ किसंदर किया था?
l) Who is considered as the champion of Indian journalism?
भारतीय पत्निकार के चैंपियन के रूप में किस को माना जाता है?
m) The art of printing first entered India through Madras. Yes/No
छपाई की कला पहले मद्रास के माध्यम से भारत में प्रवेश किया हां नहीं?
n) What do you mean by ‘Cyber’?
'साइबर' का क्या अर्थ है?

o) Who is the great American printer of the 18th century? Mendoza or Ben Franklin जी 18वदी के महान अमेरिकी प्रिंटर कौन है? मेंडोजा या बेन फ्रैंकलिन

PART-A

Q.2. Answer any five of the following: (5x5=25)

a) Write a short note on Broadcast guidelines.
   प्रसारण दिशानिर्देश पर एक संक्षिप्त नोट लिखें

b) “Printing press as a mass communication tool” Explain
   “एक जन संचार उपकरण के रूप में प्रिंटिङ प्रेस की मूल्यिका को विस्तार करें.”

   के 1889 सरकारी गोपनीयता कानून पर एक संक्षिप्त नोट लिखें.

d) Differentiate between libel and defamation.
   लाइबल और बदनामी के बीच अंतर क्या है?

e) Write brief note on the necessity of media ethics for Journalists.
   पत्रकारों के लिए मीडिया नैतिकता की आवश्यकता पर संक्षिप्त नोट लिखें.

f) Distinguish between the Vernacular Press Act and the Rowlatt Act
   वर्नूकूल प्रेस एक्ट और रोलाट एक्ट के बीच अंतर लिखें.

Q.3. Answer any two of the following: (17.5x2=35)

a) Explain in detail the history of pre and post status of printing press and its impact on social reform movements in India.
   विद्तार से प्रिंटिङ प्रेस और भारत में सामाजिक सुधार आंदोलनों पर इसके प्रभाव के पहले और बाद की स्थिति के इतिहास के बारे में बताएं.

b) Write a descriptive note on the Journalistic ethics and discuss the social responsibility of media.
   पत्रकारिता नैतिकता पर एक वर्णनात्मक पत्र लिखें और मीडिया की सामाजिक जिम्मेदारी पर चर्चा करें.

c) Define Cable Act and explain in detail the Cyber Laws (I T Act 2000) in India.
   केबल एक्ट को परिभाषित करें और विस्तार से भारत में साइबर कानून 2000 अधिनियम (को समझाएं).
Manav Rachna International University
End Semester Examination, May-2013
BJMC – II Semester
IT FOR MEDIA (BJ-203)

Time: 2 hrs

Max Marks: 50

Note: Q. No.1 is compulsory. Attempt any five questions from Part-A and any two questions from Part-B.

Q.1 Answer any two of the following MCQ:

(i) Programs written in an assembly language are converted into machine language in a computer by...
A) Assembler
B) Compiler
C) Processor
D) Interpreter

(ii) Oracle is a/an...
A) An operating system
B) Word processor
C) Database software
D) None of these

(iii) A computer cannot “boot” if it does not have the...
A) Computer
B) Loader
C) Operating System
D) Assembler

(iv) A/an ...... converts and executes one statement at a time.
A) Compiler
B) Interpreter
C) Converter
D) Instructions

ए) कंप्यूटर
बी) लोडर
cी) ऑपरेटिंग सिस्टम
dी) असेंबलर

एक ...... एक समय में एक ब्यान को व्यवस्थित करता है और कार्यान्वित करता है।
ए) कंप्यूटर
बी) इंटरप्रीटर
(v) IC chips used in computers usually made up of
A) Silicon
B) Lead
C) Chromium
D) Gold
कंप्यूटर में इस्तेमाल होने वाले IC चिप्स आमतौर पर बनाया जाता हैं
ए) सिलिकोन
बी) सील से का
सी) क्रोमियम
डी) स्वर्ण का

(vi) A DNS translates a domain name into what?
A) Binary
B) Hex
C) IP
D) URL
एक DNS एनएस एस में एक डोमेन नाम अनुवाद है
ए) बिनरी
बी) हेक्स
सी) आईपी
डी) यूएलआरएस

(vii) Input is modified into output by...
A) Peripherals
B) Memory
C) Storage
D) CPU
इनपुट को आउटपुट में संशोधित किया जाता है ...
ए) मेमोरी
बी) स्टॉरेज
सी) भंडारण
डी) सीपीयू

(viii) Select the odd one out:-
A) Interpreter
B) Compiler
C) Operating System
D) Assembler
इनमें से एक फिर्ता का प्रयोग करें: -
ए) इंटरप्रेटर
बी) कंप्लीलर
सी) ओपरेटिंग सिस्टम
डी) असेम्ब्लर

