3rd Sem / Comp. / Mechtronics
Subject:- Programming in C

Time : 3Hrs.   M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory   (10x1=10)

Q.1   A flowchart is a _____ representation of an algorithm using various symbols, shapes, and arrows to represent a process.
   a)   Visual   b)   Graphical
   c)   Both a and b   d)   None of the above

Q.2   The C-preprocessors are specified with_____ symbol.
   a)   #   b) $
   c)   ″ ″   d)   &

Q.3   Scanf() is predefined function in_____ header file.
   a)   <stdlib.h>   b)   <ctype.h>
   c)   <stdio.h>   d)   <stdarg.h>

Q.4   Which one of the following is a loop construct that will always be executed once?
   a)   for   b)   while
   c)   do-while   d)   switch

Q.5   The global variables are_____.
   a)   External   b)   Internal
   c)   Both External and Internal
   d)   None of the above

Q.6   What does a pointer variable store?
   a)   Value of the variable
   b)   Address of another variable
   c)   Both value and address
   d)   None of the above

Q.7   In a 'for' loop, what is the purpose of the third expression?
   a)   It initializes the loop
   b)   It checks the loop condition
   c)   It updates the loop control variable
   d)   It terminates the loop

Q.8   What is an array in C?
   a)   A collection of variables of different types
   b)   A collection of variables of the same type
   c)   A single variable
   d)   A pointer to a memory location

Q.9   What keyword is used to define a union in C?
   a)   Union   b)   define
   c)   typedef   d)   class

Q.10 What is the size of the 'int' data type in C?
   a)   Depends on the compiler
   b)   2 bytes
   c)   4 bytes
   d)   8 bytes

SECTION-B

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

Q.11 Define debugging.

Q.12 Name any two keywords used in C programming.

Q.13 Write syntax for data type casting in C.

Q.14 C was developed at _____ Laboratories.

Q.15 Name any two standard functions used in C.

Q.16 What is == operator in C?

Q.17 What is strcpy function?

Q.18 Define keywords in C?

Q.19 State difference between continue and break statement.

Q.20 How to add multiline comments in C programming.

SECTION-C

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

Q.21 How do flow charts contribute to the development process in C programming?

Q.22 Explain the significance of algorithm development in C programming.

Q.23 What is data type? Explain basic data types in C with examples.

Q.24 What are logical operators in C? Explain their use with examples.

Q.25 Define function in C.

Q.26 Explain formatted and unformatted statements in C.

Q.27 How do you declare a pointer variable in C?

Q.28 What is the difference between strcpy and strcmp?

Q.29 How do you pass arguments to a function in call by reference?

Q.30 How do you define a union in C?

Q.31 Write a program of addition and multiplication of two numbers in C.

Q.32 What are the benefits of using pointers?

Q.33 How to declare structure in C?

Q.34 Explain difference between while and do while loop.

Q.35 Define the use of break and continue statements in C.

SECTION-D

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

Q.36 Discuss the decision control statements in C and also write a program to find out whether the given number is even or odd.

Q.37 Explain the difference between a function declaration and a function definition with the help of an example.

Q.38 Explain the concept of operator precedence in C. Also, Explain the difference between the '= =' and '!=' operators in C.