# End Semester Examination, May 2015

## 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)  Write in set builder form: $A = \{-4, -3, -2, -1, 0, 1, 2, 3, 4\}$.

**2**

b)  Write in roster form: B={ $x : x$ is prime natural number, $10 < x < 20$ }.

**2**

c)  Find the sum of $10$ terms of the series: $5, 8, 11, 14, \ldots\ldots\ldots\ldots$ .

**2**

d)  Find all possible arrangements of letters of word 'ABHAY'.

**2**

e)  What do you mean by singular matrix?

**1**

f)  Find simple interest on Rs. 2000/- at 10 % per annum for 3 years.

**2**

g)  If $a = 2, r = 5$, then find $T_8$.

**2**

h)  Differentiate: $7^x$ w.r.t. $x$

**2**

## UNIT-I

Q.2   a)  Define equal and equivalent sets by giving an example.

**5**

b)  Let $A = \{1, 2\}, B = \{1, 2, 3, 4\}, C = \{5, 6\}$ and $D = \{5, 6, 7, 8\}$.

Verify that: $A \times (B \cap C) = (A \times B) \cap (A \times C)$.

**4**

c) A survey shows that $63\%$ of Indians like apples whereas $76\%$ like oranges. Find the % of Indians who like both apple and oranges.

**6**

Q.3    a) Prove that: $A - (B \cap C) = (A - B) \cup (A - C)$.

**6**

b) In a survey of $100$ persons it was found that $28$ read magazine A, $30$ read magazine $B$, $42$ read magazine $C$, $8$ read magazine $A$ and $B$, $10$ read magazine $A$ and $C$, $5$ read magazine $B$ and $C$ and $3$ read all the three magazines.

Find:

i)    How many read none of three magazines?

ii)    How many read magazine $B$ only?

iii)    How many read magazine $A$ or $B$ but not $C$?

**9**

# UNIT-II

Q.4    a) Divide $32$ into four parts which are in A.P. such that the product of the extremes is to the product of the means are 7:15.

**7**

b) Sum of the series:

$0.5 + 0.55 + 0.555 + \ldots\ldots\ldots\ldots$ to $n$ terms

**8**

Q.5    a) The $5^{th}$ term of an A.P. is $\dfrac{1}{10}$ and $10^{th}$ term is $\dfrac{1}{5}$, show that the sum of $50^{th}$ terms is $\dfrac{51}{2}$.

**5**

b) If $\log_2 x + \log_4 x + \log_{16} x = \dfrac{21}{4}$, find the value of $x$.

**6**

c) If $x = 3^{\frac{1}{3}} + 3^{\frac{2}{3}}$ ; then show that: $x^3 - 9x - 12 = 0$.

**4**

# *UNIT-III*

Q.6  a) Find all possible arrangements that can be made out by using the letters of the word 'INDEPENDENCE'. In how many of them:

    i)  Vowels are together?

    ii)  Vowels are not together?

    iii)  Start with P?

**9**

b) Compute compound interest on Rs. $24,000/-$ for $4$ years at $12\%$ per annum, compounded semi-annually.

**6**

Q.7  a) How many four-letter words can be formed by using letters of the word 'MATHEMATICS'?

**9**

b) Find all possible $5$ digit numbers that can be made out by using the digits: $1,2,3,4,5,6,7,8,9$.

**6**

# *UNIT-IV*

Q.8  a) If $A = \begin{bmatrix} -2 & 3 & -1 \\ -1 & 2 & -1 \\ -6 & 9 & 4 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & 3 & -1 \\ 2 & 2 & -1 \\ 3 & 0 & -1 \end{bmatrix}$ find $AB$ and $BA$. Is $AB = BA$?

**8**

b) If $y = \sqrt{\dfrac{1-x}{1+x}}$ ; find $\dfrac{dy}{dx}$ ; hence prove that:

$$\left(1 - x^2\right)\frac{dy}{dx} + y = 0.$$

**7**

Q.9  a) Using determinants, solve the system of equations:

$2x + 3y + 3z = 5$

$x - 2y + z = -4$

$3x - y - 2z = 3$

**9**

b) If $y = v^3 + 2v^2 + 5$; $v = 3u + 1$ and $u = 9x + 1$, find $\dfrac{dy}{dx}$.

**6**

# End Semester Examination, May 2015

BBA (Gen) / BBA (Banking) - First Semester

## FINANCIAL ACCOUNTING (bba-1003)

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 whether the following statements are TRUE or FALSE:**
   a) Purchase journal is meant for recording all purchases of goods.
   b) Depreciation of fixed assets is a capital expenditure.
   c) Outstanding salaries are shown as an assets.
   d) Cheque issued but not cleared will reduce the balance as per cash book.
   e) Sales book records all the cash sales.
   f)  Ledger is a set of accounts.
   **Fill in the blanks:**
   g) The two methods of valuation of depreciation are _____and _____.
   h) Journal records transactions in a _____ order.
   i)  The system of recording transactions based on dual aspect concept is called
      _____ system.
   j) Book keeping is concerned with _____ of financial data.

   **1 x 11**

   **Answer in brief:**
   l)  Name the users of financial accounting.
   m) Explain the meaning of depreciation.                    **2 x 2**

## UNIT-I

Q.2  Define accounting. State its functions and the persons who should be interested
   in accounting information.                               **15**

Q.3  Write short notes on:
   a)  Double entry system.
   b)  Accounting conventions.                              **7½x2**

## UNIT-II

Q.4  a) Prepare a cash book from the following transactions:

(Amount in Rs.)

| | | |
|---|---|---|
| Jan., 1 | Opening balance : Cash | 3000/- |
| | Bank | 4000/- |
| Jan., 4 | Rent paid by cheque | 2000/- |
| Jan., 6 | Goods sold in Cash | 3000/- |
| Jan., 8 | Paid to 'M' by cheque | 2000/- |
| | and earned as Cash Discount | 200/- |
| Jan., 10 | Cash purchases | 15000/- |
| Jan., 12 | Cash sales to 'R' | 20000/- |

| Jan., 20 | Received a cheque from 'S' and allowed discount | 2000/-<br>100/- |
|----------|-------------------------------------------------|-----------------|
| Jan., 31 | Salaries paid | 5000/- |
| Jan., 31 | Cash deposited into bank | 1000/- |
| Jan., 31 | Cheque received from 'S' is deposited into bank | |

**10**

b) Explain the rules regarding posting of transactions into the ledger. **5**

Q.5 What is trial balance? Explain the errors which are disclosed and not disclosed by a trial balance. **15**

## *UNIT-III*

Q.6 On 1st April, 2008, Delhi Mills purchased a plant for Rs.2,00,000/- and paid Rs.20,000/- as carriage. On 1st July, 2011 the plant was sold for Rs.80,000/- and a new plaint was purchased for Rs.1,00,000/-. Prepare plant and depreciation accounts from 2008 to 2012. Depreciation is charged at 10% p.a. and books are closed on 31st March every year. (Diminishing balance method). **15**

Q.7 a) Discuss the merits and demerits of diminishing balance method. **8**
b) Explain the reasons of difference between the cash book and pass book balances. **7**

## *UNIT-IV*

Q.8 a) Differentiate between 'Receipt and Payment' account and 'Income and expenditure' account. **8**
c) Explain the objectives of a final account. **7**

Q.9 From the following trial balance and additional information, prepare a final account:

Trial Balance (as on 31st December, 2010) Amount in Rs.

| | | |
|---|---|---|
| Capital | | 20000/- |
| Debtors | 5400/- | |
| Drawings | 1800/- | |
| Machinery | 7000/- | |
| Creditors | | 2800/- |
| Wages | 10000/- | |
| Purchases | 19000/- | |
| Opening stock | 4000/- | |
| Bank balance | 3000/- | |
| Carriage charges (Inward) | 300/-- | |
| Salaries | 400/-- | |
| Rent and Taxes | 900/- | |
| Sales | | 29000/- |
| **Total=** | **51800/-** | **51800/-** |

Additional Information:
i)   Closing stock Rs. 1200/-
ii)  Outstanding Rent and Taxes Rs.100/-
iii) Depreciation of Machinery @ 10%
iv)  Prepaid wages Rs.400/-                                          **15**

# End Semester Examination, May 2015

BBA (Gen) / BBA (Banking) - First Semester
## COMPUTER FUNDAMENTALS (bba-1004)

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) Name two applications where plotters are used.                                    **2**
      b) Resolution of printer is measured in _____.                                     **1**
      c) How many valid digits are there in the following number systems?                   **4**
         i) decimal        ii) binary      iii) octal      iv) hexadecimal
      d) Give full form of following observations:                                          **2**
         i) OS              ii) MS-DOS
      e) The number of instructions executed in a second by the CPU is measured in
         _____.                                                                    **1**

## UNIT-I

Q.2   Differentiate between:
      a) Desktop computer and Notebook computer.                                            **5**
      b) Analog and digital computer.                                                       **5**

Q.3   a) Differentiate between software, data and hardware.                                 **4**
      b) Highlight the main characteristics of microcomputer, minicomputer, mainframe
         computer and supercomputer.                                                        **6**

## UNIT-II

Q.4   Perform binary subtraction on the following binary numbers:
      a) 111000, 011010
      b) 1111, 1001                                                                         **5x2**

Q.5   Convert the following:
      a) $(10001.101)_2 = (?)_8 = (?)_{16}$                                                 **5**
      b) $(EA1.D)_{16} = (?)_8$                                                             **5**

## UNIT-III

Q.6   Describe how an audio response system works. Name two applications of an
      audio response system.                                                               **10**

Q.7   What do you understand by an operating system? What are the types of
      operating systems? Discuss in brief.                                                 **10**

## UNIT-IV

Q.8   Explain briefly the use of computers in:
      a) Education        b) Government                                                     **10**

Q.9    Write a detailed note on a desktop publishing system.

**10**

# End Semester Examination, May 2015

BBA (GEN) / BBA (BANKING) - First Semester
## BUSINESS COMMUNICATION (bba-1005)

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 whether the following statements are TRUE or FLASE:**
   a) Agenda is a list of points to be discussed in a meeting.
   b) Passive listening is when an audience is paying full attention to the speaker.
   c) Skimming is the fastest type of reading.
   d) Written communication is proof for future reference.
   e) Memo is an example of intra-office communication.
   **Fill in the blanks:**
   f) Space language is known as _____.
   g) A circular always has to be _____.
   h) Listening means hearing with _____.
   i) The rise and fall of voice is known as _____.
   j) _____ is the slowest kind of reading.
   K) Communication between superior and subordinate is called_____.
   l) Body language is also known as _____.
   m) To give general information to everyone in office about something, a _____ is put up in a central place.
   n) A _____ is an account of a person's qualification and personal details.
   o) An oral presentation is always given in a _____ room.        **1x15**

## UNIT-I

Q.2 Discuss the different types of communications followed in organizations. Also highlight the advantages and disadvantages of all.        **15**

Q.3 Write short notes on:
   a) Grapevine.
   b) Barriers of communication.
   c) Different channels of communication.        **5x3**

## UNIT-II

Q.4 Voice modulation is extremely necessary to make speech effective. Write about the different forms of voice modulation giving examples of each. How does body language help in making communication effective?        **15**

Q.5 "Listening is an important skill to enhance communication but sometimes it is not effective". Highlight the above statement by stating the barriers of listening and also suggest ways to remove these barriers.        **15**

## UNIT-III

Q.6 Write a persuasive sales letter to your regular customer using the AIDA strategy. Your letter should be very attractive so that the customer is motivated to buy your product. **15**

Q.7 As the Principal of a school send a circular to all the staff members to call them for an urgent meeting to discuss the final result of the students. Also include discipline issues and other student related problems in the agenda. **15**

## *UNIT-IV*

Q.8 As the student union leader, write a report about a ragging incident in which a student was seriously hurt. Mention the details of the date, venue, cause, finding and conclusion of the incident. Also give recommendations about what you and the students expect from the authorities. **15**

Q.9 Write notes on the following with an example of each:
a) Brochures
b) Memo
c) Minutes of the meeting **5x3**

# End Semester Examination, May 2015
BBA (Gen)/BBA (Banking) - First Semester
## MICRO ECONOMICS FOR BUSINESS DECISIONS (bba-1006)

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) Ed=1 is called _____ elastic demand.
   b) Human wants are _____.
   c) _____ and _____ are economic activities.
   d) Consumers is in equilibrium when he maximise his _____.
   e) AR is known as _____ of a goods.                    **1x6**
   **State whether the following statements are TRUE or FALSE:**
   f) Economics is a social science.
   g) Es>1 is called unitary elastic supply.
   h) Law of demand shows the positive relationship between quantity demanded and priced.
   i) IC is convex to the origin.
   j) Fixed cost=Total cost – Total variable cost.                **1x5**
   **Answer in one or two sentences**:
   k) Explain price elasticity of demand.
   l) Write any two assumption of consumer equilibrium.          **2x2**

## UNIT-I

Q.2  What do you mean by elasticity of demand? Explain the various methods of measuring elasticity of demand.                                    **15**

Q.3  What is law of supply? Explain the various factors those affecting supply of a product.                                                        **15**

## UNIT-II

Q.4  What is meant by competition equilibrium? Does equilibrium price always remain constant? How is it determined?                                    **15**

Q.5  Define and explain produces equilibrium with the help of ISO quart curve.  **15**

## UNIT-III

Q.6  Explain cost curves in short run and run with the help of a diagram. Also discuss its relations.                                                    **15**

Q.7  a) Discuss the nature of AR & MR curve under perfect completion.          **7**
     b) Write a note on increasing returns to a scale.                         **8**

## UNIT-IV

Q.8 Define monopolistic competition. How is price and output determined under it?

**15**

Q.9 Write notes on the following:
d) Modern theory of distribution.
e) Features of monopoly market.

**7½x2**

# End Semester Examination, May 2015

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 **state whether True / False:**

a) Managers are needed only in business firms.

b) Management is a science as well as an art.

c) Planning is the primary and foremost function of management.

d) Scientific theory is formed by Henri Fayol.

e) MBO provides for a regular review of performance.

**Fill in the blanks:**

f) Fayol developed the _____.

g) Management is a process of _____ activities.

h) Objectives may be _____ or specific.

i) Staffing helps in getting right people for the _____ job at the right _____.

j) _____ refers to the managerial function of employing and employing HR.

k) Motivation is something that _____ a person.

l) Leadership exists in every organization whether _____.

m) _____ refers to the business man's decision.

n) The medium is _____ or path through which the message is transmitted.

o) _____ is an important managerial function that initiates action.                **1x15**

## *UNIT-I*

Q.2    Describe the principles of management given by Henri Fayol.
**15**

Q.3    a)  Differentiate between management and administration.
**7**

b)  Discuss the role and skills of a manager.
**8**

## *UNIT-II*

Q.4    Define managerial planning. Discuss briefly various types of planning used by managers.

**15**

Q.5    Explain the meaning of decision making. Discuss the process of decision making in an organisation.
**15**

## *UNIT-III*

Q.6    a)  Write a short note on centralization and decentralization.
**7**

b)  What is departmentalization?
**8**

Q.7    What is motivation? Discuss its nature and process.
**15**

## *UNIT-IV*

Q.8    Write notes on the following:

a)  Concept of social audit.
**7**

b)  Break-even analysis.
**8**

Q.9    What is a management control technique? What are its various methods?        **15**

# End Semester Examination, May 2015

## BBA (GEN) / BBA (BANKING) – Second Semester

## MACROECONOMIC ANALYSIS AND POLICY (bba-2002)

Time: 3 hrs

Max Marks: **75**

*No. of pages: 1*

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

Q.1 **Fill in the blanks:**

a) The modern developments in macroeconomics are most closely associated with the work of _____.

b) Flow of national income can be divided into _____ parts.

c) Disposable income =_____ +_____.

d) Fiscal multiplier = _____.

**1x5**

**Answer in brief:**

e) What is aggregate demand?

f) Define secular consumption function.

g) What do you mean by subsidy?

h) Write two functions of central bank.

i) Write a note on credit control.

**2x5**

## *UNIT-I*

Q.2 a) Explain the nature, scope and limitation of macroeconomics.

**8**

b) Explain circular flow of income in 4-sector economy?

**7**

Q.3     Explain briefly the main concepts of national income. Explain their inter-relationship with each other.

**15**

# *UNIT-II*

Q.4     What is multiplier? How it can be calculated? How is it used in a business?
        **15**

Q.5     Explain Keynes psychological law of consumption and bring out its importance in macro economic analysis. Also explain the determinants of propensity to consume.

**15**

# *UNIT-III*

Q.6     Write short notes on the following:

a)  Instruments of fiscal policy.

b)  Deficit financing.

c)  Role of fiscal policy in a developing economy.
            **5x3**

Q.7     Differentiate between direct and indirect taxes. Explain the principles of a good taxation system.

**15**

# *UNIT-IV*

Q.8     What is monetary policy? Explain the functional areas of monetary policy.          **15**

Q.9     Differentiate between commercial and central bank? Explain functions of central bank.

**15**

# End Semester Examination, May 2015

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 **Fill in the blanks:**

a) Allotment of shares must be done within _____ days of the issue of prospectus.

b) Accounting to table 'A', interest on calls in advance may be paid at a rate not exceeding _____% p.a.

c) Debenture holders are _____ of the company.

d) Debentures are shown on the _____ side of the balance sheet.

e) When underwriters do not take the responsibility for the whole of issue but underwrite only a portion of the issue, it is called _____ underwriting. **1x5**

**Answer the following in brief:**

f) Define Reserve capital.

g) What is buy-back of shares?

h) Show treatment of shares issued other than cash.

i) Enlist various types of shares.

j) State the various methods of valuation of shares.
      **2x5**

# *UNIT-I*

Q.2 Alfa Ltd. issued 5000 shares of Rs. 100/- each at par. The amount payable was as under:

Rs. 25/- on application

Rs. 25/- on allotment

Rs. 20/- on first call; and

Rs. 30/- on final call.

X, a holder of 100 shares failed to pay allotment, first call and final call money. Directors forfeited his shares and re-issued the forfeited shares @ Rs. 90/- per share fully paid up. Pass necessary journal entries in the Book of Alfa Ltd. **15**

Q.3   a) Write a detailed note on alteration of share capital.
                    **7**

b) What are the accounting entries to be passed at the time of redemption of preference shares?
                                          **8**

# *UNIT-II*

Q.4   Krishna underwrites the new issue of 4000 shares of Rs. 100/- each of Rama Company Ltd. The agreed commission was 2.5% payable as to 60% in cash and the rest in fully paid shares. The public subscribed for 1600 shares and the rest had to be taken by the underwriters. These shares were subsequently quoted in the market at 15% discount.

Make necessary journal entries in the books of Rama Company Ltd. and the underwriter and prepare underwriting account.
              **15**

Q.5   a) What are the different sources of finance for the redemption of debentures?

                                                    **8**

b) Write a short note on 'sinking fund'.
                 **7**

# *UNIT-III*

Q.6   a) Explain the Accounting Standard – 17 in detail.
                    **7**

b) Explain how the following items will appear in a Company's balance sheet:

i)   Share capital

ii)  Fixed asset

iii) Current assets

**8**


Q.7    Explain with imaginary figures the liquidator's final statement of account.        **15**

# *UNIT-IV*

Q.8    Explain the factors which affect the valuation of a goodwill. Discuss the methods which are used for a goodwill valuation.