(ix) A collection of 8 bits is called
A) Byte
B) Word
C) Record
D) None of the above
8 बिट का एक संग्रह कहा जाता है
ए) बाइट
वी) शब्द  
सी) रिकॉर्ड  
डी) उपरोक्त में से कोई नहीं  
(x) In Excel, workbook is a collection of  
A) Workbooks  
B) Worksheets  
C) Charts  
D) None of the above  
एक्सेल में, कार्यपुस्तक का एक संग्रह है  
ए) कार्यपुस्तक  
बी) चार्ट  
सी) चार्ट  
डी) उपरोक्त में से कोई नहीं  
(xi) What type of memory is volatile?  
A) Cache  
B) RAM  
C) ROM  
D) Hard Drive  
किस प्रकार की स्मृति के अंतर्गत हैं?  
ए) कैश  
बी) रेम  
सी) रोम  
डी) सर्व ड्राइव  
(xii) Computers on an Internet are identified by...  
A) E-Mail address  
B) Street address  
C) IP address  
D) None of the above  
एक कंप्यूटर इंटरनेट पर पहचान जा सकता हैं...  
ए) ई - मेल पते  
बी) सड़क का पता  
सी) आईपी पते  
डी) उपरोक्त में से कोई नहीं  
(xiii) Convert the binary no. 110010101 into decimal number.  
बाइनरी संख्या 110010101 को देसीमल संख्या में परिवर्तित करें।  
(xiv) ……………computer is a combination of analog and digital computer.  
…………… कंप्यूटर एनालॉग और डिजिटल कंप्यूटर का एक संयोजन है।  
(xv) URL stands for...  
यूएसबीएल शब्द प्रयोग होता है...  

PART-A  
Write briefly about any five of the following (4X5=20)  

Q. 2. What is Data and Information? Mention any four applications of IT.  
डेटा और सूचना क्या है? आईटी के किसी भी धारा अनुप्रयोग का उल्लेख करें।  
Q. 3. Write short notes on the followings:  
   (i) Repeater  
   (ii) Router
Q. 4. Differentiate the followings:
(I) Primary Memory and Secondary Memory
(II) Assembly and Machine Language
(III) Client and Server
(IV) Impact and Non-impact Printer

Q. 5. Write five output devices and explain in detail about the CRT monitor.

Q. 6. Write down the classification of function in Excel.

Q. 7. What are the equipments required for using Internet? What are the advantages of Internet?

Q. 8. Explain the various types of views in MS Word.

Q. 9. Write down the name and function of the tools available in the Adobe PageMaker tool box.

PART-B

Answer any two of the following


Q. 11. Define the term ‘Topology’. Explain the various types of topology used in networking.

Q. 12. What is transmission channel (communication media) and how many types of channel are used in networking? Describe the mode of data transmission in a channel with suitable example.
Q.1 Attempt any ten of the following:

a. Define Balloon
   बॉलोन को परिभाषित करें

b. What is desk?
   डेस्क क्या है?

c. What do you mean by beat?
   बीट से क्या मतलब है?

d. What is Bullet?
   बलेट क्या है?

e. What is Broach sheet?
   ब्रोश शीट क्या है?

f. P&I stands for......
   पी एंड आई से क्या तात्त्वक है?

g. What is gutter?
   गटर क्या है?

h. What is Caption?
   कैप्चन क्या है?

i. Who is the editor of Hindi daily newspaper ‘Hindustan’?
   हिंदी दैनिक अखबार हिंदूस्तान के संपादक कौन है?

j. What is Dummy?
   डमी क्या है?

k. What do you mean by date line?
   डेट लाइन से आधा क्या मतलब है?

l. What is lead?
   लीड क्या है?

m. What is Masthead?
   मास्टहेड क्या है?

n. What is cropping?
   क्रोपिंग क्या है?

o. Who is the editor of English daily The Indian Express?
   इंग्लिश दैनिक अखबार पी इंडियन एक्स्प्रेस के संपादक कौन है?
PART-A

Answer any five of the following: (4X5=20)

किसी पांच प्रश्न का उत्तर दें

1. Discuss the hierarchy of a desk of a newspaper organization.
   एक अखबार संस्थान के डेस्क कार्यालय के पदार्थ अवधारणा पर चर्चा करें।
2. What are the basic elements of a news report?
   किसी न्यूज रिपोर्ट के बुनियादी तत्व क्या हैं?
3. What are the qualities of a reporter?
   एक रिपोर्टर के गुण क्या हैं?
4. Discuss the importance of layout in Print media industry.
   प्रिंट मीडिया उद्योग में लेयरिंग के महत्व पर चर्चा करें।
5. Discuss the concept of news.
   सामाजिक के अवधारणा की चर्चा करें।
6. Discuss the concept of breaking news.
   ब्रेकिंग न्यूज की अवधारणा की चर्चा करें।
7. Write a short note on Inverted Pyramid.
   विलोम रुपांच पर एक संक्षिप्त नोट लिखें।
8. Write about the types of newspaper.
    अखबार के प्रमुख प्रकार क्या हैं?

PART-B

Answer any two of the following: (10X2=20)

किसी दो प्रश्न के उत्तर दें।

1. What are the different types of reporting? Discuss with examples.
   रिपोर्टिंग के विभिन्न प्रकार क्या हैं? उदाहरण से साक्ष्य चर्चा करें।
2. What is news value? Discuss the news values with examples.
    खबर मूल्य क्या है? उदाहरण से खबर मूल्यों की चर्चा करें।
3. ‘Writing for media is challenging’. Discuss.
    मीडिया लेखन पुनरूपित किया जाता है, चर्चा करें।
Manav Rachna International University
End Semester Examination, May-2013
BJMC- III Semester
Communication Theory (BJ-301)

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:

(1X10=10)

a) What do you understand by channel in communication?

b) In communication sender decodes the message. (True/False)

c) Give two examples non verbal communication.

d) Name any two barriers of communication

e) What is inter-personal communication?

f) Write any two characteristics of Mass communication.

g) Dependency Theory says that;

h) Define culture.

i) What do you understand by Kinesics?

