(b) Write complete C programs (any two)   **12**

   (i) Write a program to find sum of digits of accepted number.

   (ii) Write a C program to find the sum of series 1+3+5+7...... up ton terms.

   (iii) Write a C program to display following output on the screen.

```
            1
         1  2  1
      1  2  3  2  1
   1  2  3  4  3  2  1
1  2  3  4  5  4  3  2  1
```

---

1 (a) Fill in the blanks :   **4**

   (i) _____ header file contains mathematical functions.

   (ii) A global variable is also known as _____ variable.

   (iii) Every program statement must end with _____.

   (iv) The _____ function is used to display output on the screen.

(b) Attempt any two from the following questions :   **8**

   (i) What is a flow- chart ? Discuss about various symbols used to draw a flow chart with suitable example.

   (ii) Discuss about primary data types in 'C' language.

   (iii) Explain basic structure of ' C' program.

(a) Fill in the blanks : **4**

(i) The operator _____ cannot be used with real operands.

(ii) The _____ operator returns the number of bytes the operand occupies.

(iii) The value of expression 25/3 % 2 = _____.

(iv) The value of logical expresion a< b && a> c = _____.

(if a=5, b=10 and c= -6)

(b) Attempt any two from the following questions : **8**

(i) Explain relational operators with suitable examples.

(ii) Explain increment and decrement operators with suitable example.

(iii) Explain getchar ( ) and putchar ( ) functions with suitable examples.

(a) Fill in the blanks : **4**

(i) The _____ operator is true only when both the operands are true.

(ii) The expression ! (x ! = y) can be replaced by the expression _____.

(iii) A for loop with the no test condition is known as _____ loop.

(iv) In the entry controlled loop, if the body is executed n times , the test condition is evaluated _____ times.

(b) Write short notes : (any two) **8**

(i) If else statement

(ii) Do while statement

(iii) For loop.

4 (a) Assuming the variable string contains the value " The sky is the limit ", determine what output of the following statement will be, **4**

(i) Print f (" % s " , string);

(ii) Print f (" % 25.105 ", string);

(iii) Print f (" % − 25.105 ", string);

(iv) Print f (" ------\ n ");

(b) Attempt any two from the following questions : **8**

(i) Discuss about one dimentional arrays with suitable examples.

(ii) Explain strcat ( ) and strcpy ( ) functions.

(iii) Discuss about declaring and initializing string variables.

5 (a) Write complete C programs (any two) **10**

(i) Write a C program to evaluate simple interest I= PRN/ 100.

(ii) Write a C program to enter days and convert into years, months and remainder days.

(iii) Write a C program to find largest of given three numbers.

B. C. A. (Sem. I) Examination

November/December – 2013

BCA - 102 : Database Management System

(CC) (New Course)

Time : 3 Hours]　　　　　　　　　　　　　[Total Marks : 70

1　(a)　Do as directed:　　　　　　　　　　　　　　4

　　　　(i)　List out - types of user

　　　　(ii)　Define term: Data integrity

　　　　(iii)　What is DBMS ?

　　　　(iv)　What is Metadata ?

　　(b)　Attempt following : (any two)　　　　　14

　　　　(i)　Who is DBA ? Describe role of DBA in detail.

　　　　(ii)　Describe the functions of DBMS ? Discuss the advantages and disadvantages of DBMS.

　　　　(iii)　Write down the components of DBMS & discuss it in detail.

2　(a)　Do as directed:　　　　　　　　　　　　　　5

　　　　(i)　Define: Foreign key

　　　　(ii)　" Tuple " is unother name of " Row " in DBMS. (true / false)

　　　　(iii)　What is domain ?

　　　　(iv)　What is primary key ?

　　　　(v)　What is candidate key ?

(b)   Attempt following (any two)   **12**
   (i)   Exaplain special relation operations with example.
   (ii) Explain the architecture of D.B.M.S. in detail.
   (iii) Explain relational model in detail with example and discuss its advantages and disadvantages.

(a)   Do as directed: **4**
   (i)   List out : types of relationship between entity.
   (ii) Define term : composite attribute
   (iii) What is normalisation ?
   (iv) What is full form of : BCNF.
(b)   Attempt following : (any **two**)   **14**
   (i)   What is entity ? Discuss all type of entity with example.
   (ii) What is Relationship ? Explain it's types with exmaple ?
   (ii) What 1st and 2nd normalisation process ? Discuss each in detail with one example ?

(a)   Do as directed :   **5**
   (i)   What is MS- Access ?
   (ii) What is memo ?
   (iii) Define term: Autonumber.
   (iv) What is default format of time and system date ?
   (v)   What value the Boolean data type gives ?
(b)   Attempt following : (any two)   **12**
   (i)   What is form ? Explain steps to create report in detail.
   (ii) Explain elements which are used in form and report designing in detail.
   (iii) Discuss the all data types of MS- Access in detail.

GU-2553 Seat No._____

B. C. A. (Sem. I) Examination

October/November – 2013

BCA - 103 : Computer Organization

(CC) (New Course)

Time : 3 Hours] [Total Marks : 70

1 (a) Do as directed : 6
  (i) Differentiate between digital and Analog computer system.
  (ii) What is software ?
  (iii) What is Nibble ?
  (iv) List out the major part of digital computer.
  (v) Full name of C.P.U.& A.L.U.
  (vi) What is operating system.