**15**


Q.9    Calculate value of equity share from the following:


| Issued equity share capital | 50,000 shares of Rs. 10/- each |
|---|---|
| Paid up equity share capital | Rs. 8/- per share |
| 9% preference share capital | 20,000 shares of Rs. 10/- each fully paid up. |
| Annual transfers to general reserve | 20% |
| Rate of tax | 50% |
| Expected profits before tax | Rs. 2,18,000 |
| Normal rate of dividend | 15% |


**15**

# End Semester Examination, May 2015

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)  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 font style?

i)  Bold
ii)    Italics

iii) Regular
iv)    Superscript

c)  Which option in file pulldown menu is used to close a file in MS Word?

i)  New
ii)    Quit

iii) Close
iv)    Exit

d)  The effect applied to display when slides changes in slide show view is:

i)  Slide animation                                             ii) Custom animation

iii) Custom transition  iv)  Slide transition

e) Which of the following font effect is not available in PowerPoint font dialog box?

   i) Underline
      ii)  Shadow

   iii) Emboss
      iv)  Strikethrough

f) In a PowerPoint presentation:

   i) Sound clips can be inserted but not movie clips.

   ii) Movie clips can be inserted but not sound clips.

   iii) Both cannot be inserted.

   iv) Both can be inserted.

g) Each excel file is called a workbook because:

   i) It can contain text and data.

   ii) It can be modified.

   iii) In can contain many sheets including worksheets and chart sheets.

   iv) You have to work hard to create it.

h) All formula in Excel start with:

   i) %                    ii)     +                    iii)     =
      iv)    -

i) To add two cells ( A1 and A2 ) together you use the following formula:

   i) =A1+A2
      ii)     =Add(A1+A2)

   iii) =together(A1:A2)                    iv)     A1  plus A2

j) Where a row column meets it is called a?

   i) A cell
      ii)     A block

   iii) A box
      iv)     None of the above          **1x10**

# *UNIT-I*

Q.2    What is mail merge? Explain the steps of mail merge with an example.
       **10**

Q.3    Explain the following features of MS Word with an example:

a)  Thesaurus                                                          b)      Find
    and replace                                    **5x2**

# *UNIT-II*

Q.4    What is MS PowerPoint? Explain the uses of PowerPoint?
       **10**

Q.5    Explain the following features of PowerPoint:

a)  Custom animation.

b)  Slide transition.
                                                    **5x2**

# *UNIT-III*

Q.6    Describe the different types of functions in MS Excel with examples.
       **10**

Q.7    What are charts? Explain the different types of graphs and charts available in MS Excel.

                                                               **10**

# *UNIT-IV*

Q.8    What is multimedia? Explain the various components of multimedia.
       **10**

Q.9    Explain the business applications of multimedia in detail.
       **10**

# End Semester Examination, May 2015

BBA (GEN) / BBA (BANKING) – Second Semester

## ORGANIZATIONAL 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 **Define the following in one or two sentences only:**

a) Personality

b) Motivation

c) Instrumental value

d) Ego

e) Scientific management

f) Team

g) Change

h) Culture

i) Terminal value

j) Structure

**1x10**

**Give one word for the following:**

a) A kind of spirit which exists in a team when it is completing a task.
b) Ability to have desired results by influencing others.
c) The right to command.
d) Reaction or response to an event, person or object.
e) Disagreement in the organizational sense.

**1x5**

## *UNIT-I*

Q.2 Explain the emerging trends in organizational behavior which has made the job of the manger more challenging.

**15**

Q.3 Trace the evolution of organizational behavior which has made it a very important subject for today's organizations.

**15**

## *UNIT-II*

Q.4 Write short notes on the following:

a) Maslow's need Hierarchy theory.

b) Sigmund trend's psychoanalytical theory of personality.

c) Types of attitudes in organizations.

**5x3**

Q.5 Discuss the theories of learning. Which according to you is the best and why?

**15**

## *UNIT-III*

Q.6 Discuss the different types of teams functioning in organizations. Which team would you like to be a part of an organization and why?

**15**

Q.7 What do you understand by organizational politics? State the reasons of politics in organizations and ways to deal with it.

**15**

## *UNIT-IV*

Q.8 Write short notes on the following:

a) Lewin's change model      b)    Mechanistic structure    c)    Culture

**5x3**

Q.9 Highlight the elements of an organizational structure in detail.

**15**

# End Semester Examination, May 2015

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 **Short or one word answer questions:**

a) Write formula of median for continuous series.

b) Give two uses of index numbers.

c) Find median for the series: 138, 115, 124, 152, 100, 120.

d) Define mode and write down its formula.

e) Give an example of discrete and continuous series.

f) Write difference between positive and negative correlation.

**Fill in the blanks:**

g) The harmonic mean of 2, 8, 11 is _____.

h) Arithmetic mean is always _____ then geometric mean.

i) If $P_{80}=35$ then $D_8=$_____.

j) If mean $=20$ and median $=25$ then mode=_____.
   **1½x10**

## UNIT-I

Q.2 a) What do you mean by statistics? Explain its functions and limitations.     **7**

b) What is tabulation in statistics? Write down steps for creating a table.     **8**

Q.3 a) Draw a pie-chart for spending your 24-hours in different activities in a day. **7**

b) What is classification? Explain its types in detail.
**8**

# UNIT-II

Q.4 Calculate mean, median, $P_{80}$, $D_3$ and $Q_2$ for the following data:

| Scores | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 |
|---|---|---|---|---|---|---|---|---|---|
| No. of candidates | 8 | 15 | 17 | 28 | 25 | 24 | 18 | 9 | 6 |

**15**

Q.5 a) A train runs first 25 kms at a speed of 30 km/h, next 50 km at a speed of 40 km/h, then due to repair of the track, it covers only one km at a speed of 10 km/h and finally covers the remaining distance of 24 km at a speed of 24 km/h. What is the average speed of train in km/h?
**6**

b) Calculate the coefficient of variation for the following data:

| Weight | 60-64 | 65-74 | 75-79 | 80-84 | 85-94 | 95-99 | 100-104 |
|---|---|---|---|---|---|---|---|
| No. of students | 10 | 40 | 35 | 22 | 26 | 10 | 7 |

**9**

# UNIT-III

Q.6 a) What do you mean by correlation? Why correlation is said to be non-sense? Explain.

**5**

b) A doctor records the blood pressures of her pregnant patients and collected the following data:

| Age | 23 | 24 | 25 | 26 | 28 | 29 | 31 | 35 | 40 |
|---|---|---|---|---|---|---|---|---|---|
| Lower limit of B.P. | 65 | 60 | 62 | 70 | 70 | 73 | 75 | 83 | 90 |

Assuming age as X and B.P. as Y, calculate the two regression equations. Also estimate the B.P. is the age of the patient is 38 years.
**10**

Q.7 a) What do you mean by regression? Distinguish between correction and regression.

**5**

b) Calculate Karl Pearson's coefficient of correlation between expenditure and sales from the data given below:

| Advertising expenses 000 Rs. | 39 | 65 | 62 | 90 | 82 | 75 | 25 | 98 | 36 | 78 |
|---|---|---|---|---|---|---|---|---|---|---|
| Sales lakhs Rs. | 47 | 53 | 58 | 86 | 62 | 68 | 60 | 91 | 51 | 84 |

**10**

# *UNIT-IV*

Q.8 a) What do you mean by index number? Write down different problems arises in the construction of index numbers.

**5**

b) State time and factor reversal tests and verify from the following data whether Fisher's ideal index number formula satisfies these tests:

| Commodity | 2000 | | 2010 | |
|---|---|---|---|---|
| | $p_0$ (Rs.) | $q_0$ (kg) | $p_1$ (Rs.) | $q_1$ (kg) |
| A | 30 | 80 | 50 | 90 |
| B | 22 | 55 | 35 | 75 |
| C | 12 | 45 | 45 | 60 |

**10**

Q.9 a) Define time series. Explain it different components.

**5**

b) Fit a straight line trend to the following data by the method of least square and estimate the trend values. Also make estimates of the values for 2009 and 2011.

| Year: | 2001 | 2003 | 2004 | 2005 | 2006 | 2008 | 2010 |
|---|---|---|---|---|---|---|---|
| Value (in laksh Rs.): | 80 | 90 | 83 | 94 | 99 | 92 | 105 |

**10**

# End Semester Examination, May 2015

## BBA (GEN) / BBA (BANKING) – 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 **Fill in the blanks:**

a) Cost accounting is a tool of _____ accounting.

b) Indirect costs are all together called _____.

c) The cost of labour turnover is divided into _____ and _____.

d) P/V ratio=(Contribution/_____)x100.

e) A section of an organization for which separate budget can be prepared and controlled exercise is called _____.

f) Material cost variant is the total of _____ and _____.

**State True or False:**

g) Cost unit is a unit of product or service for which costs are determined.

h) Budgets are based on forecasts.

i) Indirect cost are not apportioned but allocated to cost centres.

j) Break-even point is a point where the business can recover only the fixed costs.

**1½x10**

## *UNIT-I*

Q.2 a) Define and differentiate cost accounting, Financial accounting and Management accounting.

**10**

b) Define cost centre. Briefly explain its types.

**5**

Q.3 "Costs may be classified in a variety of ways to their nature and information needs of the management" Discuss.

**15**

## *UNIT-II*

Q.4 a) Explain "Overtime premium". Along with its treatment.

**7**

b) Explain time booking along with methods.

**8**

Q.5 a) List five important methods of overhead absorption.

**5**

b) ABC Ltd. has two production and two service departments. Expenses and other information is as follows:

| Department | Overheads before allocating service department costs | Services Maintenance (%) (M) | Power (%) (P) |
|---|---|---|---|
| Production department | | | |
| R | 2,00,000 | 40 | 70 |
| S | 2,50,000 | 40 | 25 |
| Service Department | | | |
| Maintenance (M) | 20,000 | - | 5 |
| Power (P) | 30,000 | 20 | |
| | | | - |
| | 5,00,000 | 100 | 100 |

Find the total overheads of production departments.

**10**

## *UNIT-III*

Q.6 What is absorption costing? What are the advantages of absorption costing method? Distinguish between marginal costing and absorption costing.

**15**

Q.7    A company producing a single product sells it at `50 p. u. unit variable cost is `35 and fixed cost amounts to `12 Lakhs p.a. with this data you are required to calculate the following treating each independent of the other.

a) P/V ratio.

b) Break even sales.

c) New break even sales if variable cost increase by `3 p. u. without increase in selling price.

**15**

# *UNIT-IV*

Q.8    Write a detailed note on:

a) Zero Base budgeting.

**8**

b) Advantages and limitation of standard costing.

**7**

Q.9    Prepare a flexible budget at 50% 80% and 100% of activity level if information for 60% is given as follows:

Capacity        -        6000 units

Material        -        ` 50 per unit

Labour -        ` 40 per unit

Expenses-    ` 25 per unit

Factory expense ` 4,00,000 (`1,00,000 fixed) administrative expenses `(60 % fixed)

**15**

# End Semester Examination, May 2015

BBA (GEN) / BBA (Banking) – Third Semester

## HUMAN RESOURCE MANAGEMENT (bba-3002)

Time: 3 hrs

Max Marks: **75**

*No. of pages: 1*

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

Q.1    Answer briefly:

a)  State any two functions of HRM.

**2**

b)  List out various HRM policies of an organisation.

**2**

c)  Write down the steps of selection process.

**2**

d)  List out the methods of job evaluation.

**2**

e)  Give any two points of differences between career planning and career development.

**2**

f)  Define golden handshake.

**2**

g)  List out various welfare programmes run by an organisation.

**3**

## *UNIT-I*

Q.2    Define Human Resource Management. Discuss its nature, scope and objectives in detail.

**15**

Q.3    Write notes on:

a)  Differentiate between HRM and HRD.

b)  HR information system.

**7½x2**

# *UNIT-II*

Q.4    What is a recruitment? Discuss the various methods of recruitment in the organisations.

**15**

Q.5    Write notes on:

a)  Job analysis

b)  Human resource planning.

**7½x2**

# *UNIT-III*

Q.6    Define a training. Discuss the different training methods used by the organisations for training their employees.

**15**

Q.7    Discuss in detail the performance appraisal techniques by which organizations evaluate its employees performance.

**15**

# *UNIT-IV*

Q.8    Write notes on:

a)  Fringe benefits.

b)  Guidelines to maintain health and safety in organizations.

**7½x2**

Q.9    Write short notes on:

a)  Profit sharing

b)  Total quality management

c) Rewards and pay plans.

**5x3**

# End Semester Examination, May 2015

## BBA (GEN) / BBA (BANKING) – Third Semester

## PRODUCTION MANAGEMENT (bba-3003)

Time: 3 hrs

Max Marks: **75**

*No. of pages: 1*

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

Q.1 ***Answer the following in brief:***

a) Define ergonomics.

**2**

b) What is quality assurance?

**2**

c) What is safety stock?

**2**

d) What is fixed position layout?

**2**

***State whether statement are: True/False:***

e) Execution of jobs is not the objective of work study.

**2**

f) ABC analysis stands for abrtness brings continuity.

**1**

g) Work study helps to reduce waste through standardization of qualitative and quantitative elements of a job.

**2**

h) EOQ is the level of inventory order in which inventory cost is maximum.

**2**

# *UNIT-I*

Q.2    Discuss the various POM decisions and their applications.

**15**

Q.3    Discuss the historical development of production and operation management thought.

**15**

## *UNIT-II*

Q.4    a) How does a good plant layout help to improve productivity?

**8**

b) Bring out the importance of materials handling.

**7**

Q.5    "The guiding principle in search for a location should be for a place where the cost of the raw materials and of fabrication, plus the cost of the marketing of the finished product, will be minimum". Elaborate.

**15**

## *UNIT-III*

Q.6    a) What is master production scheduling? What are its objectives?

**10**

b) Discuss the ways of improving productivity.

**5**

Q.7    What are the various techniques of work measurement? Specified the name and describe each of these.

**15**

## *UNIT-IV*

Q.8    a) What are the effects of low stock holding and high stock holding?

**8**

b) Explain ABC technique of inventory control.

**7**

Q.9    Discuss the various types of control charts used for:

a) Variable.

b) Attribute.

**7½x2**

# End Semester Examination, May 2015

## BBA (GEN) / BBA (BANKING) – Third Semester

## DATABASE MANAGEMENT SYSTEM (bba-3004)

Time: 3 hrs

Max Marks: **50**

*No. of pages: 2*

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

Q.1  a)  Insert statement comes under:

  i)   Data definition language.

  ii)  Data manipulation language.

  iii) Data transaction language.

  iv)  None of the above.

  b)  RMAN stands for _____.

  c)  Proxy is a type of _____.

  d)  Write a query for selectivity all the tables of a database.

  e)  Name any four viruses.

  f)  Name all the operators used in SQL.

  g)  Define Schema.

  h)  Write down the properties of primary key.

  i)  Database architecture is client server architecture. **(True/False)**

  j)  Which view is called user's view in a database?

  i)   Physical.
  ii)      Internal.

  iii) Conceptual.                                                          Iv)
  None of the above.                    **1x10**

# UNIT-I

Q.2   a)  Explain the following:

      i)   Differentiate between data and information.

           **4**

      ii)  Roles and responsibilities of data base administrator.

           **6**

  b)  Explain the following:

      i)   Clauses used in SQL with proper examples.

           **5**

      ii)  Data dictionary.

           **5**

Q.3   Explain different types of database language. Also explain SQL and its sublanguage with proper statements.

      **10**

# UNIT-II

Q.4   What is E-R diagram? Explain E-R diagram for library management system.
    **10**

Q.5   "Data modeling is mandatory for creation of a complete database package". Justify the statement with explaining all the data models in detail.
    **10**

# UNIT-III

Q.6   'Data base security for online databases is necessary for all the organizations' Justify the statement. How could you secure your database by using different techniques?

      **10**

Q.7   Explain backup and recovery of databases in detail. Also explain the recovery techniques.

      **10**

# UNIT-IV

Q.8   Explain the following:

a) Mobile databases.

**5**

b) Internet databases.

**5**

Q.9    What do you mean by data mining? Explain data mining in terms of emerging database technologies in today's scenario.

**10**

# End Semester Examination, May 2015

BBA (GEN) /BBA (Banking) – Third Semester

## WORKSHOP ON ENVIRONMENTAL STUDIES (bba-3005)

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) Each and every relationship of an organism with this environment is called _____.

b) Environment day is celebrated on _____.

c) Soil erosion can be prevented by _____.

d) The Chipko movement in Garhwali region was initiated by _____.

e) The store house of biodiversity is _____.

f) Energy level of food chain is called _____.

g) Dead plant parts and animal remains are _____.

h) Cancer of skin and burns are due to _____.

i) Ozone layer in upper atmosphere is being destroyed by _____.

j) The maximum size of population that can be supported by the environment is called _____.

**1½x10**

## *UNIT-I*

Q.2    Define deforestation. What are the major advantages of forests? Explain their ecological uses.

**15**

Q.3    What do you mean by natural resources? Discuss the difference between senewable and none-renewable resources with relevant examples.

**15**

## *UNIT-II*

Q.4    What are the biotic and abiotic components of ecosystem? Discuss the features of marine ecosystem.

**15**

Q.5    What do you mean by biodiversity? Describe the measure threats of biodiversity.    **15**

## *UNIT-III*

Q.6    Discuss the major issues and problems related to rehabilization of the displaced people.

**15**

Q.7    Give a detailed account of environmental disasters and their management.

**15**

## *UNIT-IV*

Q.8    What are the problems associated with successful implementation of environmental legislations?

**15**

Q.9    'In terms of continents and countries, the world's population is very ill-balanced'. Explain.

**15**

# End Semester Examination, May 2015

BBA (GEN)/BBA (Banking) – Third Semester

## WORKSHOP ON PRESENTATION SKILLS (bba-3006)

Time: 3 hrs

Max Marks: **50**

*No. of pages: 1*

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

Q.1    Define the following very briefly: (**One** *or* **two** sentences only)

a)  Group discussion.

b)  Emotional presentation.

c)  Conference.

d)  Simulation.

e)  Brainstorming.

f)  Visual-aids.

g)  Note-cards.

h)  Value-added presentation.

i)  Presentation boosters.

j)  Objective.

**1x10**

## *UNIT-I*

Q.2    Write a presentation to bring out the emotions of people on the topic "BETI PADHAO, BETI BACHAO" Mention the aids used and the method of presenting.
        **10**

Q.3    Give a motivational presentation to your colleagues to inspire them to start coming to office in a car pool in order to save time and fuel; also to reduce the parking space which

is not enough.

**10**

# UNIT-II

Q.4    What is the basic objective of giving a presentation? What factors should be kept in mind while planning a presentation?

**10**

Q.5    "A planned presentation is definitely more effective than an unplanned one". Discuss the above statement bringing out the difference between the two.

**10**

# UNIT-III

Q.6    Explain how a fish bowl presentation is made? How is it better than other methods?

**10**

Q.7    Write short notes on the following:

a)  Motivation.

b)  Role-plays

**10**

# UNIT-IV

Q.8    Write a humorous presentation for the employees of your organization who are stressed out after a very tiring period of hard work.

**10**

Q.9    As the CEO of ABC international you have come to know that the employees are angry and dissatisfied with the latest promotions in your department. Write a presentation to build trust among your employees.

**10**

# End Semester Examination, May 2015

BBA (GEN) / BBA (BANKING) – 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 **Fill in the blanks:**

a) IMF stand for _____.

b) Business environment has two components _____ and _____.

c) Any member of IMF is the member of _____.

**Whether the following statement is True or False:**

d) EXIM is stand for export-import.

e) RBI regulates the SEBI.

f) UTI is a pure banking institution.

**1x7**

**Answer the following question in brief:**

g) Define the term FDI.

h) Write any two features of privatization.

i) Discuss any two social responsibility of business.

j) What is BOP?

**2x8**

## <u>UNIT-I</u>

Q.2 Define business environment. Explain the various components of business environment.

Q.3 Discuss the role of private sector in India in the industrial development. What are its limitations?

**15**

# *UNIT-II*

Q.4 Distinguish between cottage and small scale industries. Discuss the importance of such industries in the Indian economy.

**15**

Q.5 a) Explain the consequences of industrial sickness.

**7**

b) Critically evaluate globalization of Indian economy.

**8**

# *UNIT-III*

Q.6 What is meant by BOP? Analyse the causes of adverse BOP in India. How it is corrected?

**15**

Q.7 a) Discuss the importance of foreign investment in the economics development of India.

**7½**

b) Explain the role of public sector banks in India.

**7½**

# *UNIT-IV*

Q.8 Examine the role of MNC's in India. What is the policy of the government regarding MNC's?

**15**

Q.9 Write short notes on:

a) Objectives of world trade organization.                    B)    Functions   of    IMF.