(10)

किन्हीं दस प्रश्नों के उत्तर दे
j) Hypodermic needle theory is also known as ................
हपोडर्मिक नीडल थीरापी के रूप में भी जाना जाता है ................
k) Cultivation theory was given by ....................
कल्टिवेशन सिद्धांत द्वारा दिया गया था .....................

l) What is Noise?
शोर क्या है?
m) Name any two functions of communication.
संचार के किसी भी दो कार्यों के नाम

n) In communication ‘feedback’ can be explained as
संचार में ‘फीडबैक’ के रूप में समझा जा सकता है
a) response from the receiver
रिप्ली के संगति का संगति
b) explanation of a theory
एक सिद्धांत की व्याख्या;
c) Process of communication
संचार की प्रक्रिया;
o) Who is Marshal McLuhan?
मार्शल मैकलूहन कौन है?

PART-A
Answer any five of the following:
किसी पांच प्रश्नों का उत्तर दे (5X5=25)

Q2. Write a short note on the Multi-step flow theory of communication.
संचार की बहु कदम प्रवाह के सिद्धांत पर एक संक्षिप्त नोट लिखें.

Q3. Distinguish between verbal and non verbal communication.
भाषात्मक और नैभाषिक संचार के बीच अंतर करके दर्शाइएं।

Q4. Differentiate between interpersonal and intrapersonal communication.
पारस्परिक और अन्तर्प्रेमिक संचार के अंतरबीच व्यक्तित्व अंतर हैं।

Q5. Write a short note on the seven C’s of communication.
संचार सात सी एक संक्षिप्त नोट लिखें.
Q6. Explain briefly the Osgood model of communication.

Q7. Write a short note on Cultivation theory.

Q8. Discuss in detail the process of communication.

Q9. Write a short note on effective communication

PART-B
Answer any two of the following:
किन्हीं दो प्रश्नों के उत्तर दें।  (17.5X2=35)

Q10. Discuss in detail the Shannon-weaver and Lasswell model of communication.

Q11. What is communication? Discuss the barriers of communication in detail.

Q12. "Communication is 'the key of development'. Elaborate.
    "संचार विकास की कुंडी है, ' प्रकाश डालिए।"
Manav Rachna International University
End Semester Examination, May-2013
BJMC – III Semester
Advertising and Public Relations (BJ-302)

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. Answer any ten of the following:
   a) The abbreviation SWOT stands for _______.
   SWOT का बिस्तर करें.
   (1x10=10)

   b) Public Relations is a _______ communication process.
   सार्वजनिक संबंध एक _______ संचार प्रक्रिया है.
   c) Man is a _______ animal.
   इंसान एक _______ प्राणी है.
   d) Name any two tools of Public Relations.
   लोक संपर्क की किसी भी दो उपकरण नाम बताएं.
   e) What do you mean by classified advertising?
   आप वर्गीकृत विज्ञापन से क्या समझते हैं?
   f) Name any two advertising apex bodies in India.
   भारत में किसी भी दो विज्ञापन शीर्ष निकायों नाम लिखें.
   g) Name any two advertising agencies of India.
   भारत के किसी भी दो विज्ञापन एजेंसियों नाम बताएं.
   h) Advertising is a powerful marketing tool. True/False
   विज्ञापन एक शक्तिशाली विपणन उपकरण है. यह सच है / झूठा
   i) The acronym AIDCA denotes what?
   AIDCA क्या अर्थ है?
   j) Outdoor advertising refers_______.
   आउटडोर विज्ञापन संदर्भित करता है_______
   k) Write any two qualities of a PR professional
   एक पीआर पेशेवर के किसी भी दो गुणों लिखें.
   l) The word “Advertio” means what in advertising.
   Advertio शब्द का विज्ञापन में क्या मतलब है?
   m) Name the stages in PLC?
   पीएसएच में चरणों के नाम बताएं?
   n) What do you mean by POP?
   आप पीप से क्या मतलब है?
Q.2. Answer any five of the following: (5x5=25)

a) Discuss the social and economic aspects of advertising.

b) Define copy and write down the various types of ad copy.

c) How Publicity is different from Advertising? Discuss.

Q.3. Answer any two of the following: (17.5x2=35)

a) Discuss in detail the historical growth of advertising in India and explain in detail various types of advertising.

b) Critically examine the role of new age advertising vehicles in the corporate world.

c) Trace out the historical development of PR and discuss the functions of a PR department.
Manav Rachna International University
End Semester Examination, May 2013
BJMC – III Semester
Photography, Design and Graphics (BJ-303)

Time: 3 Hours
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:

(i) ‘Camera’ is actually a Latin word meaning
   a) picture box
   b) room
   c) light box
   d) dark

   कैमरा व्यंजन में एक लैटिन शब्द है, जिसका का अर्थ है:-
   क) चित्र बोक्स
   ख) कैमरा
   ग) प्रकाश बोक्स
   घ) अंधेरा

(ii) A slave is
   a) A remote flash trigger
   b) A small tripod
   c) Someone to carry your gear
   d) None of the above

   एक स्ले द है
   क) एक दूरस्थ फ्लैश ट्रिगर
   ख) एक छोटी लिथाइ
   ग) कोई जो आपका सामान ले जाने के लिए
   घ) उपयुक्त से कोई नहीं

(iii) The fastest colour film available is
   a) 1000 ASA
   b) 1600 ASA
   c) 3200 ASA
   d) 100 ASA

   उपलब्ध सबसे तेज किंयासील रंगील फिल्म है
   क) 1000 एसएसए
   ख) 1600 एसएसए
   ग) 3200 एसएसए
   घ) 100 एसएसए

