2011

Time : 3 hours

Full Marks : 80

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

Answer from both the Groups as directed.

Group – A

(Objective Type Questions)

Answer all questions.

1. Choose the correct answer of the following :  
   \[ 2 \times 10 = 20 \]

   (a) The language C is also known as :
   
   (i) Object Oriented Language
   (ii) Monolithic Programming
   (iii) Structured Programming
   (iv) Procedural Programming

JX – 19/3  (Turn over)
(b) Every expression always returns:
   (i) 0 or 1
   (ii) 1 or 2
   (iii) -1 or 0
   (iv) None of these

(c) The meaning of if(1) is:
   (i) Always true
   (ii) Always false
   (iii) Both (i) and (ii)
   (iv) None of these

(d) In nested loop:
   (i) The inner most loop is completed first
   (ii) The outer most loop is completed first
   (iii) Both (i) and (ii)
   (iv) None of these

(e) The union declared without tag name is called as:
   (i) Anonymous union
   (ii) Nameless union
   (iii) Unknown union
   (iv) Void union

JX - 19/3 (2) Contd.
(f) What is the main feature of static variable?
   (i) It stores the current value
   (ii) It stores previous values
   (iii) It is a constant variable
   (iv) None of these

(g) Which of the following is not part of string library?
   (i) Strlen (st)
   (ii) Strcpy (st)
   (iii) Strdln (st)
   (iv) Strvet (st)

(h) Null character means:
   (i) It can terminate any C string
   (ii) It is nothing more than 0
   (iii) It can be connected by 0/\&
   (iv) All of these

(i) The function of C is also used as:
   (i) Compilation function
   (ii) Procedure
     
   (iii) Library function
   (iv) Multi dimensional function
(j) Passing parameter is mainly used for:
(i) Through line function it is more flexible
(ii) Only applicable with line function
(iii) Both (i) and (ii)
(iv) None of these

**Group – B**

(Long-answer Type Questions)

Answer any four questions:

2. (a) Write a program to check whether a given number is palindrome.  
8

(b) Explain the goto statement with an example.  
7

3. (a) Explain the different types of if statements with example.  
8

(b) Write a program to find the smallest of 4 numbers using nested if statement.  
7

4. (a) What is the difference between function declaration and function definition.  
8

(b) Write the recursive definition to find gcd of two numbers.  
7

JX – 19/3   ( 4 )  Contd.
5. (a) Explain the global variable with example. 8  
    (b) Write a program to accept a number and check whether it is Armstrong or not. 7
6. What are pre-processors in C? Explain each of them with simple examples. 15
7. (a) Distinguish between Array Variable and Pointer Variable. 8  
    (b) Distinguish between Structure and Union. 7
8. (a) What is a structure? How does a structure differ from an array? 8  
    (b) Write a program to declare an array of size 10 of integer data type and arrange them all in ascending order by using bubble sort. 7
9. (a) Explain the binary search with the program. 8  
    (b) What is a member? What is the relationship between a member and a structure? 7
10. (a) Write a program to find the number of characters in a string using pointers. 8  
     (b) Describe the external variable with example. 7