**7½x2**

# End Semester Examination, May 2015

## BBA (GEN) / BBA (BANKING) – 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 ***Whether the following statement is True or False:***

a) Main objective of financial management is maximization of profit.

b) Risk and return are two basic dimensions of any financial decision.

c) Cash management means obtaining of finance from variance sources.    **1x3**

***Fill in the blanks:***

d) The finance manger is responsible for taking _____, _____ and _____ decision.

e) An annuity is a serial of _____ payments.
       **2x4**

***Answer in brief:***

f) Define working capital. (Define the term working capital)

g) What is operating cycle?
                **2x2**

## *UNIT-I*

Q.2 "The wealth maximization objective provide an appropriate criteria for proper financial decision making." Explain.
        **15**

Q.3   What are the major financial decisions which are taken by financial management? Explain.

**15**

## *UNIT-II*

Q.4   A choice is to be made between two proposal which require an equal investment of Rs. 50,000/- each and are expected to generate net cash flow as under:

| Year: | I | II | III | IV | V | VI |
|-------|------|------|------|------|------|------|
| Project A | 25000 | 15000 | 10000 | NIL | 12000 | 6000 |
| Project B | 10000 | 12000 | 18000 | 25000 | 8000 | 4000 |

The cost of capital of the company is 10%. Which project should be chosen under?

a)   Pay book period          b)   NPV          c)
     ARR methods

Discount factor at 10% are for 1 to 6 years:

0.909, 0.826, 0.751, 0.683, 0.621, 0.564

**15**

Q.5   Write notes on:

a)  Cost of debt capital                    b)      Internal rate of return.

**7½x2**

## *UNIT-III*

Q.6   What do you mean by capital structure? When should it be called as optimum one? Bring out the qualities of an optimum capital structure.
**15**

Q.7   Define leverage. What are the different types of leverages? Explain them.          **15**

## *UNIT-IV*

Q.8   Define dividend policy. Explain briefly main determinants of dividend policy of a firm.

**15**

Q.9   Write short notes on:

a)  Permanent and temporary working capital.

b) Management of cash.

**7½x2**

# End Semester Examination, May 2015

## BBA (GEN) / BBA (BANKING) – 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 briefly:

a) Diagrammatically represents the steps in marketing process.
**2**

b) List out the steps in consumer buying decision process.
**2**

c) Design appropriate distribution channel for:

i) Flowers
ii) Furniture                                    **2**

d) Diagrammatically represent PLC.
**2**

e) List out the steps in marketing research process.
**2**

f) State any two benefits of packaging of a product.
**2**

g) List out few types of electronic media for advertising.
**2**

h) The concept of positioning was given by _____.
**1**

## *UNIT-I*

Q.2 a) Define marketing. Discuss the concepts of marketing mix in detail.
**10**

b) Differentiate between marketing and selling.

**5**

Q.3 Explain the core concepts of marketing in detail.

**15**

## *UNIT-II*

Q.4 What do you understand by consumer behaviour? Discuss its determinants in detail.

**15**

Q.5 What is market segmentation? Discuss the bases of market segmentation for a car.

**15**

## *UNIT-III*

Q.6 Define product. Discuss the challenges faced by the marketer while doing branding of a product.

**15**

Q.7 a) Discuss the different pricing strategies adopted by the marketer, while setting a price of the product.

**10**

b) Discuss the strategies adopted by the marketer in maturity stage of PLC.

**5**

## *UNIT-IV*

Q.8 Write notes on:

a) Trends in retailing

b) Sales promotion

**7½x2**

Q.9 Discuss the merits and demerits of "outdoor advertising media".

**15**

# End Semester Examination, May 2015

BBA (GEN) / BBA (BANKING) – 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 ***Answer the following briefly:***

a) What is a variable?

b) Define hypothesis.

c) What is inductive theory?

d) What is law of statistical regularity?

**2x4**

***State whether statement are: True/False:***

e) Research is a tool that is specific to certain disciplines.

**2**

f) One of the most important features of a good research study is replicability of findings.

**2**

g) A nominal scale can only involve the assignment of numbers. Alphabets or symbols cannot be assigned.

**1**

h) Selected bibliography refers to the referred articles which are from selective and prestigious journals and sources.

**2**

## *UNIT-I*

Q.2 What is business research? Explain various types of business research.

**15**

Q.3    What is business research proposal? Explain the ingredients of a research proposal.

**15**

## *UNIT-II*

Q.4    Define research design. What are the significant elements of a research design? **15**

Q.5    "Scaling describes the procedures by which numbers are assigned to various degrees of opinion, attitude and other concepts" discuss. Also points out the basis for scale classification.

**15**

## *UNIT-III*

Q.6    What are the needs of sampling? Discuss various probability sampling methods by giving their merits and demerits.

**15**

Q.7    a)  What are the guiding considerations in the construction of a questionnaire? Explain.

**8**

       b)  Differentiate between primary and secondary data.
**7**

## *UNIT-IV*

Q.8    Enumerate different types of analysis.

**15**

Q.9    Define the term research report. Describe the various types of report in research.

**15**

# End Semester Examination, May 2015

BBA (GEN) / BBA (BANKING) – 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  a)  **Fill in the blanks**:

   i)   Damages are _____ compensation allowed to the injured party for the loss suffered by him as a result of the breach of contract.
   **1**

   ii)  "An agreement not enforceable by law is said to be _____."
   **1**

   iii) The person who gives the guarantee in the contract of guarantee is kno_____.

   **1**

   iv)  Goods identified and agreed upon at the time of the making of the contract of sale are called '_____'.
   **1**

   v)   In an asymmetric cryptosystem, "key pair" means a _____and it is mathetically related to _____.
   **2**

   vi)  A negotiable instrument may be dishonoured by i) _____ or ii) _____.

   **2**

   vii) Delivery of goods means _____.
   **2**

   viii) _____ principle means a principal whose existence is disclosed by the agent but the name is not disclosed.
   **1**

b) Answer the following questions in **one** or **two** sentence:

i) What is a continuing guarantee?

**2**

ii) What are quasi-contracts?

**2**

# *UNIT-I*

Q.2 Define contract. Discuss the essential elements of a valid contract.
**15**

Q.3 a) Who is minor? Discuss the law relating to validity of contracts by minors.
**10**

b) Discuss the rights and duties of a finder of goods.
**5**

# *UNIT-II*

Q.4 What are various ways in which one or more parties to a negotiable instrument is discharged from liability? Discuss.

**15**

Q.5 Who is a holder in due course? What are the essential qualifications of a holder in due course? Explain the rights and privileges of a holder in due course.
**15**

# *UNIT-III*

Q.6 a) What is agency by ratification? What are the requisites of a valid ratification?  **8**

b) Describe briefly the various modes by which an agency may be terminated.  **7**

Q.7 Differentiate 'condition' and 'warranties'. Explain briefly the implied conditions and warranties in a contract of sale of goods.
**15**

# *UNIT-IV*

Q.8 What is a contract of guarantee? What are its special features? Distinguish between a contract of guarantee and a contract of indemnity.
**15**

Q.9 a) How is "Cyber Appellate Tribunal" established? What are its powers under the IT Act, 2000? Discuss.

**10**

b) Explain the term "e-governance" with reference to IT Act, 2000.

**5**

# End Semester Examination, May 2015

## BBA (GEN) / BBA (BANKING) – Fourth Semester

## INFORMATION SYSTEM IN MANAGEMENT (bba-4006)

Time: 3 hrs

Max Marks:   **50**

*No. of pages: 1*

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

Q.1   a)  Define system boundary.

b)  Define Information.

c)  Define E-commerce.

d)  Give one example of MIS.

e)  _____ systems operate in a external environment and exchange information and material with that environment.

f)  _____ is data that have been organized so that they have meaningful value to the recipient.

g)  Write full form of DDOS.

h)  Write full form of ICT.

i)  Write full form of DSS.

j)  The most important method for control and security on internet and other network is the use of _____.
**1x10**

## *UNIT-I*

Q.2   How can IT supports a company's business processes and decision making and give it a competitive advantage? Give examples to illustrate your answer.
**10**

Q.3   What is data? What are the characteristics and components of information system? Explain.

**10**

# *UNIT-II*

Q.4   What is MIS? Why is it important in a business organization? Discuss various limitations of MIS.

**10**

Q.5   Define:

   a)   System                          b)   Sub-system
         c)   Interface

   d)   Expert system          e)   System environment

**2x5**

# *UNIT-III*

Q.6   Discuss the objectives and principles of information system planning.

**10**

Q.7   Write short note on implementation of information system.

**10**

# *UNIT-IV*

Q.8   Is there an ethical crisis in business? What role does information technology play in unethical business practices?

**10**

Q.9   Write short note on:

   a)   e-commerce

   b)   e-collaboration

**2x5**

# End Semester Examination, May 2015

BBA (GEN) / BBA (BANKING) – Fifth Semester

## PURCHASE AND MATERIALS MANAGEMENT (bba-5001)

Time: 3 hrs

Max Marks: **75**

*No. of pages: 1*

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

Q.1    Answer the following briefly:

a) List out the objectives of purchasing.

**2**

b) State the steps involved in purchasing cycle.

**2**

c) State any two applications of computers in various functions of material management.

**2**

d) Define a purchase order. Also draw its format.

**2**

e) Name any two material handling equipments used in production process in an organization.

**2**

f) State the various modes of transport.

**2**

g) Name few materials stores.

**2**

h) LIFO is one of the methods of valuation of stock. (***True/False***)

**1**

## *UNIT-I*

Q.2    What do you mean by purchasing? State the functions and 5Rs of purchasing.
       **15**


Q.3    a)    Discuss the organizational matters in purchasing.
                                    **9**

       b)    Explain various forms of purchasing organization.
                                    **6**


# *UNIT-II*

Q.4    a) What do you mean by determination of material quality? Explain its determinants.

                                                                    **10**

       b) Discuss the factors to be considered in vendor selection.
                                    **5**


Q.5    a) Do you favour buying an item from other source instead of making it in house?
          Support your answer with reasons.
                                    **9**

       b) List out the documents required during the procedure of purchase.
                **6**


# *UNIT-III*

Q.6    Define material management. Discuss the functions and objectives of material
       management.
                                                            **15**


Q.7    Write notes on:

       a) Standardization and variety reduction

       b) Value analysis.
                                    **7½x2**


# *UNIT-IV*

Q.8    What is store keeping? Discuss the various types of store layouts.
             **15**


Q.9    a)  What is codification? State its merits and demerits.
                                     **8**

       b)  What do you mean by scrap? Explain how the scrap is disposed-off.
                   **7**

# End Semester Examination, May 2015

## BBA (GEN) / BBA (BANKING) – Fifth Semester

## INDIAN FINANCIAL SYSTEM (bba-5002)

Time: 3 hrs

Max Marks:    **75**

*No. of pages: 1*

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

Q.1    Answer in brief:

a)  Explain the meaning of the term "derivatives".

b)  Give two advantages of an E-IPO.

c)  What is a bonus share?

d)  Give two factors considered in a credit rating.

e)  Give two roles of SEBI in issuing securities.

f)  Give two functions of NSDL.

g)  Define factoring.

h)  What are physical shares?

i)  What is the meaning of a sovereign credit rating?

j)  Red herring prospectus contains _____.
    **1½x10**

## *UNIT-I*

Q.2    Define a financial system. Discuss its structure and functions in Indian context.    **15**

Q.3 Distinguish between primary market and secondary market and elaborate the players in those markets.

**15**

# UNIT-II

Q.4 Write short notes on:

a) Commercial bill

b) Term money

**7½x2**

Q.5 Define capital market instruments. Is there any innovation in financial instruments? Explain with example.

**15**

# UNIT-III

Q.6 What do you mean by a depository system? What are the benefits of a depository system?

**15**

Q.7 What do you mean by a debt market? State the types of instruments traded in a debt market.

**15**

# UNIT-IV

Q.8 Give a brief note about the functions of service providers in a financial service market.

**15**

Q.9 Define SEBI. What are the powers vested with SEBI to promote the development of securities market and to protect the interest of investors?

**15**

# End Semester Examination, May 2015

BBA (GEN) / BBA (Banking) – Fifth Semester

## COMPANY LAW (bba-5003)

Time: 3 hrs

Max Marks: **75**

*No. of pages: 1*

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

Q.1 **Fill in the blanks:**

a) Maximum number of members in case of a public company is _____.

b) The liability of members of company limited by guarantee is limited to the extent of _____.

c) Transfer of shares in a public company is _____.

d) The companies which are formed under Companies Act, 1956. They will be called as _____.

e) Atleast _____ members should sign the MoA in case of a public company.

f) An act ultra vines the directors can be ractified if it is not ultra vines the _____.

g) Contracts made after incorporation but before the grant of certificate of commencement of business are called _____.

h) Total managerial remuneration cannot exceed _____% of net profits.

i) If the quorum is not present for the meeting the meeting will be _____.

j) The minimum application money should be _____ of nominal value.       **1x10**

**State True or False:**

k) Minimum paid up capital of a public company is 10 lakhs.

l) Statutory meeting must be held for all type of companies.

m) CIN stands for company index number.

n) A company can be wound up only be court.

o) Shares are transferred from X to Y. Now X and Y both are members of the company.

**1x5**

# *UNIT-I*

Q.2     Explain the characteristic of company as put forwarded in 'Solomon Vs Solomon and company' case. Also explain exceptions to this general rule.

**15**

Q.3     Discuss at length the doctrine of indoor management as an exception to the doctrine of constructive notice.

**15**

# *UNIT-II*

Q.4     What is AGM? Explain the provisions of Companies Act related to AGM.

**15**

Q.5     Explain:

a)  Contents of prospectus.

b)  Termination of membership of a company.

c)  Voting in member meetings.

**5x3**

# *UNIT-III*

Q.6     Explain the provisions of Companies Act related to qualification, powers and removal of auditors of a company.

**15**

Q.7     a)      Discuss the differences between Managing Director and whole time Director.
**7**

b)      Explain provisions related to remuneration of directors of a public company.
**8**

# *UNIT-IV*

Q.8     What do you mean by 'members voluntary winding up'? Explain in detail and differentiate it from 'creditors voluntary winding up'.

**15**

Q.9    Explain:

    a)  Contributories.         b)      Official liquidator.

                                            **7½x2**

# End Semester Examination, May 2015

BBA (GEN) / BBA (Banking) – Fifth Semester

## COMPUTER NETWORKING AND INTERNET (bba-5004)

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) Which of the following network is used to connect a number of computers to each other by cables in a single location?

i)  LAN

ii)    WAN

iii) MAN

iv)    Both ii) and iii)

b) Transmission lines are also called as:

i)  Circuits

ii)    Channels

iii) Truncks

iv)    All the above

c) The distance a simple signal can travel in one period is called:

i)  Wavelength speed

ii)    Propagation

iii) Frequency

iv)    Both i) and ii)

d) Data Link Control Protocol (HDLC) is implemented at the:

i)  Data link layer

ii)    Network layer

iii) Transport layer

iv)    Physical layer

e) Tools that is used to transfer data/files among computers on the internet:

i)  FTP

ii)    Archie

iii) TCP                                        iv)      Gopher

f) The concept of electronic cash is to execute payment by:

    i) Credit card                                  ii)      ATM card

    iii) Using computers over network     .     iv)      Cheque

g) An ISP:

    i) Provides access to the internet.

    ii) is a CPU register.

    iii) is a CPU functional unit.

    iv) is a protocol that allows for remote login.

h) Telephone system may be classified as:

    i) Simplex and symmetrical               ii)      Duplex and asymmetrical

    iii) Simplex and asymmetrical            iv)      Duplex and symmetrical

i) Why was the OSI developed?

    i) Manufacturers 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.

j) Which of the following is a data communication system?

    i) Sender      ii)     Medium          iii)     Receiver          iv)
    All of the above              **1x10**

## *UNIT-I*

Q.2    What do you understand by computer networks? Discuss the advantages and disadvantages of a network. Differentiate between different types of data signals. **10**

Q.3    a) What are lists in HTML? Explain

                                    **5**

     b) Explain ring topology in brief.

                                    **5**

## *UNIT-II*

Q.4     What is a network security? Explain firewalls and its different types.
                **10**


Q.5     What are the factors we need to keep in mind while designing a website for the client?

                                                                **10**

## *UNIT-III*

Q.6     a)  Explain the background of a internet.
                                                **5**

        b)  Discuss the steps for setting windows environment for a dial up networking.
            **5**


Q.7     a)  How does a web search engine works? Explain.
                                                **5**

        b)  What are forms in HTML? Illustrate with an example.
                                    **5**

## *UNIT-IV*

Q.8     What are the different protocols for a communication?
                                    **10**


Q.9     Write short notes on:

        i)   Future of intranet

        ii)  HTTP protocol

                                                **5x2**

# End Semester Examination, May 2015

BBA (GEN) / BBA (BANKING) – Fifth Semester

## WORKSHOP ON PERSONALITY AND SOFT SKILLS DEVELOPMENT

## (bba-5005)

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)  Personality is derived from the Latin word _____.

b)  What people think of you is known as _____.

c)  In an interview, first _____ is very important.

d)  Personality is a sum total of _____ that an individual develops as he grows up.

e)  _____ plays a very important role in shaping the personality of an individual.

**1x5**

**Give one word for the following**:

f)  Group of people working together for a specific project.

g)  When a child is small, who plays a major role in shaping his/her personality?

h)  Strict child-training method.

i)  Special ability of a person.

j)  A change in which an already present trait is replaced with a new one.
        **1x5**

## *UNIT-I*

Q.2     What factors are responsible for determining the personality patterns of an individual?

**10**

Q.3     Explain the word 'syndromes'. How many types of syndromes are there?
**10**

## *UNIT-II*

Q.4     What factors help in moulding the personality of an individual? Elaborate with the help of suitable examples.

**10**

Q.5     How many child training methods are there and which one according to you is the best and why?

**10**

## *UNIT-III*

Q.6     What role does body language play in enhancing the personality of an individual? Explain each component of a body language.

**10**

Q.7     Write short notes on *any two:*

a)  Stress

b)  Personal hygiene

c)  Healthy personality

**5x2**

## *UNIT-IV*

Q.8     What points should be kept in mind while preparing for an interview?

**10**

Q.9     What interpersonal and group skills are required to make a team effective?
**10**

# End Semester Examination, May 2015

BBA (GEN) / BBA (Banking) – 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) Dividend income is taxable under the head _____.

b) Deduction under section 80 QQB is in respect of income from _____.

c) TDS means _____.

d) Education Cess is levied @ _____.

e) Service tax is applicable to whole of India except _____.

f) VAT rate for silver and gold ornaments is only _____.

g) Due date for payment of service tax for last quarter is _____.          **1x7**

**Write two or three sentence about:**

h) Service tax return

i) Variants of VAT

j) Gross total income

k) Agricultural income

                                                              **2x4**

## *UNIT-I*

Q.2 Write notes on:

a) Income.

b) Scope of total income of ordinarily resident.

c) Residential status of company.

**15**

Q.3 "The incidence of tax depends upon the residential status of an assessee". Discuss in detail.

**15**

## *UNIT-II*

Q.4 There are expenditures which are specifically allowed and disallowed while computing business income. Discuss.

**15**

Q.5 Explain deductions under sections 80 C, 80 D and 80 P.

**15**

## *UNIT-III*

Q.6 What do you mean by VAT? Justify the application of VAT in India.

**15**

Q.7 Write a detailed note on input tax credit available in VAT.

**15**

## *UNIT-IV*

Q.8 Discuss the rules pertaining to determination of value of taxable service in different circumstances.

**15**

Q.9 What are the services covered in negative list? Discuss briefly.

**15**

# End Semester Examination, May 2015

## BBA (GEN) / BBA Banking – 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  a)  Define system.

b)  Write down the phases of waterfall model.

c)  DFD stands for _____.

d)  The step by step instructions that solve a problem are called:

    i)  An algorithm                 ii)
    A list

    iii)  A plan
        iv)     A sequential structure

e)  How many phases are there in a SDLE?

f)  What do you mean by prototyping?

g)  I/O design stands for _____.

h)  Write down the types of feasibility study.

i)  What is a primary key?

j)  Write down any two fact finding techniques.
    **1½x10**

# *UNIT-I*

Q.2  Explain atleast three SDLE models in detail.