(iv) Metol is a
   a) Developing agent
   b) Reducing agent
   c) Both
   d) None of the above
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

vi) Using tungsten film in daylight will cause a
   a) Blue cast
   b) Orange cast
   c) Green cast
   d) Normal cast

vii) Who coined the term ‘photography’?
   a) Fox Talbot
   b) Nicéphore Niepce
   c) Sir John Herschel
   d) Robert Hook
8) Daylight colour film is balanced for light at
   a) 3200 K
   b) 3400 K
   c) 4000 K
   d) 5400 K

9) A ‘bleeding’ picture is one that is
   a) Without borders
   b) Badly printed
   c) Streaked due to exhausted developer
   d) Red color picture

10) A photon is a particle of light energy.
    a) A particle of light energy
    b) A measure of light energy
    c) A stream of light energy
    d) None of the above

Panoramic cameras can cover an angle of view of
   a) 180 degrees
   b) 270 degrees
   c) 1 degree
   d) 360 degrees

Name any two types of the printer.
   किसी भी दो प्रकार के प्रिंटर का नाम बताएं।

SLR stands for.........................
Part-A

Answer any five of the following: (5x5=25).

Q.2 Write Short notes on the following:
   (a) F-stop
   (b) Focal length
   (c) एफ स्टॉप
   (d) फोकल लंबाई

Q.3 Explain in detail about Hot and Cold Type in Typography.

Q.4 What is photo cropping? Explain the concern points while manipulating a photograph.

Q.5 Write Short notes on the following:
   (i) Shutter in a camera
   (ii) Zoom lens

Q.6 What is designing? Explain the importance of Designing.

Q.7 Explain the various types of film used in photography.

Q.8 Describe the lens aberrations. Write down the characteristics of corrected lens.

Q.9 What are the points to be remembered while proceeding for the wild life photography?

Part-B

Answer any two of the following: (17.5x2=35)

Q.10 What is filter factor? Explain the various types of filter used in photography.

Q.11 What is digital sensor in a camera? Discuss in detail its advantages and disadvantages over film.

Q.12 Explain the various Printing Methods in detail.

Q. 1  Attempt any ten questions.  

कितनी दस प्रश्नों के उत्तर हैं: 

a) Define motivation?  
उत्तरण क्या है?  

b) What is census?  
उन्नयन क्या है?  

c) Who is a consumer?  
उपभोक्ता कौन है?  

d) What do you mean by Participatory observation method?  
सहभागिता अभ्यासक प्रणाली से आप क्या समझते हैं?  

e) Define geographic segmentation of market?  
भौगोलिक विभाजन क्या है?  

f) What do you mean by demographic Segmentation of market?  
हेमोग्राफिक विभाजन के आप क्या समझते हैं.  

g) What is the primary objective of doing content analysis?  
विषय वस्तु का आकलन का प्रमुख उद्देश्य क्या है?  

h) Give an example of quantitative research method.
What does SWOT stand for?
एस डब्ल्यू ऑ टी से व्या तत्त्वादि है?

Amir Khan is the brand ambassador of which social advertisement?
आमिर खान किस सामाजिक विज्ञापन के ब्रांड अंबास्डर हैं.

Define open ended question.
अपेन्ड इंडे प्रश्न को परिभाषित करें.

Write any one type of probable sampling method.
संपादित नमूने प्रणाली के फिर एक प्रकार के विवरण में लिखें.

Quantitative Research is based on statistics.

i) True ii) False
मात्रकालक शैक्षणिक संबंधित होता है।
सही / गलत

NRS stands for -------------------
एन आर एस से तत्त्वादि है -------------------

What are needs?
आवश्यकता क्या है?

PART A
किसी शोध प्रश्न के उत्तरें:

2) Explain various types of needs?
 आवश्यकता के विभिन्न प्रकार की व्याख्या करें

3) What are the factors affecting Consumer behaviour?
 उपभोक्ता व्यवहार को प्रभावित करने वाले विभिन्न कारक क्या हैं?
4) Differentiate between Questionnaire and Schedule

प्रश्नावली और सूची में अंतर बताएं.

5) Define Content Analysis and its process

विषय वस्तु अध्ययन की परिभाषा दें और इसकी प्रक्रिया बताएं.

6) What is psychographic segmentation?

मनोवैज्ञानिक विभक्ति क्या है?

7) Explain sociological segmentation?

सामाजिक विभाजन की व्याख्या करें।

8) Explain any two types of Probable Sampling method.

समान्तर नमूने प्रश्नावली के किसी दो प्रकार की व्याख्या करें।

PART B

किसी दो प्रश्न के उत्तर दे:

9. Describe the Models of Consumer Behavior in detail.

उपभोक्ता व्यवहार के मॉडल की विस्तारपूर्वक वर्णन करें।

10. Prepare a Questionnaire on any social issue.

किसी सामाजिक सुधे पर एक प्रश्नावली तैयार करें।

11. Explain the various sources of data collection for any research study.

किसी शोध के लिए डाटा संग्रह करने के विभिन्न स्रोतों की व्याख्या करें।
Manav Rachna International University
End Semester Examination, May, 2013
BJMC-IV Semester
Media Issues and Debates (BJ-401)

Time: 3 Hours

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:
किन्हीं दस प्रश्नों के उत्तर दे (1X10=10)

a) What is PTI?
पी टी आई क्या है?

b) Why Sarabjit is in news?
सरबजीत क्यों चर्चा में है?

c) Who is the director of the movie ‘Student of the Year’?
‘स्टूडेंट ऑफ द यीएर’ फिल्म के निर्देशक कौन है?

