M – 2024

Register Number : | | | | | | |

Subject Code : 41

COMPUTER SCIENCE

Time : 3 Hours 15 Minutes] [Total No. of questions : 47] [Max. Marks : 70

PART – A

Answer **all** the questions. **Each** question carries **one** mark. **(15×1=15)**

I. Select the correct answer from the choices given :

1) Which generation computers used microprocessors ?
   A) Second B) Third
   C) Fourth D) Fifth

2) The smallest unit that can be written or read from the disk
   A) Sector B) Track
   C) Cylinder D) Surface

3) How many bits make a nibble ?
   A) 32 B) 16
   C) 8 D) 4

4) Total number of digits present in any number system is called as
   A) Bits B) Power
   C) Base D) Mantissa

5) What error the following code may generate ?

```
void main ( )
{
    int r = 2, area;
    area = 2 * 3.142 * r * r;
}
```

   A) Syntax error B) Semantic error
   C) Run time error D) No error

P.T.O.

6) Graphical representation of an algorithm is
   A) Pseudo-code B) Flowchart
   C) Program D) Graph

7) '\0' is called as
   A) Null character B) Character constant
   C) End-of-file D) String constant

8) endl is same as
   A) \t B) \a
   C) \b D) \n

9) Which loop executes the statements atleast once ?
   A) while B) for
   C) do-while D) switch

10) Elements of two dimensional array are accessed using
   A) 1 index number B) 2 index numbers
   C) 3 index numbers D) More than 3 index numbers

11) The function prototype describes function interface to
   A) Compiler B) Interpreter
   C) Assembler D) Linker

12) Type of value a function returns to the operating system
   A) double B) float
   C) char D) int

13) Default font used in MS-Word
   A) Times New Roman B) Calibri
   C) Arial D) Lucida console

14) File extension for spreadsheet is
   A) .xlx B) .dox
   C) .pdf D) .xls

15) Intersection of row and column in spreadsheet is called as
   A) Table B) Cell
   C) Sheet D) Book

II. Fill in the blanks choosing appropriate word/words from those given in bracket. (local, global, cout, mantissa, size, flow of control) **(5×1=5)**

16) _____ specifies value of a number.

17) _____ stands for console output.

18) The orderly execution of statements in a program is called as _____

19) _____ defines number of elements that can be stored in an array.

20) _____ variable is declared outside the function.

PART – B

III. Answer **any four** questions. **Each** question carries **two** marks. **(4×2=8)**

21) List any two uses of super computers.

22) Mention different types of monitors.

23) Define the terms linker and loader.

24) Write the syntax and example for if-else statement.

25) What is module and modularity ?

26) What are modifiers ? List the types of modifiers.

27) Define function. Mention types of functions.

28) Write the shortcut keys to save and print a word document.

PART – C

IV. Answer **any four** questions. **Each** question carries **three** marks. **(4×3=12)**

29) Briefly explain types of keyboards.

30) Explain binary number system.

31) Write the tasks of process management component of operating system.

32) List the advantages of modular programming.

33) Explain any three relational operators of C++ with example.

34) Write a C++ program to interchange the values of two variables using third variable.

35) Explain types of arrays.

36) With syntax and example, explain how members of a structure are accessed.

PART – D

V. Answer **any four** questions. **Each** question carries **five** marks. **(4×5=20)**

37) Explain any five characteristics of computer.

38) Explain the characteristics of an algorithm.

39) Explain unary operators of C++ with example.

40) Write a C++ program to print all the even numbers from 1 to 10 using do-while loop.

41) Write a C++ program to find the sum of two compatible matrices.

42) Write the steps involved to create a formula to multiply numbers in cells.

43) Explain various statistical functions of spreadsheet.

44) Explain formatting tags of HTML with example.

PART – E

VI. Answer **any two** questions. **Each** question carries **five** marks. **(2×5=10)**

45) $FACE_{(16)}$ = ? $_{(8)}$ = ? $_{(10)}$.

46) Explain the concept of pass by reference with suitable program example.

47) Explain for loop with syntax and suitable example.