**15**

Q.3    Write notes on:

a)  Case tools

**9**

b)  Structured English

**6**

# *UNIT-II*

Q.4    'Feasibility study is must for any system and should be done before development of the system'. Justify the statement.

**15**

Q.5    Write notes on:

a)  Decision tree

**7**

b)  Data dictionary

**8**

# *UNIT-III*

Q.6    a)  Explain I/O design in detail.

**8**

b)  Differentiate between a file system and a database system.

**7**

Q.7    What do you understand by a project management? Explain its complete procedure.

**15**

# *UNIT-IV*

Q.8    What is a system testing? Why is it necessary for the successful completion of a project? Explain.

**15**

Q.9    Explain the following:

a)  Backup and recovery.

**8**

b) Documentation and its uses.

**7**

# End Semester Examination, May 2015

BBA (GEN) / BBA (Banking) – Sixth Semester

## FOUNDATION 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 ***State whether the following statement is True or False:***

a) Risk factor involved in an international business is more than a domestic business.

b) Exchange of goods and services is known as trade.

c) Franchising is more common in a service industry.

d) In PLC theory companies will manufacturing product first with in the country.

***Fill in the blanks:***

e) FDI stands for _____.

f) Portfolio investment comprises of _____ holdings by non residents.

g) Adam Smith developed the theory of _____ advantage.

h) According to comparative advantage theory says that total global output can be increased through _____.

i) WTO stands for _____.

**1x9**

***Answer the following questions in one*** or ***two sentences:***

j) Write two ways of tariffs in an international business.

k) State two objectives of IMF.

l) Mention two determinants of FDI.

**2x3**

## UNIT-I

Q.2 Define international business. Explain the nature and main fields of international business.

**15**

Q.3 "FDI contributes towards development of an underdeveloped country leading to overpowering its economy". Justify the statement. Also suggest various measures to attract FDI in India.

**15**

## UNIT-II

Q.4 Discuss in detail the absolute advantage theory of international business with suitable examples.

**15**

Q.5 Differentiate between tariff and non-tariff barriers. Explain the technical and administrative non tariff barriers in detail.

**15**

## UNIT-III

Q.6 Explain the functions, principles and scope of WTO.

**15**

Q.7 Write short notes on:

a) Balance of payment.

**8**

b) Characteristics of foreign exchange market.

**7**

## UNIT-IV

Q.8 Discuss the present policy of the government towards multinationals. What suggestions would you recommend in this regards?

**15**

Q.9 Write notes on:

a) Pricing strategy done in the international business.

**8**

b) Factors that determine the distribution channels in the international markets.

**7**

# End Semester Examination, May 2015

BBA (GEN) / BBA (Banking) – Sixth Semester

## E-COMMERCE (bba-6004)

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)  Name any four payment gateways.

b)  Digital signature enhances the security of online transactions. **(True/ False)**

c)  Define virus.

d)  Transacting online is safe if you have installed _____ (Virus/ Firewall)

e)  Write down categories of E-commerce.

f)  Through which protocol hacking of a system is possible.       (TCP/IP)

g)  Encryption means _____.

h)  Give name of any four search engines.

i)  Online business is more beneficial than brick Vs click business. **(True/False)**

j)  Name any four viruses.

**1x10**

## *UNIT-I*

Q.2  Define E-commerce and its categories in detail.

**10**

Q.3  a)  Write down the advantages and disadvantages of online transactions.

**5**

b)  Differentiate between pure online business and brick vs click business.

**5**

## UNIT-II

Q.4 What do you mean by payment gateways. Explain the working and features of payment gateways.

**10**

Q.5 a) Explain the required IT infrastructure for online business.

**6**

b) What can be the possible pitfalls of online business?

**4**

## UNIT-III

Q.6 How E-commerce applications make your business effective in manufacturing, retail and service sectors? Explain with suitable examples

**10**

Q.7 "Online transaction can only be safe if we are using a strong network security". Justify the statement.

**10**

## UNIT-IV

Q.8 What do you understand by virtual organization? Explain its advantages and disadvantages in detail.

**10**

Q.9 a) Explain the conceptual design of E-commerce model for a middle level organization.

**5**

b) What is transaction handling? Explain the procedure of handling of transactions.

**5**

# End Semester Examination, May 2015

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)  MICR stands for:

   i)  Magnetic ink character reader reader

   ii)  Magnetic ink code

   iii)  Magnetic ink cases reader

   iv)  None of the above.

   b)  Which operation is not performed by a computer?

   i)  Inputting

   ii)  Processing

   iii)  Controlling

   iv)  Understanding

   c)  The binary equivalent of 74 is:

   i)  1001011

   ii)  1001010

   iii)  1010101

   iv)  1001101

   d)  Which of the following is not a logical operator?

   i)  &

   ii)  &&

   iii)  !!

   iv)  !

e) Which of the following can't be checked in switch case?

    i) Character                                                 ii)
      Integer

    iii) Float                                                  iv)
      enum

f) Nested structures are allowed in 'C':

    i) Yes                                                    ii)
      No

g) Which of the following are unary operators in 'C'?

    i) !
    ii)     sizeof

    iii) ~
    iv)     &&

h) Name any two first generation computers:

i) _____ is the father of computer.

j) CD-ROM stands for _____.

                            **1½x10**

# ***UNIT-I***

Q.2   a) Explain any five input devices.

                              **10**

     b) What is the difference between computer and human being?
                      **5**

Q.3   a) Explain any three output devices.

                             **6**

     b) Compute the following:        $(11011.1101)_2 = (?)_{10} = (?)_8 = (?)_{16}$

                  **9**

# ***UNIT-II***

Q.4   a) What are various problem solving approaches? Explain them with their advantages and disadvantages.

                              **10**

b) Draw a flowchart to find out sum of $n$ natural numbers.

**5**

Q.5　a　Differentiate between:

　　i)　Primary and secondary memory

　　ii)　Algorithm and flowchart

**7½x2**

# *UNIT-III*

Q.6　a) Write a program to find reverse of a number and check whether it is palindrome or not?

**10**

b) What are various tokens available in 'C'?

**5**

Q.7　a) What do you mean by preprocessor directive?

**5**

b) What are various operators available in 'C' language?

**10**

# *UNIT-IV*

Q.8　a) What do you mean by array? What are its advantages and disadvantages?
**10**

b) Explain any two library functions in detail.

**5**

Q.9　What is the difference between call-by-value and call-by-reference? Write a program to swap two numbers using both call-by-value and call-by-reference.
**15**

# End Semester Examination, May 2015

## 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)  In a throw of dice, what is the probability of getting number greater than $5$?

b)  If a set $A$ has $n$ elements, then the total number power set of $A$ is _____.

c)  Find the 7th term of sequence $2, 4, 6, 8$ _____.

d)  What is the value of $\sin\dfrac{3\pi}{2} + \cos\dfrac{2\pi}{3}$.

e)  If $\sin(x+20) = \cos x$, find the value of $x$.

f)  The value of $\log_5(1/125)$ is _____.

g)  If $\log_{32} x = 0.8$, then $x$ is equal to _____.

h)  If we differentiate:  $y = \dfrac{x^4}{4} + 2x^2$, we get _____.

i)  Evaluate: $\int (5x^2 - 4x + 6dx)$

j)  The general term of G.P. is _____.

**1½x10**

## *UNIT-I*

Q.2   a)  In a group of $65$ people, $40$ like cricket, $10$ like both cricket and tennis. Find:

i)  How many like tennis       ii)     How many like tennis only and not cricket.   **7**

b) Sum the series $0.3+0.33+0.333+.....$ to $n$ terms.

**8**

Q.3  a) The 5th term of a G.P is $\dfrac{1}{3}$ and 9th term is $\dfrac{16}{243}$. Find the 4th term.

**7**

b) Find the domain and range of the following functions:

i) $y = \dfrac{x^2-1}{x-1}$, $x \neq 1$            ii)     $y = \sqrt{x}$

**8**

## UNIT-II

Q.4  a) Prove that $\sin^4\theta - \cos^4\theta = \sin^2\theta - \cos^2\theta$

**7**

b) Solve for $x$ $\log(4x-3) = \log(x+1) + \log 3$

**8**

Q.5  a) Prove that $7\log\dfrac{16}{15} + 5\log\dfrac{25}{24} + 3\log\dfrac{81}{80} = \log 2$

**8**

b) In a bag, there are 100 bulbs out of which 30 are bad ones. A bulb is taken out of bag at random. Find the probability of the selected bulb to be good.

**7**

## UNIT-III

Q.6  a) Evaluate: $\lim\limits_{x \to a} \dfrac{(x+2)^{5/3} - (a+2)^{5/3}}{x-a}$

**7**

b) If $y = \sqrt{1+x^5}$ ; Prove that $\dfrac{dy}{dx} = \dfrac{5x^4}{2y}$

**8**

Q.7    a)  For what value of $k$ is the following function continuous at $x = 4$ :

$$f(x) = \begin{cases} \dfrac{x^2 - 16}{x - 4} & if \quad x \neq 4 \\ \\ k & if \quad x = 4 \end{cases}$$

**7**

b)  If $y = \left(x - \sqrt{1 + x^2}\right)$; Prove that: $\left(1 + x^2\right)\left(\dfrac{dy}{dx}\right)^2 = y^2$

**8**

## UNIT-IV

Q.8    a)  Evaluate    $\displaystyle\int \dfrac{\sin x}{\left(1 + \cos x\right)^2} dx$

**7**

b)  Solve the differential equation $\dfrac{dy}{dx} = x \log x$

**8**

Q.9    a)  Solve the differential equation $\dfrac{dy}{dx} = \dfrac{y - x}{y + x}$

**8**

b)  What is Algebraic structure? Explain Groups and Rings with examples.
**7**

# End Semester Examination, May 2015

## BCA -First Semester

## BUSINESS COMMUNICATION-I (BCA-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 **Choose / fill the correct option:**

a) Communication starts with

   i)   Message          ii)    Sender        iii)   Channel      iv)   Feedback

b) The two broad areas of communications are:

   i)   Oral and written communication.

   ii)  Verbal and written communication.

   iii) Verbal and non-verbal communication.

   iv) Oral and non-verbal communication.

c) Which of the following are examples of written communication?

   i)   Letters and Voicemail         ii)    Reports and email

   iii) Circulars and voicemail        iv)    Presentations and email.

d) All the following are external stakeholders of an organization, except:

   i)   Media          ii)    Government      iii)   Suppliers      iv)   Shareholders

e) Readability is determined mainly by:

i) Punctuation                                                 ii)    Length    of words

iii) Active and passive voice              iv)    Spelling

f) Writing style can be improved through use of:

i) Jargon                 ii)    Slang                 iii)    Simple words         iv)    Metaphors

g) One advantage of telephone communication is:

i) Good for problem solving

ii) Permits use of some non-verbal cues

iii) conveying large amount of information

iv) Keeping a permanent record

h) All of the following types of information can be posted on the intranet except:

i) Employee benefits                   ii)    Declared holidays

iii) Company policies                  iv)    Performance appraisals

i) Which of the following is not a compulsory part of a business letter?

i) Salutation              ii)    Close                  iii)
Attention line       iv)    Body

j) A resume summarizes the following:

i) Strengths and weaknesses          ii)    Personality

iii) Education and experience          iv)    Hobbies

**1x15**

# *UNIT-I*

Q.2    Choose correct option:

a) She looks _____ than she is.

i) much younger    ii)    very younger    iii)    more young
iv)    more younger

b) We were caught _____ a shower on our way home:

i) in                                    ii)    with
iii)    at                             iv)    by

c) Policy, is, the, Honesty, best. (Rearrange to form a meaningful sentence)

d) Godliness, to, cleanliness, is (Rearrange to form a meaningful sentence)

e) It may _____ in the afternoon. (raining/rained/rain)

f) Boy:Girl::man: _____

g) "_____do you live?" _____ in India.(Fill up)

h) "_____ do you come to school?" _____ by bus. (Fill up)

i) The antonym of spendthrift is _____.

j) The synonym of honest is _____.

k) Full form of ISDN is _____.

l) Full form of ERP is _____.

m) He _____ from London. (be/ is/ am/ are)

n) What is _____ dog called? (him/ her/ them/ you)

o) _____ English? (Do you be/ You are/ Are you/ Is you)
   **1x15**

Q.3    a) Fill in each of the blanks with the correct form of present tense:

   i)   Janet _____ Karate class every Saturday. (attend)

   ii)  The market _____ usually noisy in the morning. (to be)

   iii) Aanya _____ her room for the past hour. (Paint)

   iv) The delivery man _____ the parcel already. (delivery)

   v)  You are late. The bus _____ already. (leave)
       **1x5**

   b) Convert to questions:

   i)   They are working hard.

   ii)  They will be working hard.

   iii) They had worked hard.

iv) They have been working hard.

**1x4**

c) Rearrange the words and phrases to form meaningful sentence:

i) Last / the / week / President / Obama / of / the / USA / India / visited.

ii) He / the / went / Humayun's / to / tomb / see / with / his.

iii) He / time / spent / with / some / the / street / in / children / an / NGO.
**2x3**

# *UNIT-II*

Q.4 a) Write your first experience when you visited the collage for the 1<sup>st</sup> time and the conversation in the form of dialogues you had in Admission Cell.
**8**

b) You have to organize a business trip to Goa. Mention the conversation between the different managers for the same in the form of dialogue.
**7**

Q.5 a) Mention basic etiquettes that need to be followed while conversing either at college or outside college.
**8**

b) "People who know how to talk can easily win over hearts". Explain
**7**

# *UNIT-III*

Q.6 How do you define personality? What are its determinants and types?
**15**

Q.7 a) "Goal set is goal half achieved". Do you agree with this? Justify your opinion.
**8**

b) Who is a facilitator? What are the key roles performed by him?
**7**

# *UNIT-IV*

Q.8 a) Why do we have to design resumes with caution? What are the basic points under consideration while designing resumes?
**8**

b) Design your resume with the cover letter for the post of Software Engineer in ABC Company Ltd.

**7**

Q.9   a) Why does an organization conduct interviews? What are the different types of interviews?

**8**

b) Explain the role of communication technology in the workplace.

**7**

# End Semester Examination, May 2015

BCA -First Semester

## PC SOFTWARE (BCA-104)

Time: 3 hrs

Max Marks: **75**

*No. of pages: 1*

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

Q.1 a) The collection of readymade pictures is called _____.

b) We can change the styles of a shape using _____ tab.

c) The file extension of EXCEL workbook is _____.

d) Print review is used for _____.

e) Ctrl+s key is used for _____.

f) DOS means DISK OPERATING SYSTEM. *(True/False)*

g) All the files in a folder should have same name. *(True/False)*

h) WORD can check grammar while checking grammar. *(True/False)*

i) Define macro.

j) Define screen saver.

**1½x10**

## *UNIT-I*

Q.2 a) Explain file management through Windows.
**7½**

b) Explain Five external commands in DOS.
**7½**

Q.3 a) Write short not on Windows Accessories.

b) Define operating system. Discuss the types of operating system.
**8**

# *UNIT-II*

Q.4    a) Create a list of 10 best friends. Create a thank you letter. Use mail merge feature of MS word to create thank you letter for each of your friend from above two files.

**10**

b) How text is formatted in MSWORD?
**5**

Q.5    Define the following terms:

i)  LINKS                                              ii)      Headnotes
      iii)      Header and footer

iv) WIZARDS                                          v)      Tables
**5x3**

# *UNIT-III*

Q.6    a) Explain any five mathematical functions in MS-EXCEL.
**10**

b) Discuss the concept of Freeze Panes in MS-EXCEL.
**5**

Q.7    a) Explain the following:

i)  Creating a workbook              ii)      Opening a workbook

iii) Saving a workbook                iv)      Creating and inserting a worksheet

v) Deleting a worksheet
**10**

b) Discuss any two date and time functions.
**5**

# *UNIT-IV*

Q.8    a) How MS-PowerPoint is a better option for a business presentation? Discuss.
**6**

b) Discuss the various types of views in MS-PowerPoint.

**9**

Q.9 a) Write the steps for the following:

    i) Checking spelling and correcting with objects.

    ii) Adding clipart and other pictures.

    iii) Printing presentation.

**3x3**

b) Write the benefits of PowerPoint presentation.

**6**

# End Semester Examination, May 2015

## BCA -Second Semester

## DATA STRUCTURES (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    **Fill in the blanks:**

a) A stack is an ordered list in which all insertion and deletion are made at one end, called _____.

b) Queue is a _____ list.

c) The complexity of linear search algorithm is _____.

d) The operation of processing each element in an array is _____.

e) The complexity of bubble sort is _____.

                                        **1½x5**

**Multiple choice questions:**

f) When new data are to be insisted into a data structure, but there is no available space, this situation is called:

   i) Underflow                                                                  ii) Overflow

   iii) Houseful                                                                 iv) Saturated

g) The largest element of an array index is called its:

   i) Lower bound          ii) Upper bound          iii) Range          iv) None of the above.

h) The depth of complete binary tree is given by:

i)    $n \log_2 n$          ii)     $n \log_2 n + 1$        iii)     $\log_2 n$

    iv)      $\log_2 n + 1$

i) The size of a problem is measured in terms of:

    i)   Output                                            ii)     Input

    iii) Level of problem                             iv)
      Complexity

j) Which of the following sorting procedure is the slowest?

    i)   Quick sort                                        ii)
      Heap sort

    ii) Shell sort                                    iv)
      Bubble sort                              **1½x5**

# *UNIT-I*

Q.2   a) What do you mean by an algorithm? How can we measure the efficiency of an algorithm?

                                                 **8**

    b) Write algorithm to find largest and second largest element from a list.
       **7**

Q.3   a) What do you mean by a circular queue? What are the advantages of circular queue over linear queue? Justify your answer.
                **8**

    b) Convert the following infix notation into postfix notation:

$$A * (B + C * D) + E$$

    Also write an algorithm for the same.
                                  **7**

# *UNIT-II*

Q.4   a) Write recursive algorithm for a binary search. Why binary search is better than linear search? Justify your answer.
                        **10**

    b) Write a short note on doubly linked list.
                      **5**

Q.5  a)  Write an algorithm for inorder traversal.

**5**

b)  Write a short note on binary tree.

**5**

c)  How can we represent a polynomial using a linked list?
**5**

# *UNIT-III*

Q.6  Write algorithm for merge sort.

**15**

Q.7  What are the various ways to represent a graph? Explain with the help of an example.

**15**

# *UNIT-IV*

Q.8  a)  What are the various file operations?

**8**

b)  What are the various collision resolution methods? Explain with example.
**7**

Q.9  a)  What do you mean by Index Sequential Access Method (ISAM)?
**5**

b)  Differentiate between fixed and variable length record.
**5**

c)  Hash function

**5**

# End Semester Examination, May 2015

BCA -Second Semester

## MATHEMATICAL FOUNDATION 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)  Define cardinality of a set with an example.

b)  If $P = \{a,b,c\}$ and $Q = \{k,l,m,n\}$, determine $P \times Q$.

c)  If $A = \{\phi, a\}$, construct $A \cup P\{A\}$.

d)  Explain the working rule of mathematical induction.

e)  If a set $A$ has $n$ elements, how many relations are there from $A$ to $A$.

f)  If $X = \{1,2,3\}$, $Y = \{8,9\}$ and $R = \{(1,8),(2,8),(1,9),(3,9)\}$, find $\bar{R}$.

g)  The sum of degree of all the vertices in a graph $G_1$ is even. (True / False)

h)  Define path and circuit in graph.

i)  Define complete binary tree with an example.

j)  Consider the set $A = \{4,5,6,7\}$. Let $R$ be the relation $\subseteq$ of $A$. Draw the Hasse diagram of R.

**1½x10**

## UNIT-I

Q.2   a)  Let $X = \{a,b,c\}$. Define $f : X \rightarrow X$ such that $f = \{(a,b),(b,a),(c,c)\}$. Find:

i)   $f^{-1}$

ii)   $f^2$

iii)   $f^3$

6

b) Prove that $1.2 + 2.3 + 3.4 + ....... + n(n+1) = \dfrac{n(n+1)(n+2)}{3}$ by mathematical induction.