  (b) Answer any two : 12
  (i) Explain all merits and demerits of computer in details.
  (ii) Describe all Computer Generation.
  (iii) Explain classification of computer with main frame computer.

2 (a) Do as directed : (any three) 5
  (i) What is memory cell ? List out types of memory cell.
  (ii) List out types of input devices.
  (iii) Full name: USB & DVD.
  (iv) Define the terms : Seek Time & Latency Time.

  (b) Attempt any two : 12
  (i) Explain Ram with types.
  (ii) Explain keyboard with diagram.
  (iii) Explain CRT monitor with internal structure of CRT.

(a) Attempt any three.   **6**
   (i) Binary subtraction:
      (101111-10101)
   (ii) List out number system with example.
   (iii) Conversion of $(ABCD.EF)_{16}$ to $(?)_2$.
   (iv) Conversion of $(634.35)_8$ to $(?)_2$

(b) Attempt any four: **12**
   (i) Conversion of $(90\ BF.\ AC)_{16}$ to $(?)_{10}$.
   (ii) Conversion of $(1093.6)_{10}$ to $(?)_{16}$
   (iii) Conversion of $(54442)_8$ to $(?)_2$ & $(?)_{16}$
   (iv) Conversion of $(101110.11)_2$ to $(?)_{10}$
   (v) Binary Addition :
      1110111.101
     + 1010010.101

(a) Do as directed : (any two)   **5**
   (i) List out Logic Gates. Explain any one.
   (ii) Add 3 and 2 in XS–3 code.
   (iii) Explain NOR Gate.

(b) Attempt any two :   **12**
   (i) Explain full Adder in detail.
   (ii) Explain 3 to 8 line decoder.
   (iii) Explain EX-OR and EX-NOR Gates.

GU-2554 Seat No._____

B. C A. (Sem. I) Examination

November / December – 2013

BCA - 104 : Communication Skills - I

(CC) (New Course)

Time : 3 Hours]   [Total Marks : **70**

1   (a)   (i)   Discuss various barriers to   **6×3=18**
                        communication.
                                OR
            (ii)   What is communication ? Define and explain.

     (b)   (i)   Write a detailed note on process
                        of communication.
                                OR
            (ii)   What is the importance of feedback in
                        communicatio ? Explain in detail.

     (c)   (i)   Discuss the types of communication.
                                OR
            (ii)   What should we do for improving our
                   communication ? Give your suggestions.

2   Do as directed :   **4+4+9=17**

     (a)   Change into indirect speech :
            (i)   Rahul said to Mehul, " I am watching Tv
                   now "
            (ii)   She said to me, " I have submitted my
                   project "
            (iii) The doctor said to the patient, " Do
                   not eat Ice-cream."
            (iv)   Vaibhavi said to me, " Have you taken
                   your breakfast ?

(b) Fill in the blanks with proper verb forms :
(i) I did not _____ your call yesterday. (recieve)
(ii) Ritesh _____ videogame since afternoon. (play)
(iii) We _____ not _____ the assignment yet. (submit)
(iv) My mother _____ at 5 a.m daily. (get up)

(c) Fill in the blanks with proper answers :
(i) Bajirav Singham is _____ honest officer. (article)
(ii) I read _____ Indian Express daily. (article)
(iii) You _____ take rest. (modal)
(iv) I _____ not drive a car befor 2 years. (modal)
(v) AAP party _____ win the Assembly election in Delhi. (modal)
(vi) Apple manufacture I-phones. (change the voice)
(vii) The company has selected you. (change the voice)
(viii) Your transaction is being processed by ATM. (change the voice)
(ix) Do you attend lectures daily ? (change the voice)

3 Answer any three :   6×3=18
(a) On behalf of Navneet publishers, write a voluntary offer letter for Gala dictionaries.
(b) Write a letter to Samsung mobile, CG road, Ahmedabad, for ordering various smart phones.
(c) Draft a letter of cancellation to CITIZEN CO. about your order of calculators
(d) Write a complain letter of damaged goods of laptops to LENOVO CO. , Mumbai.
(e) Write an inquiry letter to LG Electronics, Mumbai about various types of T.V. and refrigerator, on behalf of Modern Tech. Electronics, Visnagar.

4 Do as directed :   3+3+2+2+7=17
(a) Choose correct word :
(i) He is sitting _____ Roshan. (besides / beside)
(ii) Dengue is a _____ . (decease / disease)
(iii) My uncle lives on 3rd _____ . (flour / floor)
(b) Write one word substitute :
(i) One who journeys to sacred places.
(ii) Want of rain.
(iii) A person sacrificing life for a noble cause.
(c) Give antonyms :
(i) Encourage
(ii) Debit
(d) Give synonyms :
(i) Risky
(ii) Prohibition
(e) Write an essay on any one of the following:
(i) Internet : use & misuse
(ii) Role of the youth in nation- building.
(iii) Global warming's causes and can we solve them ?

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