[4289] – 101

P. G. D. C. M. (Semester - I) Examination, 2012

101 : ELEMENTS OF INFORMATION TECHNOLOGY AND OFFICE AUTOMATION WINDOWS OPERATING SYSTEM AND M.S. OFFICE

(2008 Pattern)

Time : Three Hours   **Total Marks : 70**

Note :   *(i)*   *Attempt **any seven** questions.*

　　　　　(ii)   *All questions carry **equal** marks.*

Q. 1. Solve the following :

    (a)　$(11101)_2 + (4D)_{16} = (?)_{10}$

    (b)　$(2A)_{16} = (?)_8 = (?)_2$

    (c)　$(111011011)_2 = (?)_{10} = (?) = 8$

    (d)　$(111010)_2 * (13)_{10} = (?)_8$

    (e)　$(122)_8 + (10101)_2 = (?)_{10}$

Q. 2. Explain the working of CD as one of the memory devices.

Q. 3. Explain functions of operating system.

Q. 4. Explain file manager in MS WINDOWS.

Q. 5. Explain different editing commands in MS-WORD.

Q. 6. Explain file organization and accessing techniques.

Q. 7. (a)　Explain in brief history of computers.

    (b)　Explain any 5 string functions in MS-Excel.

Q. 8. Write short notes on **any two** :

    (a)　GUI

    (b)　E-mail

    (C)　Bar code

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[4289] – 102

P.G.D. C. M. (Semester – I) Examination, 2012
102 : PROGRAMMING USING VISUAL BASIC
(2008 Pattern)

Time : Three Hours   **Total Marks : 70**

Note :   *All questions are compulsory.*

Q. 1. Give output for following section of code and explain **(any five)** :   **[20]**

   (a)   dim chk

          chk = If ("BMW"> "HONDA", "Bigger", "Smaller")

          print chk

   (b)   dim check As integer

          check = StrComp("aB, "a", vbBinaryCompare)

          print check

          print (cbool(check))

   (c)   dim dt as date

          dt = DateSerial (2012, 5, 19)

          print dt

          print format(DateAdd("m", 10,dt), "dd,mm,yyyy")

   (d)   print chr(asc("FINE"))

   (e)   dim ch as integer

          for ch = 1 to 20 step 2

               if ch = 10 then

                    print ch

               end if

          print ch

          next

   (f)   dim x As String

          x = "best of luck"

          print StrReverse(x)

          print Mid(x, 1, 4)

          print StrConv(x, vbProperCase)

          print Format("3490.9096", "#,###.##")

Q. 2. Name the property for the following controls **(any five)** :   **[5]**

    (1)   To change background colour of Label.

    (2)   To enter the date in combobox at design time.

    (3)   To display an image in picture box.

    (4)   To display different types of files in FileListbox.

    (5)   To apply a graphical effect to button.

    (6)   To set password character of textbox.

Q. 3. Write a sectional code for the following **(any four)** :   **[20]**

    (1)   To sort an array in ascending order having 10 elements.

    (2)   Select colour using common dialog control and change the colour of textbox.

    (3)   Use checkbox control to select bold, italic and underline and display the text using selected styles.

    (4)   Accept number in textbox and print factorial of the number when Display button is pressed.

    (5)   Take a textbox and two Buttons. Accept a number. Write the following code to :

        (a)   Check whether the number is negative or positive.

        (b)   Check whether the number is divisible by 7.

Q. 4. Write short notes on **(any five)** :   **[25]**

    (1)   String functions with e.g.

    (2)   Data types in Visual Basic

    (3)   Control statements

    (4)   Implicit and Explicit declaration of variable

    (5)   Progress Bar, Status Bar and Slider controls

    (6)   Common dialog box 6.0

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[4289] – 103

P.G.D. C. M. (Semester – I) Examination, 2012
103 : INTRODUCTION TO 'C' AND 'C++' LANGUAGE
(2008 Pattern)

Time : Three Hours   **Total Marks : 70**

Note : *(i)*   ***Q. No. 1 and 5*** *are compulsory.*

(ii)   *Solve **any two** questions from 2 to 4.*

(iii)   *Figures to right Indicate full marks.*

(iv)   *Use comments if necessary.*

Q. 1. Write output of following programs with explanation :   **[10]**

(A)   void main ( )

{ int i =, 10 j = 5 ;

for (i = 0 ; i < = j ; i + +)

{ i = + + i ;

j = i + + j ;

} j = – – j ;

printf ("%d%d", i , j) ;

(B)   void main ( )

{   int x = 100 ;

int y = 500 ;

if   (x < = y)

x + + ;

else

y - - ;

printf ("%d", "%d", x, y) ;

}

Q. 2. (A) Write a program to largest and smallest element of an integer   **[20]**
array of 10 elements. Accept numbers from user. Use 'C' language.

(B) Write short notes on :

(i)   Operators in C++

(ii)   Parameterised constructor in C++

Q. 3. (A) Differentiate between :   **[20]**

(i)   Virtual base class and Abstract class

(ii)   Multilevel inheritance and multiple inheritance

(B) Write a program using 'C' language to display following pattern.

(i)   1   (ii) A

1 0   a b

1 0 1   A B C

1 0 1 0   a b c d

Q. 4. (A) Write a program in 'C++' to find the sum of prime numbers   **[20]**
between 1 to 30.

(B) Explain Constructors and Destructors with example.

Q. 5. Write short notes on :   **[20]**

(a) Static and Register storage class

(b) Friend functions in C++

(c) Symbolic constant

(d) Function call by value and function call by Reference in 'C'

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P.G.D.C.M. (Semester – II) Examination, 2012
202 : SOFTWARE ENGINEERING
(2008 Pattern)

Time : Three Hours   **Total Marks : 70**

Note : *Make your own assumptions, wherever necessary. Solve **any five** questions*
[14 × 5 = 70].

Q. 1. For Payroll processing system for small scale industry draw :
   (a)   ER diagram
   (b)   Database Design

Q. 2. What are the skills that an analyst should possess? Explain.

Q. 3. Explain various steps of System Development Life Cycle.

Q. 4. Draw the decision tree and decision table for the following
Income tax is computer for salaried person as follows :
-       If salary is < 1,50,000/- then no tax.
-       If salary is > = 1,50,000/- and < 1,60,000/- then 10% tax.
-       If salary is > = 1,60,000/- and < 2,50,000/- then 20% tax.
-       For salary > = 2,50,000 then 30% tax.
-       For physical disabled person 10% rebate in tax.

Q. 5. Draw Context level diagram for Bank Fixed Deposit System and design
format of Fixed Deposit Receipt.

Q. 6. Write short notes on **(any two)** :
   (i)   Spiral model
   (ii)   Types of systems
   (iii) Fact finding techniques

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