**9**

Q.3 a) Describe equivalence relation briefly.

**5**

b) Let $R$ be a binary relation on the set of all integer $I$ such that:

$R = \{(a,b) | (a-b) \text{ is even integer}\}$. Is $R$ reflexive? Symmetric? Transitive? Equivalence relation?

**5**

c) Prove that by mathematical induction $n(n+1)(2n+1)$ is divisible by $6$.

**5**

# UNIT-II

Q.4 a) Consider the set $D_{50} = \{1, 2, 5, 10, 25, 50\}$ and relation divides $(/)$ be a partial ordering relation on $D_{50}$.

   i)  Draw Hasse diagram of $D_{50}$ with relation divides.

   ii) Determine all upper bounds of 5 and 10.

   iii) Determine all lower bounds of 5 and 10.

   iv) Determine g.l.b of 5 and 10

   v)  Determine l.u.b of 5 and 10

**5**

b) Define sublattice. Consider the lattice of all positive integer $I$, under the operation of divisibility. The lattice $D_n$ of all divisor of $n > 1$ is a sublattice of $I_+$. Determine all the sublattice of $D_{30}$ that contain at least four elements $D_{30} = \{1, 2, 3, 4, 5, 6, 10, 15, 30\}$

**10**

Q.5 a) Given the Boolean expression: $f = ABC + B\overline{C}D + \overline{D}BC$

i)  Make the truth table.                    ii)    Simplify using K-map

**8**

b)  Consider the Boolean algebra $D_{30}$, determine the followings:

i)  All the Boolean subalgebra of $D_{30}$

ii) All Boolean algebras which are not Boolean subalgebra of $D_{30}$ having atleast four elements.

**7**

## UNIT-III

Q.6     a)  Find the equation of a line passing through the point $(2,3)$ and making an angle of $45^0$ with the line $3x + y - 5$.

**7**

b)  Solve the differential equation $a_r - 7a_{r-1} + 10a_{r-2} = 0$, satisfying the conditions $a_0 = 0$ and $a_1 = 6$.

**8**

Q.7     a)  Two points $A(0,0)$ and $B(3, \sqrt{3})$ form an equilateral triangle with another point $P(x, y)$. Find the coordinate of $P$.

**8**

b)  Solve the differential equation:   $2a_r - 5a_{r-1} + 2a_{r-2} = 0$ and find particular solution such that $a_0 = 0$ and $a_1 = 1$.

**7**

## UNIT-IV

Q.8     a)  Find the minimum spanning tree of the labeled connected graph.
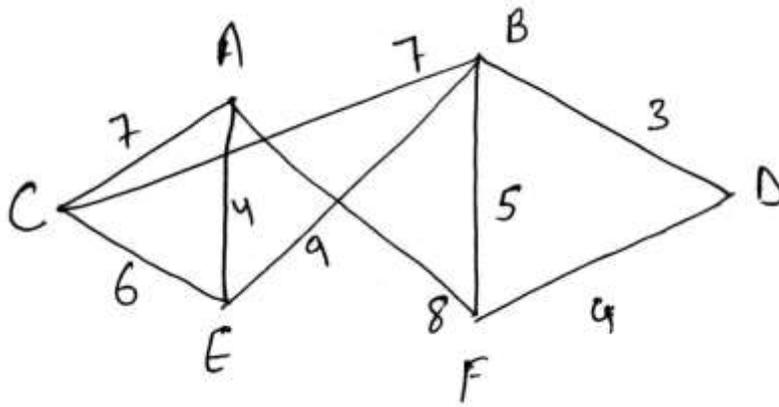
**6**

b) Consider the binary tree as shown below. Draw the binary tree for each of the following operations if applied to the binary tree. Also draw the undirected graphs K₃ and K₅.

i) Delete the node V    ii)    Delete the node E    iii)    Delete the root node R
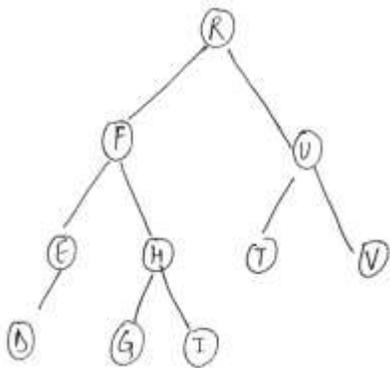


**9**

Q.9    Find the shortest path between a to z in the graph.
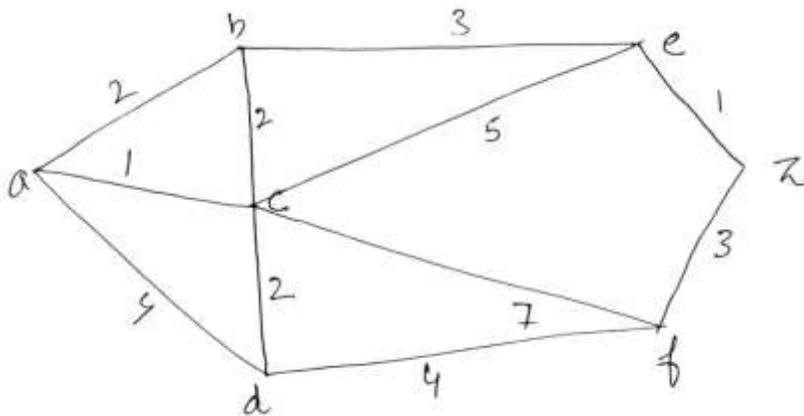
# End Semester Examination, May 2015

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)  One of the major strength of Visual Basic language is _____.

b)  _____ and _____ are procedural languages.

c)  Integer data type takes _____ bytes.

d)  Static variables are _____ only once.

e)  _____ is an example of string function.

f)  _____ is a conditional statement.

g)  The reference library of Visual Basic is called _____.

h)  Menus are created using _____ in Visual Basic.

i)  _____ function converts string to numerical value.

j)  In _____only one option can be selected at a time.
        **1½x10**

## *UNIT-I*

Q.2    Explain the use of following terms:

a) Menu Bar                    b)    Tool Bar                    c)
    Tool Box                                                **5x3**

Q.3    Explain all the components of Visual Basic IDE (Integrated Development Environment) in detail.

**15**

## *UNIT-II*

Q.4    Explain the following data types in Visual Basic:

a) String                                    b)    Integer                              c) Variant                                                    **5x3**

Q.5    a) Explain the two conditional statements available in Visual Basic with the help of examples.

**10**

b) Explain the difference between local and static variables using an example.
   **5**

## *UNIT-III*

Q.6    Explain the following controls in Visual Basic:

a) Text Box                          b)    List Box                                    c) Frame                                                  **5x3**

Q.7    Differentiate between the followings:

a)  List Box and Combo box

b)  Check Box and Option Button

c)  Label and Text Box

**5x3**

## *UNIT-IV*

Q.8    Explain all the steps required to create a menu using menu editor in Visual Basic.

**15**

Q.9    Explain the following terms:

a)  Data Control                          b)    Data Grid Control      c)    Data Report.
                                          **5x3**

# End Semester Examination, May 2015

## 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   **Fill in the blanks:**

a)   _____ flip-flop is used to store data in registers.

b)   The decode instruction in stored in _____.

c)   The output of a gate is low when atleast one of its input is low. It is true for _____ gate.

d)   Micro instructions are stored in _____ memory.

e)   The DMA controller has _____ registers.

**Multiple Choice questions:**

f)   A flip-flop has:

   i)   One stable state                                            ii)   No stable state

   iii) Two stable state                                           iv)   None of the above

g)   Which of the following expression is in SOP form?

   i)   $(A+B)(C+D)$                                              ii)   $(A)B(CD)$

   iii) $AB(CD)$

      iv)   $AB + CD$

h) Applying DeMorgan's theorem to the expression $\overline{(x+y)+z}$, we get:

   i)  $(x+y)z$

    ii)     $(\bar{x}+\bar{y})z$

   iii)  $(x+y)\bar{z}$

    iv)     $(\bar{x}+\bar{y})\bar{z}$

i) Which of the following expresses the commutative law of multiplication?

   i)  $A+B=B+A$                             ii)
      $AB=B+A$

   iii)  $AB=BA$
    iv)     $AB=A\times B$

j) What are the symbols used to represent digits in binary number system?

   i)  $0,1$

    ii)     $0,1,2$

   iii)  $0$ through $8$                              iv)
     $1,2$                          **1½x10**

# UNIT-I

Q.2  a) What is the requirement of a number system? Explain in detail.
       **6**

    b) Convert:   $(12.456)_8 = (?)_2, (?)_{10}, (?)_{16}$
                                 **9**

Q.3  a) Find the addition of following unsigned binary number:

.     i)  $1110+111$                                    ii)
      $11011+11011$                         **5**

    b) Perform AND, OR & XOR with two binary strings $1011100$ and $10100001$.
       **5**

    c) Explain the concept of Hamming code with the help of an example.
       **5**

# UNIT-II

Q.4    Explain all the gates with their truth tables.

**15**

Q.5    Simplify the followings using K-map:

a)    $F(A,B,C,D) = \sum 1,5,6,8,9,12$

**7½**

b)    $F(X,Y,Z) = \sum 1,2,5,7$

**7½**

## *UNIT-III*

Q.6    a)  What do you mean by an instruction cycle? Explain its different phases in detail.

**10**

b)  Explain different types of instructions in detail.

**5**

Q.7    Write short notes on:

a)  RISC                                              ii)      CISC
    iii)      Subroutine calls                                  **5x3**

## *UNIT-IV*

Q.8    Differentiate between:

a)  I/O and memory bus

b)  Asynchronous and Synchronous date transfer.

c)  Isolated and memory mapped I/O.

**5x3**

Q.9    Explain the working of a DMA controller and transfer with the help of block diagram.

**15**

# End Semester Examination, May 2015

## BCA -Second Semester

## WORKSHOP IN EVS (BCA-206)

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 option:

a) If waste materials contaminate the source of drinking water which of the following diseases will spread:

   i)  Scurvy                          ii)     Typhoid                       iii)     Malaria
              iv)     Anaemia

b) Which of the following wastes cannot be decomposed by bacteria to form compost?

   i)  Kitchen waste                                          ii)     Plastic     and
   polythene bags

   iii) Dead plants                                           iv)     Bodies
   of insects living in the soil

c) When trees are cut, amount of oxygen?

   i)  Decreases                                                        ii)
   Increases

   iii) Both a and b                                          iv)
   Remains same

d) 71% of earth surface is covered with:

   i)  Land                                                            ii)
   Air

   iii) Water                                                          iv)
   Coal

e) Acid rain is due to:

    i)   Combustion of fossil fuels            ii)     Oil slick

    iii) Oxides of sulphur                iv)    Nuclear wars

f) The gas associated with global warming is:

    i)   $CO_2$                              ii)
      $H_2S$

    iii) $CH_4$                         iv)
      $SO_2$

g) Which of these is biodegradable?

    i)   Cow dung                    ii)
      Pepsi can

    iii) Plastic rubber                iv)    CDs

h) Female sterilization inhibits _____ production.

    i)   Egg                           ii)
      Estrogen

    iii) Progesterone              iv)    All   of
the above

i) Bhopal gas tragedy occurred due to:

    i)   Methane                     ii)
      Phosgene

    iii) Methyl isocyanate            iv)    Methyl amine

j) Who started the Chipko movement?

    i)   Kiran Bedi                  ii)
      S.L. Bahuguna

    iii) Medha Patkar              iv)    None   of   the
above                 **1x10**

## *UNIT-I*

Q.2   a) Why do people need to be aware about environmental issues?
       **5**

     b) Differentiate between renewable and non-renewable sources of energy.
       **5**

Q.3    a) Explain why environmental studies is made as mandatory or essential subject in the syllabus.

**5**

b) How can we help and save environment? Explain in detail.
**5**

# *UNIT-II*

Q.4    a) Illustrate how energy flows in an ecosystem with an example.
**5**

b) What is a food chain? How does a food chain get effected when one of the trophic level is disturbed?

**5**

Q.5    a) Differentiate between producers, consumers and decomposers.
**5**

b) What is ecological pyramid? Mention atleast two types.
**5**

# *UNIT-III*

Q.6    a) What do you mean by pollution? Name its different types and the two major causes for each type of pollution.

**5**

b) Mention the major reasons for global warming and climate change.
**5**

Q.7    Write short notes on *any two:*

a) Unsustainable and sustainable development.

b) Wasteland reclamation.

c) Environmental Protection Act.

**5x2**

# *UNIT-IV*

Q.8    a) Illustrate the role of information technology in environment and human health.

**5**

b) What are the major causes of AIDS? Mention various symptoms and effects of AIDS.

**5**

Q.9  a)  How can we control population explosion? Why do we need to control it?
**5**

b) Explain how increase in human population is causing increase in environment pollution.

**5**

# End Semester Examination, May 2015

## 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 a) If order of A is MXP and order B is PXN then order of AB is _____.

b) If $A = \begin{bmatrix} 5 & 3 & 2 \\ 0 & 4 & 1 \\ 0 & 0 & 3 \end{bmatrix}$ find $|A|$.

c) In how many ways can the letters of the word PRAISE be arranged?

d) Formula of general term in binomial expansion is _____.

e) Define monotonic increasing function with an example.

f) Define supremum and infinimum of set with an example.

g) Find the convergence of sequence $<un> = \dfrac{8n-3}{2n+1}$.

h) What is the limit of a sequence $\{S_n\} = \left\{ \dfrac{1}{n} ; n \in \mathbb{Z}^+ \right\}$

i) Define the criteria for consistency of a system of linear equations.

j) Inverse of every square matrix, if it exists is unique *(True/False)*.          1½x10

## UNIT-I

Q.2 a) Verify that $A(B+C) = AB + BC$ where $A = [1 \ 2]; B = \begin{bmatrix} 1 & 2 & 3 \\ 0 & 4 & 5 \end{bmatrix}$ and $C = \begin{bmatrix} 1 & 0 & 1 \\ 2 & 3 & 0 \end{bmatrix}$.

**8**

b) Evaluate: $6C_1 + 6C_2 + 6C_3 + 6C_4 + 6C_5 + 6C_6$.

**7**

Q.3 a) Find the coefficient of $x^4$ $in$ $\left( x^4 + \dfrac{1}{x^3} \right)^{15}$.

**8**

b) Out of 7 consonants and 4 vowels, how many words of 3 consonants and 2 vowels can be formed?

**7**

# UNIT-II

Q.4 a) Prove that all real numbers in the interval [0 1] is uncountable.

**7**

b) Find the least upper bound and greatest lower bound of the followings:

i) $\{x : -5 < x < 2\}$                                  ii)

$\left\{ \dfrac{1}{5n} ; n \in \mathbb{Z}, n \neq 0 \right\}$

iii) $\left\{ x : x = 1 + \dfrac{1}{n}, n \in N \right\}$          iv) $\left\{ x = 1 - \dfrac{1}{n} ; x \in N \right\}$

**2x4**

Q.5 a) Prove that the union of 2 countable sets is countable.

**8**

b) Prove that union of an arbitrary family of open sets is an open set.

**7**

# UNIT-III

Q.6 a) State and prove Cauchy's general principle of convergence.

**8**

b) Prove that a monotonically increasing sequence $< U_n >$ bounded above converges to its least upper bound.

**7**

Q.7    a)  Discuss the convergence of the sequence $<un>$ where $<un>= \dfrac{2n-7}{3n+2}$.

**8**

b)  State and prove comparison test of $5^{th}$ form of series of numbers.

**7**

## *UNIT-IV*

Q.8    a)  Show that $\dfrac{x}{x+1} < \log(1+x) < x : x > 0$.

**8**

b)  Expand $a^x$ and $e^x$ in power of $x$ by Maclaurin's theorem.

**7**

Q.9    a)  Evaluate $\underset{x \to 0}{\lim} \dfrac{1+\sin x - \cos x + \log(1-x)}{x \tan^2 x}$.

**7**

b)  Evaluate $\underset{x \to a^+}{\lim} \dfrac{\log(x-a)}{\log(e^x - e^a)}$ by L' Hospital rule.

**8**

# End Semester Examination, May 2015

## 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 a) Construct a $3 \times 3$ matrix whose elements are $a_{ij} = i + j$

b) Define upper triangular matrix with an example.

c) Expand $(x + y)^2$ by binomial expansion.

d) Define Lagrange's mean value theorem.

e) What are countable set? Explain with the help of an example.

f) Define set bounded above.

g) Find $x + 1_{P_3}$

h) What is neighborhood of a point?

**State whether TRUE or FALSE:**

i) A set of all positive real numbers is not bounded above.

j) A finite set has no limit point.

**1½x10**

## UNIT-I

Q.2 a) Define the following terms with an example:

i) Transpose of matrix ii) Symmetric matrix iii) Skew symmetric matrix **9**

b) For the 2 matrices $A$ and $B$ verify that $(AB)^T = B^T . A^T$ where

$$A = \begin{bmatrix} 0 & -1 & 2 \\ 3 & 0 & -1 \end{bmatrix} \qquad \text{and} \qquad B = \begin{bmatrix} 1 & -1 \\ 0 & 2 \\ 5 & 0 \end{bmatrix}$$

**6**

Q.3 a) How many different words can be formed with the letters of the word BHARAT?

    i) In how many of these B and H are never together.

    ii) How many of these begin with B and end with T.

    **6**

b) For the matrix $A = \begin{bmatrix} 3 & 1 \\ 7 & 5 \end{bmatrix}$, find $x$ and $y$ so that $A^2 + xI = yA$. Hence find $A^{-1}$.**9**

## UNIT-II

Q.4 a) Show that union of two countable sets is countable.
    **10**

b) Show that union of an arbitrary family of open sets is an open set.
    **5**

Q.5 a) Show that union of a denumerable collection of denumerable sets is denumerable.

    **7**

b) Find the supremum and infimum, if exist of the following:

    i) $\{x: -5 < x < 3\}$                     ii)
       $\{x: x = 4^n, n \in -N\}$

    iii) $\left\{1, \dfrac{1}{2}, \dfrac{1}{3}, \dfrac{1}{4}, \ldots\right\}$             iv)     Open   interval
    $(0, 1)$                           **8**

## UNIT-III

Q.6 a) Show that a sequence converges if and only if it is a Cauchy's sequences     **10**

b) Show that the series $\dfrac{1}{3} + \dfrac{1}{3^2} + \dfrac{1}{3^3} \ldots\ldots$ converges.

**5**

Q.7 State and prove Cauchy's Root Test.

**15**

## *UNIT-IV*

Q.8 a) Evaluate $\lim\limits_{x \to \infty} x \tan\dfrac{1}{x}$

**7**

b) Show that $\dfrac{x}{x+1} < \log(1+x) < x; \ x > 0$

**8**

Q.9 a) Expand $e^{2x}$ by Maclaurin's theorem.

**8**

b) Evaluate $\lim\limits_{x \to a} \dfrac{\log(x-a)}{\log(e^x - e^a)}$ by L'Hospital's Rule.

**7**

# End Semester Examination, May 2015

## 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)  The major goal of inheritance in C$^{++}$ is:

      i)   To facilitate the conversion of data types.

      ii)  To help modular programming.

      iii) To facilitate the reusability of a code.

      iv)  To extend the capabilities of a class.

    b)  Which of the following is not an ODP feature in C$^{++}$?

      i)   Inheritance
      ii)  Polymorphism

      iii) Objects
          iv)  Exceptions

    c)  A class can have many methods with the same name, as long as the number of parameters are different. This is known as:

      i)   Method overloading
      ii)  Method invocating

      iii) Method overriding
      iv)  Method labeling

    d)  When a function is defined inside a class, this function is called:

      i)   Inside function
      ii)  Class function

iii) Inline function

   iv)    Interior function

e) The do while loop is ideal for loop structures that:

   i)   Repeat some process a fixed number of times.

   ii)  Must execute some process atleast one time.

   iii) Must check the loop condition before the loop body is executed.

   iv)  Do all of the above.

f) What will happen when defining the enumerated type?

   i)   It will not allocate memory.

   ii)  It will allocate memory.

   iii) It will not allocate memory to its variables.

   iv)  None of the above.

g) The friend function are used in situations where:

   i)   We want to exchange data between classes.

   ii)  We want to have access to unrelated classes

   iii) Dynamic binding is required.

   iv)  We want to create versatile overloaded operators.

h) Which of the following operations could not he overloaded?

   i)   i)    Size of      ii)    +                    iii)    +=
        iv)    ::

i) Which is used to create a pure virtual function?

   i)   $                          ii)    =0                      iii)
        &                    iv)    !

j) Which keyboard is used to handle an exception?

   i)   Try                        ii)    Throw            iii)    Catch
        iv)    None of the above

**1½x10**

# *UNIT-I*

Q.2    Explain the basic concepts of object oriented programming.
              **15**


Q.3    Describe how data is shared by function in a procedure oriented programs.        **15**

## *UNIT-II*

Q.4    Describe data types in C$^{++}$ with details.
                         **15**


Q.5    Explain the function classification with the passing of arguments.
          **15**

## *UNIT-III*

Q.6    What is a constructor? Explain types of constructor with examples.
          **15**


Q.7    Give a programming example that overloads == operator with its use.
          **15**

## *UNIT-IV*

Q.8    What is a virtual function? Write rules for a virtual function. Explain with an example.