 d) What is special about the movie Life of Pi?
लाइफ ऑफ पाई फिल्म में क्या विशेष था?

e) What is ‘Varta’ and ‘Bhasha’?
‘वार्ता’ और ‘भाषा’ क्या है?

f) What is Editor’s guild?
‘एडिटर्स गिल्ड’ क्या है?

g) What is TRP?
‘टीआरपी’ क्या है?

h) What is Press Club?
‘प्रेस क्लब’ क्या है?

i) What is PCI?
‘पीसीआई’ क्या है?

j) What is AFI?
‘एफआई’ क्या है?

k) What is JPC?
‘जीपीसी’ क्या है?

l) What is Paid News?
‘पेड न्यूज’ क्या है?

m) Who is Markandey Katju?
‘मार्कांडेय काट्जु’ कौन है?
n) What is Lokayukta?
लोकयुक्त क्या होता है?
o) What is RTI?
आर आई क्या पारित हुआ?

PART-A

Answer any five of the following:
किसी पांच प्रश्न का उत्तर दे

2. 'Free and Fair Media is the pillar of Democracy. Discuss.

3. Comment on the role of media in women empowerment.

4. What are the main provisions of RTI act?

5. 'A reporter is considered as the backbone of media industry'. Comment

6. Write a short note on the challenges of the print media industry.

7. Write a short note on media activism.

8. Write a short note on paid news.

9. What are the elements of development reporting?

PART-B

Answer any two of the following:
किसी दो प्रश्न के उत्तर दे

10. 'Media is guided and controlled by the market'. Do you agree? Support your views with suitable example.

11. Write a detailed note on Gender portrayal in Indian Media industry.

12. Write a detailed note on Yellow Journalism.

Manav Rachna International University
End Semester Examination, May-2013
BJMC- IV Semester
Event Management (BJ-402)

Time: 3 Hours                   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:
(1X10=10)

a) Define Event budget
Define a budget to be prepared.

b) Define Publicity
Publicity means preparing the press to announce.

c) Write any two objective of an event.
Two objectives could be:

i) To create awareness
ii) To raise funds

(i) Write any two visuals aids used for the publicity in an event

(a) Poster
(b) Flyer

(e) What is formal event?
An event that is arranged by a person or a group in an official manner.

(f) What do you mean event management?
Event management could be:

(iii) Planning
(iv) Execution

(g) What is press conference?
A press conference is a meeting where the media can ask questions.

(h) Media plays an important role in promotion of an event. (True/False)
Media play a crucial role in promoting an event.

(i) What do you mean by co-sponsorship?
Co-sponsorship means sharing the expenses and the responsibilities.

(j) What is the importance of time management in an event?
Time management is crucial to ensure the smooth running of the event.

(k) What do you mean by marketing event?
Marketing an event involves promoting it to attract attendees.

(l) Name any two companies that are famous for organizing event.

(a) Reliance
(b) India Today

(m) Write any two scope of event management.

(i) Training
(ii) Entertainment
n) Define Evaluation.

० What is Risk Management?

Part-A

Answer any five of the following:

किन्हीं पाँच प्रश्नों का उत्तर दे  

(5x5=25)

Q2. Discuss the role of sponsor in an event.

किसी इवेंट के लिए प्रयोजक की भूमिका बताएं।

Q3. Write a short note on importance of event management.

इवेंट प्रबंधन के महत्व लघु टिप्पणी करें।

Q4. 'Publicity plays an important role in the success of an event'. Discuss
किसी इवेंट की सफलता में प्रचार मतदान्य भूमिका निम्नलिखित हैं' चर्चा करें।

Q5. Explain briefly the various key elements of an event.

किसी इवेंट के मतदान्य तत्त्वों की चर्चा करें।

Q6. Discuss the role and qualities of an event Manager.

इवेंट प्रबंधक के गुणों और भूमिका की चर्चा करें।

Q7. How will you promote a low budget event being held in your society? Name the

आपके समाज में आयोजित होने वाले किसी कम बजट के इवेंट को आप कैसे

प्रोचाताएं? किन्हीं दो प्रणाली का नाम बताएं।

Q8. Make an invitation card for an informal event.

किसी इवेंट के लिए निम्नलिखित पत्र बनाएं।

Q9. Discuss in detail how to make an event budget.

कोई इवेंट बजट तैयार करने की प्रक्रिया की विस्तारपूर्वक चर्चा करें।

Part-B

Answer any two of the following:

किन्हीं दो प्रश्नों का उत्तर दे।  

(17.5x2=35)

Q10. What is planning? Discuss in detail the various steps of event Planning.

नियोजन क्या है? किसी इवेंट प्रबंधन के नियोजन के चर्चा प्रक्रिया की चर्चा करें।

Q11. Discuss the process of event evaluation in detail.

इवेंट मूल्यांकन के प्रक्रिया की चर्चा करें।

Q12. What is event? Discuss the various types of events with examples.

