Q.5 Which of the following is not an arithmetic operation?
a) x *= 65;
b) x /= 42;
c) x % = 2;
d) x ! = 56;

Q.6 Which symbol is used to declare a pointer?
a) *
b) #
c) &
d) &&

Q.7 Who is the father of C language?
a) Steve Jobs
b) James Gosling
c) Dennis Ritchie
d) Rasmus Lerdorf

Q.8 All keywords in C are in _____
a) LowerCase letters
b) UpperCase letters
c) CamelCase letters
d) None of the mentioned

Q.9 What will be the final value of x in the following C code?

```
1) #include <stdio.h>
2) void main()
3) {
4) int x = 5*9/3+9;
5) }
```

a) 3.75
b) Depends on compiler
c) 24
d) 3

Q.10 Maximum number of elements in the array declaration int a [5][8] is
a) 28
b) 32
c) 35
d) 40

SECTION-B

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

Q.11 What is a nested loop?

Q.12 What is the modulus operator?

Q.13 What is the difference between the = symbol and == symbol?

Q.14 Which of the following operators is incorrect (>=, <=, <>, ==)

Q.15 What is debugging?

Q.16 What does the || operator do in a program code?

Q.17 Define an array.

Q.18 In C programming, what command code can be used to determine if a number is odd or even?

Q.19 What does the function toupper() do?

Q.20 Give the syntax of "if statement" in C language.

SECTION-C

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

Q.21 Compare and contrast compilers from interpreters.

Q.22 Write a program to print N natural numbers.

Q.23 What is the difference between break and continue?

Q.24 Describe the order of precedence with regards to operators in C.

3rd Sem / Eltx., Mechatronics, Med. Eltx.
Subject:- Computer Programming using.
C / Comp. Prg. & App.

Time : 3Hrs.   M.M. : 100

SECTION-A

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

Q.1   Which one of the following is a loop construct that will always be executed once?

a) for   b) while
c) switch   d) do while

Q.2   Which is valid expression in c language?

a) int my_num = 100,000;
b) int my_num = 100000;
c) int my num = 1000;
d) int my num = 10000;

Q.3   Array is a _____ data structure.

a) Non-linear   b) Primary
c) Linear   d) Data type

Q.4   A global variable is declared _____.

a) Outside of the function
b) Inside of the function
c) With the function
d) Anywhere in the program

Q.25   What are multidimensional arrays? Explain with example.

Q.26   Define recursion. Explain with an example program.

Q.27   Give the difference between call by reference and call by value.

Q.28   What is the difference between for and while loop?

Q.29   Write short note on arithmetic operators.

Q.30   Explain various logical operators.

Q.31   What is a pointer? How is it declared in C?

Q.32   Give the syntax of switch statement with example.

Q.33   Define an algorithm. Write an algorithm to swap two numbers.

Q.34   Define an array. How is it declared in C.

Q.35   Write the advantages of using function.

SECTION-D

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

Q.36   Explain the steps involved in development of a program.

Q.37   What are loop constructs. Discuss various loop constructs used in C.

Q.38   Write a program to add two matrices.