                                             **15**


Q.9    Explain in detail about exception handling in C$^{++}$.
                     **15**

# End Semester Examination, May 2015

## 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　Multiple choice questions:

a)　The disadvantages of traditional file system is:

i)　Data redundancy inconsistency

ii)　Data

iii)　Poor data control

iv)　All of the above

b)　The responsibilities of DBA are:

i)　Deciding users

ii)　Backup

iii)　Both i) and ii) above

iv)　None of the above

c)　An attribute which does not identify data uniquely is called:

i)　Secondary key

ii)　Primary key

iii)　Foreign key

d)　Which is a free formatted language?

i)　SQL

ii)　Relational algebra

iii)　Relational calculus

e)　A transaction must be in following states:

i) Active state          ii) Partially committed

iii) Failed          iv) All of the above

***State whether TRUE or FALSE:***

f) A distributed database system is a collection of sites connected through network.

g) Third normal form is also known as PJNF.

h) SQL offers command interface to write queries.

i) The SQL DML provides commands for defining the relations, deleting the relations and modifying the existing relation schemes.

j) The relational model was discovered by Dr, E.F. Codd.
    **1½x10**

# *UNIT-I*

Q.2   What is data model? Explain the data structure of relational data model. Also, differentiate between Network and an Hierarchical data model.
    **15**

Q.3   Define the following with an example.

a) Entity          b) Attribute          c) Foreign key      d) Candidate key

e) Alternate key          f) Domain
    **3x5**

# *UNIT-II*

Q.4   Explain the term 'relational algebra' and various operations performed in it. Give example of each.
    **15**

Q.5   Give the format and purpose of following with examples:

a) Alter table b)    Group by clause          c)    Length      d)    Distinct

e) Having clause
    **3x5**

# *UNIT-III*

Q.6  Define normalization? Explain and define 1NF, 2NF, 3NF by giving suitable examples for each.

**15**

Q.7  Explain:     a)     Functional dependency

b)     BCNF

c)      4 NF

**5x3**

## UNIT-IV

Q.8  What do you mean by security of database? Explain various ways of database security and recovery procedures in brief.

**15**

Q.9  What is meant by query processing? Discuss various general strategies for query processing? Also, discuss query optimization through a suitable example.          **15**

# End Semester Examination, May 2015

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 **Fill in the blanks:**

a) One of the external environment factor that influence management is _____.

b) There are _____ types of degree of delegations.

c) LPG stands for liberalization, _____ and globalization.

d) All levels of management between the supervisory level and the top level of the organization are termed _____.

e) _____ is the ability to translate knowledge into action that results in desired performance.

**Choose the correct option:**

f) Management is the combination of:

   i) Art                 ii) Science              iii)
   Profession               iv) Above three

g) Which of the following is false about the characteristic of modern organizations?

   i) Have little global focus.

   ii) Face simultaneous pressure for stability and change.

   iii) Some employees will find such organizations stressful.

   iv) Use the internal to manage external interactions.

h) Decision making is a primary part of the managerial process *(True/False)*

i) Define an informal organization.

j) Name the physical aspect of an enterprise.

**1½x10**

# *UNIT-I*

Q.2 What do you mean by a business? How is it different from a profession? Explain with an example.

**15**

Q.3 What factors affect the business system? Explain their role in context of the objectives and social responsibilities of a business.

**15**

# *UNIT-II*

Q.4 Write short notes on the following *(any three):*

a) Organization as a system.

b) Stress as a motivator.

c) Decentralization.

d) Objectives of organizational behavior.

**15**

Q.5 Explain the behavioural models of decision making in an organization.

**15**

# *UNIT-III*

Q.6 What is the concept of universality of a management? Give arguments for and against this concept.

**15**

Q.7 "Management process is considered to consist of certain functions". Explain various functions in a logical order.

**15**

# *UNIT-IV*

Q.8 Why human resource management is essential for an organization? How is it different from human resource development?

**15**

Q.9 What are the sources available to a business firm for recruiting its employees? Describe the merits and demerits of various sources.

**15**

# End Semester Examination, May 2015

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 **Answer the following questions:**

a) What does B2C stands for?

b) Give atleast three examples of websites which provide facility for cyber cash.

c) Name two groups in which products of e-money can be categorized.

d) What does EFT stands for?

e) What is the stored value of a smart card?

f) Name three categories of the intellectual property over the internet.

g) What is an ISP?

**Fill in the blanks:**

h) 'e-business' is any business that is empowered by an _____.

i) The e-check system is an _____ of the paper-check system.

j) _____ is the number that identifies a machine on the internet.        **1½x10**

## UNIT-I

Q.2 What is an 'e-Commerce'? What are the advantages and disadvantages of engaging in e-Commerce activity to identify new applications in business?        **15**

Q.3 Write short notes on the following:

a) Implications of IT on e-business strategy.

**8**

b) Porter's value chain model.

**7**

# *UNIT-II*

Q.4     What is business-to-business e-commerce? Also discuss three models of B2B e-commerce.

**15**

Q.5     Explain the following:

a) EDI.

**8**

b) Just-in-time delivery      .

**7**

# *UNIT-III*

Q.6     What are the main differences between a credit card and a debit card? Why is one type of card favored over the other?

**15**

Q.7     Explain the following:

a) e-money

**7**

b) Legal, ethical and other public policy issues.

**8**

# *UNIT-IV*

Q.8     Identify the key steps to setup an infrastructure for the e-commerce. Which step is most critical and Why?

**15**

Q.9     Explain the following:

a) Virtual communities.

**7**

b)  The future of e-commerce.

**8**

# End Semester Examination, May 2015

## BCA - Fourth Semester

## OPERATING SYSTEM (BCA-402)

Time: 3 hrs

Max Marks: **75**

*No. of pages: 1*

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

Q.1 **Fill in the blank with appropriate word:**

a) An operating system is a _____ software.

b) System calls are _____ instructions.

c) Long term scheduler is also called as _____.

d) The measure used to control thrashing is _____.

e) A _____ is a collection of related information that is stored on secondary storage.

**State whether True or False:**

f) A file has a certain defined structure according to its type.

g) External fragmentation is the cause of allocating more space than required by the process.

h) The running processes in execution state may be suspended because of I/O or because of preemption.

i) Banker's algorithm is used to detect deadlock.

j) MS-DOS supports multiprogramming.

**1½x10**

## *UNIT-I*

Q.2 a) Discuss advantages of multiprogramming systems.

b) List the differences between timesharing and multiprogramming systems.

c) What is spooling?

**5x3**

Q.3  a) What is a Kernal? Explain its main functions.

**7**

b) What is the purpose of command interpreter? Why is it usually separated from the Kernal?

**8**

## *UNIT-II*

Q.4  Compare  and contrast FCFS and SJF scheduling algorithms with the help of suitable examples.

**15**

Q.5  a) Define a process with examples.

**5**

b) Differentiate between long term, short term and medium schedulers with their appropriate examples.

**10**

## *UNIT-III*

Q.6  Discuss the technique of paging in detail.

**15**

Q.7  Discuss:

a) Swapping                                    b)    Virtual memory.

**15**

## *UNIT-IV*

Q.8  a) Explain different types of file formats. Also give examples.

**7**

b) Explain various methods for free space management. Illustrate it with an example.

**8**

Q.9    Discuss FCFS, SCAN and CSCAN disk scheduling algorithm by taking a suitable example.

**15**

# End Semester Examination, May 2015

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)  IP addresses are converted into:

  i)  Binary string                              ii)      Alphanumeric string

  iii) Hierarchy of domain                       iv)      Hexadecimal string

  b)  The tag used in HTML to link other URL is:

  i)  <A>                                        ii)      <H>

  iii) <U>                                       iv)      <L>

  c)  A web page is located using:

  i)  Universal record linking.

  ii)  Universal resource locator.

  iii) Universal record locator.

  d)  Which tag is used to arrange tags in paragraphs?

  i)  <par>                                      ii)
      <paragraph>

  iii) <P>                                       iv)      <a>

  e)  HTML stands for:

  i)  Hypertext making links                     ii)      Hypertext       markup
      language

iii) Higher textual making of links      iv)    Hyper text mixer of links

f) CSS stands for:

   i) Control stylesheets              ii)      Creative stylesheets

   iii) Cascading stylesheets         iv)      None of above

g) Which of following is not scripting language?

   i) HTML                                        ii)      XML

   iii) Postscript                           iv)
   Javascript

h) We use tag within:

   i) <head> only                      ii)      <title>

   iii) <head> and <1 body>       iv)      <javascript>

i) Javascript is _____ side scripting language.

   i) Server                                 ii)      Browser

   iii) ISP                                    iv)
   None of the above

j) Which of the following HTML code is valid?

   i) <font colour = "red">         ii)      <font color = "red">

   iii) <red><font>                iv)      All of the above

<center>**1½x10**</center>

<center># ***UNIT-I***</center>

Q.2   Write short notes on:

a) SMTP                            b)      Usenet
      c)     URL                      **15**

Q.3   Write short notes on:

a) What is internet? What are its application areas?
<center>**10**</center>

b) Write a short note on internet security.
<center>**5**</center>

# UNIT-II

Q.4   a)  Explain the structure of HTML.

b)  Differentiate external and internal linking.

c)  Explain image tag and its attributes.

**5x3**

Q.5   Create an admission form in HTML using buttons, textbox, radio button, checkbox and listbox with all attributes.

**15**

# UNIT-III

Q.6   a)  What are frames? Insert the four web pages in the frames using appropriate examples.

**10**

b)  Differentiate between <Address> and <Blockquote> tags.

**5**

Q.7   a)  Explain various character formatting tags in HTML.

**10**

b)  Differentiate between colspan, rowspan, cellspacing and cellpadding in table.

**5**

# UNIT-IV

Q.8   What are cascading stylesheets? Explain the types of stylesheets in detail.

**15**

Q.9   a)  Write a program in javascript for swapping of two images.

**5**

b)  Differentiate between prompt(), alert() and conrfirm() boxes.

**10**

# End Semester Examination, May 2015

BCA -Fourth Semester

## BUSINESS COMMUNICATION-II (BCA-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 correct option:

a) Generally speaking in business we communicate:

i) Only to inform
inform

ii) To both persuade and

iii) Only to persuade

iv) Only to entertain

b) Effective communication is essentially a:

i) Two-way process

ii) Three-way process

iii) Both a one-way and a two-way process

iv) One way process.

c) Speakers usually experience difficulty in ensuring that the message is:

i) Conveyed precisely, understood correctly, and acted upon promptly and as desired.

ii) Conveyed precisely.

iii) Understood correctly.

iv) Acted upon promptly and as desired.

d) The purpose of public relations is:

i) To sell the company's products.

ii) To communicate with shareholders.

iii) To project a favorable image of the company among various publics.

iv) To communicate during a crisis.

e) Which of the following is not an indication of active listening?

i) Egocentrism.

ii) Engaging in conversation with the speaker.

iii) Taking notes.

iv) Reconstructing the information.

f) An impromptu speech means:

i) A prepared speech delivered without any supporting aids.

ii) A speech delivered without any preparation.

iii) A speech delivered while referring to notes.

iv) A speech delivered by reading from notes.

g) "A meeting without an agenda is like a ship without a destination". This means that the meeting:

i) Has no goal

ii) Lacks leadership

iii) Is inconclusive

iv) Is disorganized

h) A common method of measuring attitudes is by using:

i) In-depth interviews.

ii) Observing people's behavior.

iii) Semantic differential scales.

iv) A lie detector.

i) The centrality of an attitude reflects:

i) A person's degree of negative or positive feelings about an object.

ii) The extent to which an attitude is related to a person's other attitudes.

iii) The extent to which an attitude is a part of a person's concept of self.

iv) The attitude's resistance to change.

j) Reena is twice as old as Sunita. Three years ago, she was three times as old as Sunita. How old is Reena now?

i)  6 years

ii)  12 years

iii) 14 years

iv)  16 years

**1½x10**

## *UNIT-I*

Q.2  a) Differentiate between verbal and non-verbal communication.

**8**

b) Explain the term emotional intelligence. How is it helpful in extracting best form employees?

**7**

Q.3  a) What are the different levels of communication? Explain in detail.

**8**

b) "It is very important to be a team player". Elaborate.

**7**

## *UNIT-II*

Q.4  a) How being an optimist different from being a pessimist? Elaborate.

**8**

b) Explain an incident where being optimist has helped you in real life.

**7**

Q.5  Solve the followings:

a) If a 36 inch long strip cloth shrinks to 33 inches after being washed, how many inches long will the same strip remain after washing if it were 48 inches long?

b) The price of Maruti car rises by 30% while the sales of the car come down by 20%. What is the percentage change in total revenue?

c) The total of the ages of Amar, Akbar and Anthony is 80 years. What was the total of their ages five years ago?

d) A pineapple costs Rs.7 each. A watermelon costs Rs. 5 each. X spends Rs. 38 on these fruits. The no. of pineapple purchased are _____?

e) What is the product of all the numbers in the dial of a telephone?

**3x5**

## UNIT-III

Q.6  a)  What are the key considerations while designing a professional presentation?
**8**

b)  "A presentation is prepared based on understanding of audience and the speaking occasion". Elaborate.

**7**

Q.7  a)  Why do we need brainstorming before designing a presentation? How does it improve the standard of presentation?

**8**

b)  How developing a logical sequence for your message leaves a better impact on the audience? Explain.

**7**

## UNIT-IV

Q.8  a)  "Interviews play a crucial role for the employee and the employer". Explain.
**8**

b)  List the various documents that you need to carry while going for an interview.
**7**

Q.9  a)  What are the different types of interviews conducted in an organization? Which type of interview is best suited when the company is situated abroad?
**8**

b)  How performance appraisal plays a very important role in the growth of an individual in an organization?

**7**

# End Semester Examination, May 2015

BCA -Fifth Semester

## INFORMATION AND COMMUNICAION TECHNOLOGY (BCA-501)

Time: 3 hrs

Max Marks: **75**

*No. of pages: 1*

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

Q.1    a)  Fill in the blanks:

   i)   Tele-working mean _____.

   ii)  The digital divide is a _____.

   iii) EFTPOS is _____.

   iv)  A cyber crime is _____.

   v)   Full form of EDI is _____.
                     **1½x5**

   b)  State four methods of protecting the security of a computer network.
        **2**

   c)  Name three categories of cyber criminals.
                     **1½**

   d)  What is the network service which may be improved through the use of network audit software?
                     **2**

   e)  Define digital signature.
                     **2**

## *UNIT-I*

Q.2    Explain Bluetooth technology. Compare Bluetooth with Wi-Fi. Are the two terms similar to each other? If they are different then list the points of difference.   **15**

Q.3　How can we maintain address book on the internet? List the various advantages of maintaining address book in a correct order.

**15**

# UNIT-II

Q.4　Is there any difference between Wiki and Wikipedia? Write down the steps to upload an article in Wikipedia. Who maintain Wikipedia?

**15**

Q.5　Explain the concept of E-mail. State the requirement of having an email. State the advantages and disadvantages of email. List some email supporting websites and softwares.

**15**

# UNIT-III

Q.6　Discuss the followings:

a)　Phishing

b)　Software privacy

c)　Copywriting

**5x3**

Q.7　"A network service may be improved through the use of network audit software".

a)　Explain why network audit software is used?
**8**

b)　Give four items of data that may be recorded by the network audit software. **7**

# UNIT-IV

Q.8　Give a detailed note on control applications like turtle graphics, control of flights, buzzers, motors, burglar alarms, automatic washing machines and microwaves. **15**

Q.9　Discuss the ICT application in booking system and manufacturing industry.
**15**

# End Semester Examination, May 2015

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    Multiple choice questions:

a) Software mistakes during coding are known as:

   i)   Failures.                                                 ii)       Defects.

   iii) Bugs.                                                    iv)       Errors.

b) Spiral model was developed by:

   i)   Bev Littlewood.                             ii)       Berry Boehm.

   iii) Roger Pressman.                         iv)       Victor Basili.

c) If requirements are frequently changing which model is to be selected?

   i)   Waterfall.                                      ii)
Prototyping model.

   iii) Spiral model.                                iv)       Iterative
enhancement model.

d) Software engineering approach is used to achieve:

   i)   Better performance of hardware

   ii)  Error free software.

   iii) Reusable software.

   iv)  Quality software product.

e) Cost estimation for a project may include:

i) Software cost.  ii)  Hardware cost.

iii) Personnel costs  iv)  All of the above.

f) Temporal cohesion means:

   i)  Cohesion between temporary variables.

   ii) Cohesion between local variables.

   iii) Cohesion with respect to time.

   iv) Coincidental cohesion.

g) The relationship of data elements in a module is called:

   i)  Coupling.  ii) Cohesion.

   iii) Modularity  iv)  None of the above.

h) During validation:

   i)  Process is checked

   ii) Product is checked

   iii) Developers performance is evaluated

   iv) The customer checks the product.

i) Alpha testing is done by:

   i)  Customer.  ii)  Tester.

   iii) Developer.  iv)  All of the above.

j) Cyclomatic complexity is denoted by:

   i)  V(G)=e-n+2P.

   ii) V(G)= Ⴊ+1.

   iii) V(G)=number of regions of the graph

   iv) All of the above.

**1½x10**

## UNIT-I

Q.2 Discuss prototype model. What is the effect of designing a prototype on the overall cost of a software project? What are the advantages of developing prototype of a system?

**15**

Q.3 a) Define the term software engineering. Discuss the techniques of software engineering.

**8**

b) What is more important: Product or process? Justify the answer.

**7**

# *UNIT-II*

Q.4 a) Consider a project with the following functional units:

No. of user inputs: 50

No. of user outputs: 40

No. of user enquiries: 35

No. of user files: 06

No. of external interfaces: 04

Assume all complexity adjustment factors and weighting factors are average. Compute function points for the project.

**8**

b) Write a short note on PERT.

**7**

Q.5 Write short notes on the following:

a) LOC.

b) Token count.

c) SRS.

**5x3**

# *UNIT-III*

Q.6 Discuss COCOMO model with their types in detail.

**15**

Q.7   a)  Differentiate between coupling and cohesion.

**8**

b)  How many types of coupling are available? What is the effect of coupling on effective modular design?

**7**

## *UNIT-IV*

Q.8   a)  Define error, bug, fault, defect and failure.

**8**

b)  What is importance of testing?

**7**

Q.9   a)  Describe equivalence class partitioning method. Compare this with boundary value analysis technique.

**8**

b)  Why does software testing need extensive planning?

