Semester: 3rd
Branch: Comp./Mechtronics
Subject Name: Programming in C

Time Allowed : 3 Hrs.   **MM:100**

Section –A

Note: Multiple Choice questions. All questions are compulsory.   **10x1=10**

Q1.   Who is the father of C language?
  a) Steve Jobs   b) James Gosling
  c) Dennis Ritchie   d) Rasmus Lerdorf

Q2.   Which of the following is not a valid C variable name?
  a) int number;   b) float rate;
  c) int variable_count;   d) int $main;

Q3.   All keywords in C are in _____
  a) LowerCase letters   b) UpperCase letters
  c) CamelCase letters   d) None of the mentioned

Q4.   In which year C was developed?
  a) 1972   b) 1981
  c) 1992   d) 1995

Q5.   What is an example of iteration in C?
  a) for   b) while
  c) do-while   d) all of the mentioned

Q6.   Functions in C Language are always ___
  a) Internal   b) External
  c) Both Internal and External   d) External and Internal are not valid terms for functions

Q7.   The standard header ___ is used for variable list arguments (…) in C.
  a) <stdio.h >   b) <stdlib.h>
  c) <math.h>   d) <stdarg.h>

Q8.   What will be the final value of x in the following C code?
  #include <stdio.h>
  void main()
  { int x = 5 * 9 / 3 + 9; }
  a) 3.75   b) Depends on compiler
  c) 24   d) 3

9.   User defined data type can be derived by
  a) Struct   b) Enum
  c)   typedef   d) All of the above

10.   goto can be used to jump from main() to within a function.
  a) True   b) False
  c) Depends   d) Varies

Section-B

Note: Objective type questions. All questions are compulsory.   **10x1=10**

Q11   Array of character is called_____
Q12   Name any five escape sequences.
Q13   Scanf() is user defined function. (True/False)
Q14   A single dimensional array has _____ number of subscript.
Q15   Which keyword is used to declare union in C ?
Q16   What do you mean by reserved word?

Q17   What is initialization of a variable?

Q18   Define global variable.

Q19   What is nested loop?

Q20   What is the subscript of the first element of array?

Section –C

Note: Short answer type Questions. Attempt any twelve questions out of fifteen questions.   12x5=60

Q21   Define Flowchart. Explain various symbols used in flowchart.

Q22   How to create a structure?

Q23   Write down the difference between actual parameters and formal parameters.

Q24   Write any five benefits of using pointer.

Q25   List any five characteristics of C.

Q26   What is single dimensional array? How it is declared and initialized?

Q27   Explain increment and decrement operators.

Q28   What is function prototype? Write down its syntax.

Q29   Define recursion. Write a program for finding factorial of a number using recursion.

Q30   Difference between break & continue statement.

Q31   Write a program to add two matrices.

Q32   Differentiate between while and do while loops.

Q33   Differentiate between call by value and call by reference.

Q34   Write note on Program debugging.

Q35   How to initialize structure members?

Section-D

Note: Long answer questions. Attempt any two questions out of three questions.
2x10=20

Q36   Differentiate for loop, while loop and do while loop by giving examples.

Q37   What is pointer? How it is declared and initialized? What are the benefits of pointer?

Q38   Explain the method of declaring structure and its variables.