इवेंट क्या है? इवेंट के विभिन्न प्रकार की सोच चर्चा करें।
Q.1 Attempt any ten of the following:
(10 marks)

a) Among following which one is folk medium?
   (a) Radio   (b) Puppetry   (c) Newspaper   (d) Mobile
   निम्न में से कौन सा प्राचीन प्राचीन का एक माध्यम है?

b) Folk theatre is used for Development Communication. True/False
   लोक नृत्य का इस्तेमाल विकास आवश्यकता संबंध के लिए किया जाता है (सच/सत्य)

c) Who termed the mass media “the magic multiplier”?  
   बड़ी मीडिया को “मैगिक मल्टिप्लाईर” कहते है?

d) What is the full form of SITE?
   साइट क्या उद्देश्य या आरोग्य इन्फार्मेशन टेक्नोलॉजी इनस्टिट्यूट है?

e) Who is the present brand ambassador of tuberculosis ad campaign?
   दीवाना के लिए अभियान का ब्रांड एम्बेस्डर कौन है?

f) Community radio is a part of development communication. (True/False)
   समुदायी रेडियो विकास आवश्यकता संबंध का एक हिस्सा है (सच/सत्य)

g) What was the prime objective of Kheda Communication Project of India?
   येढा संचार अभियान का प्राथमिक उद्देश्य क्या था?

h) Name any two folk medium of North India?
   उत्तर भारत के दो सपने घटकोलोकी नाम बताएं.

i) What is the present male – female ratio in India?
   वर्तमान में भारत में पुरुष-क्षेत्रीय अनुपात कितना है?

j) “The Diffusion of Innovation” is written by whom?
   “डिफ्युजन ऑफ इनोवेशन” द्वारा किसने लिखा?

k) Whose work is “The Passing of Traditional Society: Modernising the Middle East”?
   किसके द्वारा काज “जल्दी लोक: मध्य-decoration द्वारा इमोर्निज किया गया?

l) Who is the author of “The coming of Post Industrial Society”?
   किसके द्वारा “पोस्ट इंडस्ट्रियल सामाजिक की” की रचना की?

m) TRAI stands for………………………………………
   टेरीआईएवी क्या है?

n) KHEDA stands for……………………………………
   खेडा क्या है?

o) Who is the brand ambassador of Pulse Polio advertisement today?
   डिस्प्ले के प्राप्ति संघ अभियान का ब्रांड एम्बेस्डर कौन है?
PART A

Answer any five of the following

Q2 Discuss the role of cyber media play in developing a country.

Q3 Define women empowerment with one suitable example of government initiative in empowering women in India.

Q4 Discuss briefly the Participatory Communication Method

Q5 Discuss the role of communication in the development of rural areas.

Q6 What do you mean by traditional media? Discuss at least two traditional medium of communication which are widely used in development communication.

Q7 Discuss any social awareness campaign aid which has been successful in India.

Q8 'Information and communication technology have greater role to play in urban development'. Comment.

Q9 Discuss any environmental issue that is a major challenge in India.

PART B

Answer any two of the following

Q10 Define urban development. Also discuss the various policies of Government of India.

Q11 Define development. And also discuss the developmental experiences in the developing countries.

Q12 "Participatory communication is the key to development communication". Explain.

(5x5=25)

(17.5x2=35)
1. Answer any ten of the following questions (1 X 10 = 10)

   a) What is balloon?
      बैलूण क्या है?

   b) What is Caption?
      शॉर्ट्रेक क्या है?

   c) What is AP?
      ए पी क्या है?

   d) Name the first newspaper of India.
      भारत के प्रथम समाचार पत्र का नाम क्या है?

   e) What is UNI?
      यूनाइटेड नेशनल इंटरनेशनल क्या है?

   f) Who is known as the father of Indian Journalism?
      भारतीय पत्रकारिता का जनक किसे कहते हैं?

   g) What is Dateline?
      डेटलाइन क्या है?

   h) What is print line?
      प्रिंट लाइन क्या है?

   i) Who is the editor of the daily newspaper ‘The Mail Today’?
      दैनिक अखबार ‘टीमल टॉडे’ के संपादक कौन है?

   j) Name the first hindi newspaper of India.
      भारत के प्रथम हिंदी अखबार का नाम क्या है?

   k) Bal Gangadhar Tilak started the publication of……….. newspaper
      बाल गंगाधर तिलक ने किस अखबार का प्रकाशन आरंभ किया?

   l) What is scoop?
      स्कूप क्या है?

   m) What is cropping?
      क्रोपिंग क्या है?

   n) What is bold face?
      बोल्ड फेस क्या है?

   o) Name any two monthly business magazines.
      किसी दो मासिक व्यवसायिक पत्रिका का नाम क्या है?
Part A

Answer any five of the following. (5 X 5 = 25)

2. What are the features of magazine journalism? Discuss.
   मैगजीन पत्रकारिता की क्या विशेषताएं हैं? व्याख्या करें।

3. Discuss the qualities of a reporter.
   किसी रिपोर्टर के गुणों की चर्चा करें।

4. 'Discuss the importance of lay out in print journalism.
   प्रिंट पत्रकारिता में ले आउट की चर्चा करें।

5. What are the challenges of print media industry?
   प्रिंट मीडिया उद्योग की क्या चुनौतियाँ हैं?

6. What are the elements for writing an editorial?
   समाप्तिकीय लेखन के क्या तत्व हैं?

7. Write a short note on profile writing.
   प्रोफाइल लेखन पर एक संक्षिप्त टिप्पणी लिखें।

8. Write a human interest story feature for a magazine.
   किसी मैगजीन के लिए जनस्वित पर आधारित फीचर लिखें।

9. What are the basic differences between newspaper and magazine journalism?
   न्यूजेपेपर और मैगजीन पत्रकारिता में बुनियादी अंतर क्या हैं?