**7**

# End Semester Examination, May 2015

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)   _____ parameter is used in circle function.

   i)   3.                              ii)      2.                          iii)      4.
   iv)      None of the above.

   b)   _____ function is used to set the color of an image.

   i)   Setbk color.                                                          ii)
       Set color.

   iii) Floodfill.
       iv)      None of the above.

   c)   There is _____ type of projection.

   i)   3.                         ii)      1.                          iii)      7.
   iv)      4.

   d)   The transformation in which an object can be rotated about origin as well as an arbitrary point is called as:

   i)   Translation.                                                          ii)
       Scaling.

   iii) Rotation.
       iv)      All of the above.

   e)   Two consecutive scaling transformation t1 and t2 are:

   i)   Additive.
       ii)      Subtractive.

iii) Multiplicative.                                      iv)      None of the above.

f)  Some common form of clipping includes:

i)  Curve clipping.                                      ii)      Polygon clipping.

iii) Point clipping.                                      iv)      All    of the above.

g)  The transformation that produces a parallel mirror image of an object is called:

i)  Reflection.                                          ii)
    Shear.

ii) Rotation.
    iv)       Scaling.

h)  The flat panel displays are _____ in appearance.

i)  flat.
    ii)       Curve.

iii) Both i) and ii).                                     iv)      None.

i)  The speed of printing in inkjet printer is:

i)  Fast.
    ii)       Slow.

iii) Neither fast nor slow.                              iv)      None of these.

j)  CRT stands for:

i)  Cathode Ray Tube.                                    ii)      Cannon Ray Tube.

iii) Check Ray Tube.                                      iv)
    None of the above.              **1½x10**

## _**UNIT-I**_

Q.2   What do you mean by computer graphics? Explain different types of computer graphics along with its architecture.
                                    **15**


Q.3   a) Explain input-output devices in details.
                                    **8**

b) Explain the different methods of color generation in details.

**7**

# *UNIT-II*

Q.4  Explain the DDA algorithm for a line drawing. What would be the intermediate point to draw a line between (2, 6) and (8, 12)?

**15**

Q.5  What do you mean by transformation? Explain different types of transformation with examples.

**15**

# *UNIT-III*

Q.6  Derive the transformation matrix to scale a unit cube twice uniformly w.r.t. origin. Find the coordinate of transformed cube.

**15**

Q.7  a) Differentiate between cavalier and cabinet projection. Why cabinet projection is more realistic than cavalier projection?

**10**

b) What do you mean by 3D? How is it different from 2D? Explain through an example.

**5**

# *UNIT-IV*

Q.8  Explain the use of the following graphic functions with their syntax and examples:

a) arc()
    b)      getbkcolor()

c) initgraph()                                                    d)
    detectgraph()

e) cleardevice()
    f)      closegraph()

g) setfillstyle()
    h)      outtext()

i) rectangle()                                                    j)
    Fillpoly()                                        **15**

Q.9   Write a program to generate /design a solar system.

**15**

# End Semester Examination, May 2015

## 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)  Write down formula of Regula-Falsi method for solving non-linear equations.

b)  Using Newton Raphson method construct a formula to find square root of a number N.

c)  What do you mean by initial value problem?

d)  Write down the relation between the operators E and $\nabla$ .

e)  Write down Bessel's interpolation formula.

f)  Define divided differences.

g)  State centered formula of order $O\left(h^2\right)$ for numerical differentiation.

h)  Write down expression for Simpsons three-eighth rule for numerical integration.

i)  What is binomial distribution for a variate X?

j)  Calculate $P\left(-1 \le z \le 1\right)$ for standard normal variate z.
      **1½x10**

## *UNIT-I*

Q.2  a)  Derive an iteration formula to solve $x^3 + x^2 - 1 = 0$ and hence solve the equation.
      **8**

b)  Derive Newton-Raphson Formula to solve non-linear equations.
      **7**

Q.3   a)   Solve the initial value problem:

$$\frac{dy}{dx} = \frac{y-x}{y+x}, \; y(0)=1$$

For $x = 0.1$ by Euler's method.

**7**

b)   Apply Runge-Kutta method to solve $\frac{dy}{dx} = x^2 + y^2, \; y(0)=1$.

For $x = 0.1$.

**8**

## UNIT-II

Q.4   a)   The area $A$ of a circle of radius $d$ is given for the following values:

| $d$ | 80 | 85 | 90 | 95 | 100 |
|---|---|---|---|---|---|
| $A$ | 5026 | 5674 | 6362 | 7088 | 7854 |

Calculate the area of a circle of radius 105.

**7**

b)   Using the table given below and Newton's Divided difference formula, find $f(x)$ as a polynomial in $x$ :

| $x$ | $-1$ | 0 | 3 | 6 | 7 |
|---|---|---|---|---|---|
| $f(x)$ | 3 | $-6$ | 39 | 822 | 1611 |

**8**

Q.5   a)   Using Lagrange's formula, find the interpolating polynomial for $(0,2), (1,3), (2,12)$ and $(5,147)$.

**9**

b)   Construct Newton's divided difference table for the data:

| $x$ | $-4$ | $-1$ | 0 | 2 | 5 |
|---|---|---|---|---|---|
| $y$ | 1245 | 33 | 5 | 9 | 1335 |

**6**

## UNIT-III

Q.6  a) Find the least square fit $y = a + bx + cx^2$ for the data:

| $x$ | $-3$ | $-1$ | 1 | 3 |
|---|---|---|---|---|
| $y$ | 15 | 5 | 1 | 5 |

**9**

b) Using centered formula of order $(h^4)$, Find $f'(1.4)$ from the following table:

| $x$ | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 |
|---|---|---|---|---|---|
| $f(x)$ | 1.5095 | 1.6984 | 1.9043 | 2.1293 | 2.3756 |

**6**

Q.7  a) Using Simpson's one-third rule, Compute $\int_{0}^{1} \frac{1}{1+x} dx$.

taking $h = 0.125$.

**7½**

b) A river is 80 feet wide. The depth $y$ in feet of the river at a distance $x$ from one bank is given by the following table:

| $x$ | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |
|---|---|---|---|---|---|---|---|---|---|
| $y$ | 0 | 4 | 7 | 9 | 12 | 15 | 14 | 8 | 3 |

Find approximately the area $A = \int y\, dx$ of the cross section of the river.

**7½**

## UNIT-IV

Q.8 a) A coin is tossed five times. What is the probability of getting at least three heads?

**7**

b) Fit a Poisson distribution to the following data:

| $x$ | 0 | 1 | 2 | 3 | 4 |
|-----|-----|-----|-----|-----|-----|
| $f$ | 122 | 60 | 15 | 2 | 1 |

**8**

Q.9 Fit a normal distribution to the following data and test the goodness of fit:

| $x$ | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 |
|-----|---|---|----|----|----|----|----|----|----|----|----|
| $y$ | 1 | 7 | 15 | 22 | 35 | 43 | 38 | 20 | 13 | 5 | 1 |

**15**

# End Semester Examination, May 2015

## 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     Multiple choice questions:

a)  The overloaded constructors in a class will have:

    i)   different names
    ii)      different parameter lists

    iii) different return types                           iv)      None of the above

b)  To create our own exception class, we have to:

    i)   create an own try and catch block           ii)      extend exception class

    iii) use throws keyword                                 iv)
        use finally keyword

c)  Which keyword is used to monitor statement for execution?

    i)   try
            ii)      catch

    iii) throw
        iv)      throws

d)  Which method is called first by an applet?

    i)   start
        ii)      run()

iii) init()
iv)   paint()

e)  To display text on applet, _____ method is used.

f)  Java always provides a default constructor to a _____.

g)  What is Garbage collection in Java?

h)  Why do we use array as a parameter in main method?

i)  What is package?

j)  What is method overriding?

**1½x10**

# *UNIT-I*

Q.2   a)  What is the difference between Java, C and C++?

b)  Explain the importance of JVM in Java programming.

c)  What is stand alone application?

**5x3**

Q.3   a)  Discuss the structure of Java program.

**7**

b)  Discuss the various tools available in JDK? How do they help in application development?

**8**

# *UNIT-II*

Q.4   a)  Write a program in Java to find the addition and subtraction of two matrices.

**9**

b)  Compare:        a)      break and continue                    b)      while and do-while.                      **6**

Q.5   a)  What is an array? Give the format and purpose of arrays in Java.
**10**

b)  Write a program in Java to find sum and reverse of n digit numbers.
**5**

# *UNIT-III*

Q.6    a) What are constructors used for? Can constructors be overloaded? Write a program in support of your answer.

**9**

b) What are classes and objects? How does classes accomplish data hiding? Explain

**6**

Q.7    a) What is the difference between final, finalize and finally() in Java?

**6**

b) Discuss Java error handling mechanism with an example. What is the difference between checked and unchecked exception handling in Java.    **9**

## *UNIT-IV*

Q.8    a) What is an interface? How is it different from an abstract class? Can an abstract class have constructors? Explain.

**9**

b) Define the following for packages:

i)   -Public     -     private     - protected

-import

**6**

Q.9    a) What is the difference between shadowing and overriding in C#.net?

b) Write a short note on Delegation Event Model.

c) What are applets? Differentiate them from application.

**5x3**

# End Semester Examination, May 2015

## BCA – Sixth Semester

## DATA COMMUNICATION AND NETWORKING (BCA-602)

Time: 3 hrs

Max Marks: **75**

*No. of pages: 2*

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

Q.1  a) A tree topology is a variation of a _____ topology.

  i)  Mesh                                                                              ii)  Star

  iii) Bus                                                                              iv)  Ring

  b) A television broadcast is as example of _____ transmission.

  i)  Simplex                                                                        ii)  Half duplex

  iii) Full duplex                                                                   iv)  Automatic

  c) ARQ stands for _____.

  i)  Automatic repeat quantization request                ii)  Automatic repeat request

  iii) Automatic retransmission request              iv)  Acknowledge repeat request

  d) DNS is the abbreviation of:

  i)  Dynamic name system                                          ii)  Domain name system

  iii) Dynamic network system                                    iv)  Domain network service

  e) _____ control refers to methods of error detection and correction.

i) Flow                          ii) Error

iii) Transmission             iv) None of the above

f) Frame relay provides _____ connections.

    i) PVC                        ii) SVC

    iii) DLCI                    iv) Both i) and ii)

g) Routers functions is the _____ layer.

    i) Physical                 ii) Data link

    iii) Network               iv) Transport

h) In FTP, when we _____, it is copied from the client to the server.

    i) Retrieve a file             ii) Store a file

    iii) Retrieve a list           iv) None of the above

i) _____ is the protocol suite for the current internet.

    i) TCP/IP                  ii) NCP

    iii) UNIX                   ii) ACM

j) Which of the following is not in OSI model?

    i) Physical layer           ii) Internet layer

    iii) Network layer         iv) Transport layer

**1½x10**

## *UNIT-I*

Q.2    What do you mean by sampling? Explain PAM and PCM in sampling with a proper diagram.

**15**

Q.3    Differentiate the following:

a)  Analog and digital signal.

b)  Bus and ring topology.

c)  Bitrate and band rate.

**5x3**


# UNIT-II

Q.4    Differentiate between OSI model and TCP/IP model. Explain network layer and presentation layer of OSI model.

**15**


Q.5    Write short notes on:

a)  UDP

b)  SMTP

c)  FTP

**5x3**

# UNIT-III

Q.6    What do you mean by routing? How is distance vector routing different from link state routing?

**15**


Q.7    What are virtual LANs? How are they different from LANs? State advantages and disadvantages of virtual LANs.

**15**

# UNIT-IV

Q.8    Explain token ring concept in relation to priority, reservations, monitor stations and backup stations etc.

**15**


Q.9    What is packet switching? How a datagram approach is different from a virtual circuit approach? Justify your answer.

**15**

# End Semester Examination, May 2015

BCA – Sixth Semester

## MULTIMEDIA AND ANIMATION (BCA-603)

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)  Graphics that contain movement are often referred to as _____.

    i)   Animation
       ii)      Motion

    iii)  Premier adobe                                      iv)      Flash

b)  JPEG stands for:

    i)   Joint photographic experts grade.

    ii)  Joint photo experiment group.

    iii)  Joint photographic enlarge group.

    iv)  Joint photographic experts group.

c)  What is the primary logical unit for data storage in a CD?

    i)   Groove                                        ii)
    Pit

    iii)  Sector
       iv)      Track

d)  One of the disadvantages of multimedia is:

    i)   Cost
       ii)      Adaptability

iii) Relativity
   iv)    Usability

e) Which of the following is not a video file extension?

   i) MP4
      ii)    AVI

   ii) QT
      iv)    JPG

f) Video is represented as a series of images formally known as:

   i) Pics
      ii)    Shots

   iii) Frames                                                    iv)
      Snaps

g) _____ is a technique in which one image transforms into another:

   i) Kinematics                                                  ii)
      Morphing

   iii) Animation
      iv)    Layering

h) _____ is a decision making process about when user should admitted or not.

   i) Admission control                                   ii)    Delay

   iii) Stand alone                                              iv)
      Synchronization

i) In cryptography , cipher text refers to _____.

   i) Plain text
      ii)    Formatted text

   iii) Clean text
      iv)    Rich text

j) Which one is a 3D animation software?

   i) Adobe Photoshop                                     ii)
      Microsoft silver light

   iii) Animation
      iv)    Toon Boom                    **1½x10**

# *UNIT-I*

Q.2 a) Explain about the multimedia system architecture in detail.
**10**

b) What are the objects of multimedia?
**5**

Q.3 a) What are the advantages and disadvantages of multimedia?
**8**

b) List out the basic software of multimedia and categorise them.
**7**

## UNIT-II

Q.4 a) List out the differences between a plain text and a formatted text.
**5**

b) What is OLE? Explain in detail.
**10**

Q.5 a) Write a short note on conversion in various text formats.

b) Explain RTE syntax in detail.

c) List all the tools used in HTML.
**5x3**

## UNIT-III

Q.6 a) Differentiate between Lossless and Lossy compression techniques.

b) How data compression is possible?

c) Write a short note on bitmap image.
**5x3**

Q.7 a) Explain one of entropy encoding technique with an example.
**10**

b) List some file formats used in multimedia.
**5**

## UNIT-IV

Q.8 a) Discuss the principle of animation.
**10**

b) List some 2D and 3D software. Also explain the 2D and 3D animation techniques.

**5**

Q.9    Write short notes on:

a) Morphing.

b) Use of animation in multimedia.

c) Image size on quality and storage.

**5x3**

# End Semester Examination, May 2015

## BCA -First Semester

# FUNDAMENTALS OF INFORMATION TECHNOLOGY AND PROGRAMMING TECHNIQUES (BCA-1001)

Time: 3 hrs

Max Marks: **75**

*No. of pages: 2*

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

Q.1 **Multiple choice questions:**

a) A computer program that converts assembly language to machine language is:

i) Compiler                               ii) Interpreter

iii) Assembler                         iv) Comparator

b) ALU is:

i) Arithmetic logic unit             ii) Array logic unit

iii) Application logic unit           iv) None of the above

c) The term gigabytes refers to:

i) 1024 mega bytes               ii) 1024 kilobytes

iii) Application logic unit           iv) None of the above

d) The secondary storage devices can only store data but they cannot perform:

i) Arithmetic operation           ii) Logic operation

iii) Fetch operation                iv) Either of the above

**State whether the following statements are True or False:**

e) Debugging means detecting, locating and removing all errors in a computer program.

f) Structured programming do not follow modular approach.

g) WORM stands for write once read many.

h) ROM and RAM are secondary storage units.

i) VOICE system are output devices.

j) Condition stub and action stub form a decision table.

**1½x10**

# *UNIT-I*

Q.2 Draw the block diagram of computer. Which component of a computer is generally called brain of a computer and why? Describe the functions of the distinct part of this component.

**15**

Q.3 Write down the applications of computers in the following fields:

a) Banking      b)    Medicine          c)    Sports          d)
   Airline       e)    Weather    **3x5**

# *UNIT-II*

Q.4 What do you understand by semi-conductor memory and magnetic memory? What are the similarities between the two? Also specify the major differences between the two.

**15**

Q.5 Perform the following conversions:

a) $(172)_{10} = (?)_2$

b) $(10110110101)_2 = (?)_{10}$

c) $(FCA2)_{16} = (?)_2$

d) $(7952)_8 = (?)_{10}$

e) $(4459)_{10} = (?)_8$

**5x3**

# *UNIT-III*

Q.6 What do you understand by an algorithm? What are the various measures that needs to be taken care when designing an algorithm? Illustrate with the help of an example.

**15**

Q.7    Write down the algorithm and also draw the flowchart for printing a Fibonacci series.

**15**

## *UNIT-IV*

Q.8    Explain the approach which uses reverse engineering technique to solve the problem. Mention its relative advantages and disadvantages. Compare it with black box technique.

**15**

Q.9    Which technique is popularly known as modular approach of programming? Explain its concept with a suitable example. Also mention its advantages and disadvantages.

**15**

# End Semester Examination, May 2015

## BCA -First Semester

## PROGRAMMING IN 'C' (BCA-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)  C language was developed by:

   i)  Ken Thompson                         ii)      Dennis Ritchie

   iii) Peter Nortron                        iv)      None of the above

b)  The two operators && and || are:

   i)  Arithmetic                  ii)      Logical              iii)
       Relational

c)  When we use the case control structure?

   i)  To choose one from multiple alternatives.

   ii)  To switch from one instruction to another.

   iii) To make execution fast.

   iv)  None of the above.

d)  The expression $X = 4 + 2\%8$ evaluates:

   i)  -6                                               ii)      6

   iii) 4                                               iv)      None of
   the above

e)  The single character input/output functions are:

   i)  scanf and printf          ii)      getchar and putchar     iii)      None of
   the above

f) #define should not end with a semicolon. *(True / False)*

g) A variable which is visible only in the function, in which it is defined is called local variable. *(True / False)*

h) A C variable cannot start with a number. *(True / False)*

i) Which escape character can be used to begin a new line in C?

j) Which of the language is predecessor to C programming language?
**1½x10**

# *UNIT-I*

Q.2    a) Write a program in C language to find area of a triangle.
**5**

b) What are the reasons of popularity of C over other programming languages? **5**

c) Write short note on constant.
**5**

Q.3    What is operator? Discuss various types of operators available in C language. Give an example of each.
**15**

# *UNIT-II*

Q.4    Write the format, purpose and example of following:

a)     for loop                                      b)     while loop
    c)     else-if ladder                          **15**

Q.5    a) Give the syntax of declaring Arrays in C language with examples.
**8**

b) Write a program in C to generate the Fibonacci series upto $n$ terms.
**7**

# *UNIT-III*

Q.6    a) Highlight the differences between Structure and Union.
**5**

b) Explain with the help of an example how a structure is declared and initialized?

**5**

c) Distinguish between formal and actual parameters with examples.

**5**


Q.7  a) Explain general syntax of C function with an example.

**9**

b) What is recursion? While writing any recursive function what things must be taken care of?

**6**

# *UNIT-IV*

Q.8  a) Distinguish between:

  i)  Printf() and fprintf()                    ii)     scanf() and fscanf()

**5**

b) Discuss:    fopen() and fclose() functions.

**5**

c) What is the purpose of rewind()?

**5**


Q.9  a) Discuss the various modes of opening a data file in C.

**8**

b) Write a note on storage classes.

**7**

# End Semester Examination, May 2015

## BCA -First Semester

## ENVIRONMENTAL STUDIES (BCA-1003)

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/fill the correct option:

a)  Which of these is not a natural ecosystem?

i)   Desert          ii)    Aquarium          iii)    Forest       iv) Mountain

b)  Which of these is a threat to environment?

i)  Growing plants                                    ii)    Growing population

iii) Growing crops                                    iv)    Growing flowers

c)  The interactive zone between land, air and water is called:

i)  Aquarium                                                           ii) Lithosphere

iii) Biosphere                                                         iv) Atmosphere

d)  The word 'Environment' is derived from a French word 'Environ' which means _____.

e)  The thinnest layer of the earth is:

i)   The core                                                           ii) The mantle

iii) The lithosphere                         iv)      The crust

f) What is the composition of oxygen in the atmosphere?

    i) 20%                                                  ii)
       21%

    iii) 22%                                               iv)
       23%

g) The group of organisms which convert light into food are called:

    i) Autotrophs                                    ii)
       Heterotrophs

    iii) Decomposers                               iv)
       Omnivores

h) BOD stands for:

    i) Biotic oxidation demand                ii)      Biological     oxidation demand

    iii) Biological oxygen demand             iv)      Biochemical     oxygen demand

i) 5$^{th}$ June is observed as:

    i) World forest day                                 ii)      World environment day

    iii) World Wildlife day                           iv)      World Population day

j) The hormone responsible for maintaining the pregnancy is:

    i) LH
       ii)      FSH

    iii) Progesterone                                   iv)
       Oestrogen                            **1½x10**

## *UNIT-I*

Q.2    a) Why do we need to study environmental studies?
                                       **7**

   b) Explain the role of an individual in conservation of natural resources.
       **8**

Q.3  a) What do you mean by equitable use of resources for sustainable lifestyle?
      **7**

   b) What do you mean by Natural resources? What are the associated problems with natural resources?

