2015

Time : 3 hours

Full Marks: 70

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 **all** the Groups as directed.

Group – A

(**Compulsory**)

1. [A] Choose the correct answer of the following: 1x10=10

a) The execution of a 'C' program begins at:
    i.   #include
    ii. main()
    iii. Global variable declaration
    iv. Any of these

b) Programming method followed in C language is:
    i.   Procedural
    ii. Object-oriented
    iii. Non-procedural
    iv. None of these

c) Size of (float) = _____.
    i.   2
    ii. 4

iii. 6

iv. 8

d) Which one is a valid identifier?

   i. 6 month

   ii. Total-number

   iii. N$

   iv. _sum

e) Symbol used for accessing a member of structure using pointer is:

   i. ->

   ii. .

   iii. *

   iv. &

f) Function used to read a character from file:

   i. getch()

   ii. getche()

   iii. getc()

   iv. None of these

g) 1 KB = _____ bits.

   i. 8

   ii. 1024

   iii. 1000

   iv. 512

h) 2's complement of 10011 = _____

   i. 01100

   ii. 01101

   iii. 10100

   iv. 10101

i) If a = 25, b = 30, c = -16, then value of a = = c || b>a
is_____
      i. True
     ii. False
    iii. Error
    iv. None of these
j) In call by reference:
      i. Formal arguments are pointers
     ii. Actual arguments are pointers
    iii. Both are pointers
    iv. None of them are pointers

[B] State True or False of the following: 1 x 5 = 5

a) In C string is terminated by '/0'.
b) You can assign one structure variable to another, provided they are of same type.
c) C supports octal and hexadecimal numbers.
d) Same variable name cannot be used in two functions of same program.
e) Multiplication operations are possible on pointers variables.

Group – B

Answer any **five** questions of the following: 4x5=20

2. What do you mean by constants and variables in C?
3. Write a program to read temperature in ^{o}F and convert it into ^{o}c.
4. What is an Algorithm?
5. Explain various if structures in C.

6. Explain various storage classes in C.

7. What are functions?

8. What is Pointer? Explain with example.

9. Write a program to check whether a number is an Armstrong number or not.

10. Explain formatted input and output in 'C'.

Group – C

Answer any **five** questions of the following: 7x5=35

11. Explain different loop structs with examples.

12. Explain recursive function with suitable example. Discuss its benefits and limitations.

13. Write a program to multiply two matrices.

14. Discuss switch construct.

15. What is String? Explain various string handling functions with suitable example.

16. Write a short note on "Dynamic Memory Allocation".

17. Write a program in C to copy content of one file to another.

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