Part B

Answer any two of the following. (17 ½ X 2 = 35)

10. Write a detail note on the latest trends in print media industry.
    प्रिंट मीडिया उद्योग में आगे बढ़ने वाले प्रमुख नये रुझान पर विश्वासपूर्वक टिप्पणी लिखें।

11. Discuss the different types of magazines.
    मैगजीन के विभिन्न प्रकारों की चर्चा करें।

12. Write a detailed feature of your interest for a magazine.
    किसी मैगजीन के लिए अपनी रुचि पर आधारित कोई फीचर लिखें।
Manav Rachana International University
End Semester Examination, May-2013
BJMC – V Semester
New Media (BJ-501)

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

Note: Q. No.1 is compulsory. Attempt any five questions from Part-A and any two questions from Part-B.

Q.1. Answer any ten of the following: (1x10=10)

a) Cyber crime includes social activities. Yes/No
   सामाजिक गतिविधियाँ में शामिल हैं, हां / नहीं

b) Amalgamation of two or more technologies is known as--------.
   दो या अधिक प्रौद्योगिकियों के एकीकरण को क्या कहा जाता है -------.

c) What do you mean by Cyber Vandalism?
   साइबर विकार का क्या मतलब है?

d) What do you mean by Broadcasting?
   प्रसारण का क्या मतलब है?

e) The full form of ARPA is _____.
   एआरपीए का पूरा नाम ______ है.

f) Information highway is an______ network.
   सूचना सार्वजनिक एक______ नेटवर्क है.

g) The abbreviation CPA stands for what?
   संक्षिप्त सौंपी शब्द के लिए बढ़ा है?

h) Citizen Journalism is also known as yellow journalism. Yes/No
   नागरिक जOURNALISM भी पीला पत्रकारिता के रूप में जाना जाता है. हां / नहीं

i) What do you mean by Video Conferencing?
   वीडियो कॉन्फ्रेंसिङ का क्या मतलब है?

j) What do you mean by Defamation?
   मान्यता का क्या मतलब है?

K) Who is the present Telecom Minister of India?
   भारत के वर्तमान टिकेटवेयर मंत्री कौन है?

l) Write the Full form of TIFR.
   टीआईएफआर की कुल फाइल लिखें.

m) What do you mean by Traditional Media?
   परंपरीक मीडिया का क्या मतलब है?

n) A computer system providing video, audio and text material is known as____.
Q2. Answer any five of the following:  
(5X5=25)

a) Write a brief note on “Information Superhighway”.  
"सूचना सुपर हाइवे "पर एक संक्षिप्त नोट लिखें

b) Briefly discuss the ethics of Online Journalism.  
संक्षेप में ऑनलाइन पत्रकारिता की मैत्रिकता पर चर्चा करें.

c) Discuss in detail the advantages and disadvantages of new media.  
विस्तार से नए मीडिया के फायदे और नुकसान के बारे में चर्चा करें.

d) Write a descriptive note on the pros and cons of social networking sites.  
सामाजिक नेटवर्किंग साइट के प्रोजेक्ट्स और नेगेटिव पर एक वर्णनात्मक पत्र लिखें.

e) “Usefulness of Internet is increasing day by day” Do you agree with the statement?  
Give reasons  
"इंटरनेट की उपयोगिता दिन दिन वृद्धि बढ़ती जा रही है "आप बयान से सहमत हैं?
कारण दीजिए

f) Explain in detail the history of Information Technologies in India.  
विस्तार से भारत में सूचना प्रौद्योगिकी के इतिहास के बारे में बताएं.

g) Write a short note on National Telecommunication Policy (1994).  
राष्ट्रीय दूरसंचार नीति 1994) पर एक छोटे नोट लिखें.

h) Explain the value addition services on mobile phones.
मोबाइल फोन पर मूल्य मोड़ने सेवाएं समझाओ.

PART-B

Answer any two of the following:  
(17.5X2=35)

a) Discuss the role of the social networking sites in creating awareness and educating the masses of the globe.  
जागरूकता पैदा करने और विचार की जनता को शिक्षित करने में सामाजिक नेटवर्किंग साइट की मूल्यवान पहचान करें.

b) Critically examine the importance of Mobile News technologies and its attributes.  
गतिशील रूप से मोबाइल समाचार प्रौद्योगिकीय और इसकी विशेषताओं के महत्व की जाँच करें.

c) Write a descriptive note on growth and development of new media in India.  
भारत में नए मीडिया के विकास पर एक वर्णनात्मक पत्र लिखें
Q. 1 Attempt any ten questions. (IX10=10)

किन्ही किस प्रश्न के उत्तर दे।-

a) PTI stands for ---------------
    एच टी ई क्या है?

b) Delhi Doordarshan is an Indian Public Service Broadcaster, a division of Prasar Bharti. True or False.
    प्रसार भारती के एक प्रभाग दिल्ली दूरदर्शन एक भारतीय लोक सेवा प्रसारक है। सच है या गलत?

c) Which department looks after the circulation in a newspaper organization?
    कौन सा विभाग एक समाचार पत्र संगठन में प्रसार गतिविधियों को देखता है?

d) PCI Stands for ------------------
    सी आई क्या है?

e) What is TRP?
    टीआईपी क्या है?

f) What is Community Newspaper?
    समुदायीय अखबार क्या है?

g) What do you mean by beat?
    बीट से आप क्या समझते है?

h) What is SITE?
    साइट क्या है?

i) What is traditional media?
    परंपरागत मीडिया क्या है?

j) What is ticker?
    टिकर क्या है?

k) What is PCR?
    पीसीआर क्या है?

l) What do you mean by FCP?
    एफसीपी से आप क्या समझते है?