      **8**

# *UNIT-II*

Q.4  a) Explain the energy flow in an ecosystem with an example.
      **8**

   b) Explain the structure and function of an ecosystem.
      **7**

Q.5  a) Write a note on "India as a mega-diversity nation".
      **8**

   b) Explain conservation of biodiversity.
      **7**

# *UNIT-III*

Q.6  Give causes, effects and control measures of any three:

   a) Nuclear hazards                    b)    Air pollution

   c) Water Pollution                    d)    Soil pollution
                              **5x3**

Q.7  a) What do you mean by a disaster management? Explain with relation to earthquakes and landslides.
      **8**

   b) How solid waste can be managed in urban areas and in industries?
      **7**

# *UNIT-IV*

Q.8  a) Why environment needs to be protected? Explain different Environment Protection Acts.
      **10**

b) Write a note on Urban problems related to energy.

**5**


Q.9    a) Explain how economy of India has got affected by population explosion.

**8**

b) Explain different methods to prevent pregnancy.

**7**

# End Semester Examination, May 2015

## BCA -First Semester

## **BASIC MATHEMATICAL SKILLS (BCA-1004)**

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)  Define Rank of matrix.

b)  If $k+1$, $3k$, $4k+2$ be any 3 consecutive terms of an A.P., then value of $k$ is _____.

c)  Solve $\log \sqrt{8}/\log 8$.

d)  Find $\dfrac{dy}{dt}$ for $y = x^9$

e)  The 9$^{th}$ term of AP sequence $9, 12, 15, 18\dots\dots$ is _____.

f)  If $\left(\dfrac{a}{b}\right)^{x-1} = \left(\dfrac{b}{a}\right)^{x-3}$, then the value of $x$ is _____.

g)  If $A = \begin{bmatrix} 3 & 2 \\ 1 & 1 \end{bmatrix}$ and $AB = \begin{bmatrix} 1 & 3 & 2 \\ 1 & 1 & 1 \end{bmatrix}$, then:

i)  $B$ is not determined

ii)  $B = \begin{bmatrix} -1 & 1 & 0 \\ 2 & 0 & 1 \end{bmatrix}$

iii)  $B = \begin{bmatrix} -1 & 2 \\ 1 & 0 \\ 0 & 1 \end{bmatrix}$

iv)  $B = \begin{bmatrix} -1 & 1 \\ 2 & 0 \end{bmatrix}$

h)  Fine the value of $a$ if the following matrix is singular $\begin{bmatrix} -4 & 2 \\ 6 & a \end{bmatrix}$

i)  Find cofactor of $A_{23}$ of the matrix $\qquad A = \begin{bmatrix} 5 & -2 & 7 \\ 6 & 1 & -9 \\ 4 & -3 & 8 \end{bmatrix}$

j)  If $A = \begin{bmatrix} 5 & 3 & 2 \\ 0 & 4 & 1 \\ 0 & 0 & 3 \end{bmatrix}$ the $|A|$ is _____.

**1½x10**

## UNIT-I

Q.2  a)  If $A = \begin{bmatrix} 0 & 3 \\ -7 & 5 \end{bmatrix}$ and $I = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$, then find $K$ so that $KA^2 = 5A - 21I$

**7**

b)  Find the value of $x$ such that $\begin{bmatrix} 1 & 2 & 1 \end{bmatrix} \begin{bmatrix} 1 & 2 & 0 \\ 2 & 0 & 1 \\ 1 & 0 & 2 \end{bmatrix} \begin{bmatrix} 1 \\ 2 \\ x \end{bmatrix} = 0$

**8**

Q.3  a)  Verify Cayley-Hamilton theorem for matrix $A = \begin{bmatrix} 1 & 3 & 3 \\ 1 & 4 & 3 \\ 1 & 3 & 4 \end{bmatrix}$ and hence find $A^{-1}$.

**10**

b)  Find the rank of matrix $A = \begin{bmatrix} 3 & 2 & 7 \\ 4 & -3 & -2 \\ 5 & 9 & 23 \end{bmatrix}$.

**5**

## UNIT-II

Q.4  a)  The sum of 3 numbers in A.P. is 15. If 1, 4 and 19 are added to the numbers, the resulting numbers are in G.P. Find the numbers.

**7**

b)  How many words can be formed from the letters of the word DAUGHTER?

i)  Taking all letters together            ii)        Beginning with D and ending with R            **8**

Q.5 a) Find the 8th term in $\left[\dfrac{2x}{3} - y^2\right]^{11}$

**7**

b) Sum the series 5+55+555+…… to n terms.

**8**

## UNIT-III

Q.6 a) Show that $2\log x + 2\log x^2 + 2\log x^3 + \ldots + 2\log x^n = n(n+1)\log x$

**8**

b) Simplify: $\dfrac{\tan(90+\theta)\sin(180+\theta)\sec(270+\theta)}{\cos(270-\theta)\operatorname{cosec}(180-\theta)\cot(360-\theta)}$

**7**

Q.7 a) If ABCD is a cyclic quadrilateral, Prove that $\cos A + \cos B + \cos C + \cos D = 0$

**7**

b) If $\log\dfrac{x+y}{7} = \dfrac{1}{2}(\log x + \log y)$; Show that: $\dfrac{x}{y} + \dfrac{y}{x} = 47$

**8**

## UNIT-IV

Q.8 a) For value of $k$ is the following function $f(x)$ continuous at $x = 2$

$$f(x) = \begin{cases} \dfrac{x^2 - 4}{x - 2} & ; \quad x \neq 2 \\ \\ k & ; \quad x = 2 \end{cases}$$

**7**

b) If $y = \sqrt{x} - \dfrac{1}{\sqrt{x}}$, Show that $2x\dfrac{dy}{dx} + y = 2\sqrt{x}$

**8**

Q.9 a) If $y = \dfrac{x}{x+y}$, show that $x\dfrac{dy}{dx} = y(1-y)$

**7**

b)   If $\lim\limits_{x \to} \dfrac{x^4 - 1}{x - 1} = \lim\limits_{x \to k} \dfrac{x^3 - k^3}{x^2 - k^2}$ find the value of $k$

**8**

# End Semester Examination, May 2015

## BCA -Second Semester

## DATA STRUCTURES (BCA-2001)

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 by choosing the correct option:**

a) The smallest element of an array's index is called its:

|           |                     |     |                 |
| --------- | ------------------- | --- | --------------- |
| i) Lower bound |                | ii) | Upper bound     |
| iii) Range<br>Extraction |     | iv) |                 |

b) Which of the following sorting algorithm is of divide and conquer type?

|           |          |     |              |
| --------- | -------- | --- | ------------ |
| i) Bubble |          | ii) | Quick        |
| iii) Insertion |     | iv) | All of the above |

c) Which data structure allows deleting data elements from font and inserting at rear?

|          |          |     |              |
| -------- | -------- | --- | ------------ |
| i) Stack |          | ii) | Queries      |
| iii) Dequeue |       | iv) | All of the above |

d) Linklist are not suitable for:

|               |          |     |              |
| ------------- | -------- | --- | ------------ |
| i) Insertion sort |     | ii) | Binary search |
| iii) Queue    |          | iv) | None of the above |

**Fill in the blanks:**

e) Two dimensional arrays are called _____.

f) Stack is based on the principle _____.

g) The front of the queries calculated by _____.

**State whether True or False:**

h) A binary tree can be converted into two tree by replacing each empty subtree by a new external node.

i) A connected graph T without any cycle is called neighbor.

j) A graph is a non linear data structure.

**1½x10**

# UNIT-I

Q.2    a) Suppose A is 2-dimmensional array with 20 rows and 4 columns. Each element of array is stored in 4 memory locations if base address is 200. Calculate:

   i)   A[12, 3] using row major            ii)      A[14, 2] using column major

**7**

   b) Define the followings:

   i)   Data          ii)      Information       iii)      Time complexity
   iv)      Space complexity

**8**

Q.3    a) Explain sparse array. How can you store the sparse array in memory? Explain with an example.

**8**

   b) Write an algorithm for inserting a new element into a linear array.

**7**

# UNIT-II

Q.4    What do you understand by stack? Discuss the various operations of stack. Convert the infix notation into postfix notation $((X-Y)/Z)*((U+V)-W)$.            **15**

Q.5    a) Mention and explain various types of queue with examples.
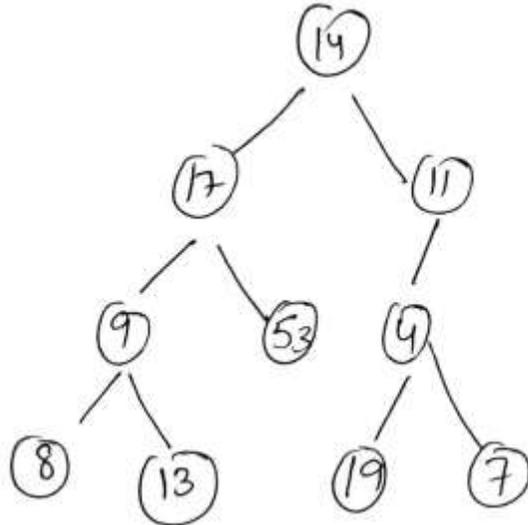
**7**

b) What are advantages and disadvantages of linked lists? How linked lists can be used for polynomial manipulation?

**8**

# UNIT-III

Q.6    a)  From the given binary tree, answer the followings:
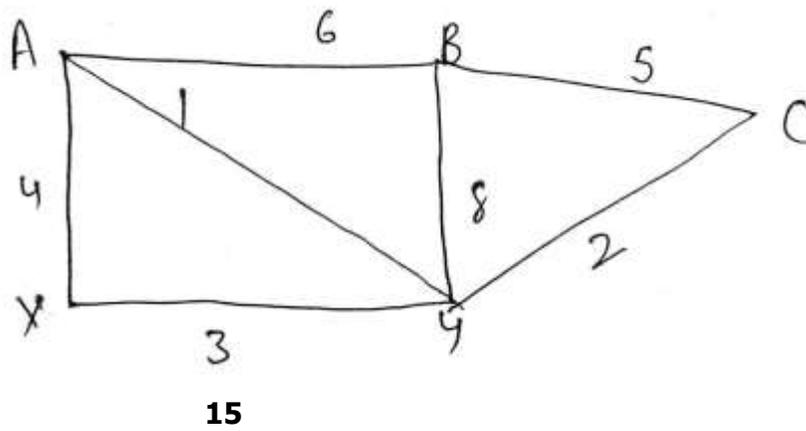


i)      Which is root node?

ii)     Which are leaf nodes?

iii)    What is the result of pre-order traversal?

iv)    What is the result of post-order traversal?

v)     What is the result of in-order traversal?

**10**

b)      Write a short note on threaded tree.

**5**

Q.7    What is minimum spanning tree? Write Kruskal algorithm for minimum spanning tree. Also, find the minimum spanning tree for the following:

**15**

## UNIT-IV

Q.8   a)  Sort the following data using quick sort:

66, 77, 11, 88, 99, 22, 33, 44, 55.

**8**

b)  Write an algorithm to search a particular element using binary search method.

**7**

Q.9   What is hashing? Discuss various hashing techniques. Also, discuss the concept of collision resolution technique in detail.

**15**

# End Semester Examination, May 2015

## BCA -Second Semester

## DATABASE SYSTEMS (BCA-2002)

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 by choosing the correct option:***

a) A database schema refers to:

i) Information at particular level

ii) Overall design of database

iii) Query language

iv) Validation issues

b) Row is synonymous with the term:

i) Record ii) Relation iii) Column
iv) Field

c) Which of the following is a group of one or more attributes that uniquely identifies a row?

i) Key ii) Determinants iii) Tuple
iv) Relation

d) Traditional set operators include:

i) Union ii) Selection iii) Projection iv) Division

e) Which structure is network model based on?

i) Graph ii) Linked list iii) Domain
iv) None of the above

f) Which of the following is not a type of SQL constraint?

i) Primary key　　　　ii)　Foreign key

iii) Alternate key　　　iv)　Unique key

g) A functional dependency is a relationship between or among:

i) Tables　　　　　　ii)　Rows　　　　　　iii)
Relations　　　　iv)　Attributes

h) Read only databases are _____ updated.

i) Always　　　　ii)　Commonly　　　iii)　Increases
iv)　None of the above

i) A transaction completes its execution is said to be:

i) Committed　　　ii)　aborted　　　　　iii)　Rolled　back
iv)　Failed

j) In ER diagram, ER stands for:

i) Entity-Record　　ii)　Entity-Relationship

iii) Entity-Row　　　iv)　All of the above.

**1½x10**

## *UNIT-I*

Q.2　What is file based approach of database? Explain its limitations. How DBMS management system is better solution along with advantages and disadvantages of DBMS?

**15**

Q.3　What are the different notations used for designing an ER diagram and explain their usage?

**15**

## *UNIT-II*

Q.4　Explain all types of keys used in relational model with a suitable database example.

**15**

Q.5　Discuss any 10 Oracle functions with proper syntax and suitable examples.
**15**

# *UNIT-III*

Q.6     What is meant by normalization? Why do we normalize the database? Explain different techniques of normalization.

**15**

Q.7     Explain two-phase locking protocol with a suitable example in concurrency control.

**15**

# *UNIT-IV*

Q.8     What is the importance of recovery procedure? What is meant by log-based recovery technique? Discuss different types of log based recovery techniques.          **15**

Q.9     What is meant by DDBMS? Compare DDBMS with DBMS and discuss advantages and disadvantages of DDBMS.

**15**

# End Semester Examination, May 2015

## BCA -Second Semester

## LOGICAL ORGANISATION OF COMPUTER (BCA-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    ***Multiple choice questions:***

a)  A flip flop has:

   i)   One stable state
   ii)      No stable state

   iii) Two stable states                                                        iv) None of the above

b)  Which is typically the longest: bit, byte, nibble word?

   i)   Bit                         ii)      Byte                    iii)      Nibble
   iv)      word

c)  A JK 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

d)  The clock signals are used in sequential logic circuits:

   i)   to tell the time of the delay.

   ii)  to tell how much time has elapsed since the system was turned on.

   iii) to carry serial digital signals.

   iv)  to synchronize events in various parts of a system.

e)  The two parts of a microprocessor instruction are called operation and the:

i) Operand
ii) Operator

iii) Observable
iv) None of the above

f) A combinational circuit which is used to change a decimal number into an equivalent BCD number is:

i) Decoder
ii) Encoder

iii) Multiplexer
iv) Demultiplexer

g) A 20-bit address bus allows access to a memory of capacity:

i) 1 MB
ii) 2 MB

iii) 32 MB
iv) 64 MB

h) When is a cache block written into the main memory?

i) Valid bit is not set

ii) Every cycle

iii) Dirty bit is set

iv) None of the above

i) A microprocessor retries instructions from:

i) Control memory

ii) Cache memory

iii) Main memory

iv) Virtual memory

j) A 32 bit microprocessor has the word length equal to:

i) 2 bytes
ii) 32 bytes

iii) 4 bytes
iv) 8 bytes                                    **1½x10**

## UNIT-I

Q.2   a) Why a binary number system is preferred for computers? Explain with reason.

**5**

b) Perform the following:

i)   $(798.5)_{10}=(\ \ )_{16}=(\ \ )_8=(\ \ )_2$                    ii)      $79 - (32)$

**5x2**

Q.3   a) Generate the Hamming code for data bits 1101.

**5**

b) Write short notes on:

i)   Non weighted code

ii)  Floating point numbers

**5x2**

# UNIT-II

Q.4   What are universal gates? Simulate NAND and NOR gates to all gates.

**15**

Q.5   Simplify the following using K-map.

a)  F (A, B, C, D) $=\sum(0, 3, 5, 6, 9, 11, 13, 14, 15)$

D (A, B, C, D)$= \sum (1, 2, 8)$

b)  $F(w, x, y, z) = \pi(1,5,7,9,10,12,14)$

**7½x2**

# UNIT-III

Q.6   What is the limitation of JK flip-flop? How can we overcome from them? Obtain the logic diagram of master slave flip-flop using NAND gates.

**15**

Q.7   Explain the followings:

a) Multiplexers

b) Full adder

c) Decoder

**5x3**

# *UNIT-IV*

Q.8    What is a cache memory? Explain various types of mapping techniques in detail.

**15**

Q.9    What is parallel processing? Explain in detail.

**15**

# End Semester Examination, May 2015

BCA -Second Semester

## CONCEPTUAL FOUNDATIONS OF MANAGEMENT (BCA-2004)

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  **Multiple choice questions:**

a) Which are of the following approaches has merged from the findings of Hawthorne experiments?

   i) Human behavior approach                                          ii) Systems approach

   iii) Classical theory
       iv)     Decision theory

b) Which one of the following is departmentation based on functions?

   i) Marketing
            ii)        North territory

   iii) Department named(A)
        iv)     Department named one.

**Fill in the blanks:**

c) A principle means a fundamental statement of _____.

d) _____ is the process of checking.

e) Organising is the _____ of work.

f) Informal leaders are not appointed but _____ in informal groups.

g) Communication is necessary to every _____.

h) A _____ must have qualities of a good leader.

i) _____ is the barrier in the sound decision making process.

**Answer the question:**

j) What are management information systems?

**1½x10**

# UNIT-I

Q.2 Define the term 'management'. Explain different functions of management. **15**

Q.3 Explain Frederick Winslow Taylor's contribution of management thought. **15**

# UNIT-II

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

**15**

Q.5 Write short notes on the followings:

a) Importance of management information systems in decision-making process. **8**

b) Types of plans.

**7**

# UNIT-III

Q.6 Explain the various steps in the process of organizing and discuss the significance of organizing.

**15**

Q.7 Explain the followings:

a) The importance of co-ordination in organizing.

**8**

b) Span of management.

**7**

# UNIT-IV

Q.8 "A good leader is not necessarily a good manager." Discuss this statement and compare leadership with management.

**15**

Q.9    Write notes on:

a) Qualities of a good leader.                                         b)      Autocratic
   leader.                              **7½x2**

# End Semester Examination, May 2015

BBA (Gen) / BBA (Banking) - First Semester
## BUSINESS ORGANISATION (bba-1001)

Time: 3 hrs                                                      Max Marks: **75**

*No. of pages: 1*

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

Q.1   Answer the following:
- a) Represent diagrammatically business as an open system.          **2**
- b) Discuss any two demerits of partnership form of a business organization.   **2**
- c) Name various types of co-operative societies.                   **2**
- d) State any two qualities of a successful entrepreneur.           **2**
- e) List out the main contents of a business plan.                 **2**
- f) State any two functions of stock exchange in India.            **2**
- g) State any two merits of a co-operative society.                **2**
- h) CII stands for _____.                              **1**

## *UNIT-I*

Q.2   a) Discuss the objectives of a business.                       **10**
      b) Differentiate between business, profession and employment.   **5**

Q.3   Discuss the nature, scope and characteristics of a business.   **15**

## *UNIT-II*

Q.4   What are the characteristics of a sole trading business? Discuss its advantages and disadvantages.                                            **15**

Q.5   a) Differentiate between Public Ltd. and Private Ltd. Company.   **8**
      b) Highlight the merits and demerits of MNCs.                   **7**

## *UNIT-III*

Q.6   Explain the terms: "Entrepreneur and Entrepreneurship". Also discuss the process of setting up a business enterprise.                          **15**

Q.7   a) Discuss the factors that determine the choice of the form of an organization.
                                                                      **8**
      b) Discuss the components of a feasibility report.               **7**

## *UNIT-IV*

Q.8   What are business combinations? Explain the main causes of such combinations.
                                                                      **15**

Q.9   Write notes on:
- f) SEBI
- g) FICCI                                                           **7½x2**