m) Who is known as the father of journalism?
    पत्रकारिता का जनक किसे कहते है?

n) ABC Stands for........
PART-A

Answer any five of the following:

किन्ही पाँच प्रश्नों का उत्तर दें

(5X5=25)

2. Write a short note on the structure of a bureau office.
   व्योरो ऑफिस की संरचना पर एक संक्षिप्त दिखाई दें।

3. Discuss the role of traditional media.
   परम्परागत मीडिया के भूमिका की पारंपरिक दिखाई दें।

4. Write a short note on FDI.
   एफडीआई पर एक संक्षिप्त लिखित दिखाई दें।

5. What are the functions of PR department in media industry?
   मीडिया उद्योग में पीआर विभाग के क्षेत्र का कार्य है?

6. What is the hierarchy of a desk in a newspaper organization?
   देवस्क का पदार्थिक प्रारूप चरण है?

7. Discuss the role of a circulation manager in a newspaper organization.
   किसी प्रकाशन निदेशक के प्रकाशन के प्रचार का चरण करें।

8. Write a short note on the various ownership patterns of mass-media in India.
   भारत में मात्र मीडिया के स्वातंत्र्य के विभिन्न प्रकार पर एक संक्षिप्त दिखाई दें।

9. Discuss the role of an event manager.
   इवेंट प्रबंधक के क्षेत्र का प्रबंधक चरण करें।

PART-B

Answer any two of the following

किन्ही दो प्रश्न का उत्तर दें।

(17.5X2=35)

10. Write a detailed note on the TRP system.
    देव आयोजन पर एक विस्तारपूर्वक दिखाई दें।

11. Write a short note on the role and responsibilities of different departments of a magazine organization.
    एक प्रकाशज्ञान सम्मेलन के विभिन्न विभागों की भूमिका और जिम्मेदारियों पर एक संक्षिप्त दिखाई दें।

12. Write a detailed note on the changing trends of Print media industry.
    प्रिंट मीडिया उद्योग के बदलती प्रवृत्तियों पर विस्तारपूर्वक दिखाई दें।
Manav Rachna International University
End Semester Examination, May, 2013
MJMC- IV Semester
Media Debates and Issues (MJ-401)

Time: 3 Hours
Max. Marks: 75

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: (1X10=10)
   a. What is AFP?
   b. What is Paid News?
   c. What do mean by PCI?
   d. What is objectivity?
   e. Name any two news agencies of India.
   f. Who is the editor of the daily newspaper ‘Mail Today’?
   g. What is "NBA"?
   h. Why was the movie Vishwaroopam in news?
   i. What is BBC?
   j. What is JPC?
   k. Who is Shobhna Bhartiya?
   l. When was RTI act passed?
   m. Who is known as the gatekeeper in media industry?
   n. What is puppetry?
   o. What is Traditional media?

PART-A

Answer any five of the following: (6X5=30)

2. Discuss the concept of media ethics.
3. Write a short note on the role of traditional media.
4. What is the code of ethics for media professional?
5. What do you mean by yellow journalism? Discuss in detail.
6. Write a detailed note on the role of media in women empowerment.
7. How can media be used as tool in development? Discuss in detail
8. Write a short note on RTI.
9. Write a short note on the influence of market on media?

PART-B

Answer any two of the following: (17.5X2=35)

10. Do you think that the present media is practicing unethical journalism? Support your answer with examples.
11. Write a detailed note on the social responsibilities of media.
12. What do you think about the gender portrayal in media? Discuss in detail.
Manav Rachna International University  
End Semester Examination, May-2013  
MJMC – IV Semester  
Business Journalism MJ-402 (A)

Time: 3 hrs  
Max Marks: 75  
No. of Pages: 02

Note: Q. No.1 is compulsory. Attempt any five questions from Part-A and any two questions from Part-B.

Q.1. Answer any ten of the following:  
(1x10=10)

a) Who is the Deputy Chairman of planning commission of India?  
b) Name any two Business magazines in India.  
c) Pink newspapers deal with political news stories only. True or False  
d) When the first five year plan started in India?  
e) Name any top two Business conglomerates of India.  
f) Who is the finance minister of India at present?  
g) Who is the chairperson of Tata Group at present?  
h) A shortage that occurs when government expenditure exceeds Government income is known as Budget surplus. Yes or No  
i) A person who undertakes and operates a new enterprise or venture.  
j) Actions taken by government with regard to its spending or taxation to influence the level of economic activity is known as Fiscal Policy. True or False  
k) The abbreviation GDP and GNP stands for what?  
l) What do you mean by Oligopoly?  
m) A monetary grant given by the government to lower prices.  
n) What do you mean by sustainable development?  
o) Business conglomerates refers.  

Q2. Answer any five of the following:  
(6x5=30)

a) Distinguish between FDI and FII.  
b) Discuss the various qualities of a business reporter and what are the sources of information for a business reporter?  
c) Explain in detail the various features of Indian economy.  
d) Write a note on the planning commission of India.  
e) Write a brief note on pre and post liberalization status of Indian Economy.  
f) How to make business reporting interesting and easy for audiences? Explain  
g) Write a short note on business news coverage in general newspapers.  
h) “The development of a nation completely depends on the economic growth” Justify
PART-B

Answer any two of the following: (17.5x2=35)
a) Define business journalism and how is it different from other types of journalism? Discuss
b) Explain in detail the status of New Media and Electronic media in the sphere of business journalism.
c) Write a descriptive note on the famous business families and conglomerates of India.