1901232

M – 2020

Register Number :

Subject Code : 41 (NS)

COMPUTER SCIENCE

Time : 3 Hours 15 Minutes] [Total No. of questions : 37] [Max. Marks : 70

PART – A

Answer **all** questions. Each question carries 1 mark. **(10 × 1 = 10)**

1) What is a port?

2) Which gate is called as inverter gate?

3) Define root node in a binary tree.

4) Mention the operator used to access member of a class.

5) How to declare a pointer?

6) What is meant by data mining?

7) Expand MIME.

8) Name any one type of UTP cable.

9) Give an example for web browser.

10) What is web scripting?

P.T.O.

PART – B

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

11) Prove that $xy + x\bar{y} = x$.

12) What is tautology and fallacy?

13) Define polymorphism. Give an example.

14) Explain any two features of parameterized constructor.

15) Differentiate between read( ) and write( ).

16) Mention the types of data independence.

17) Write the syntax and example for insert command in SQL.

18) Briefly explain Local Area Network.

PART – C

Answer **any five** questions. Each question carries **3** marks. **(5 × 3 = 15)**

19) Define cache memory. Mention the types of cache memory.

20) Write the logic diagram and truth table for NAND gate.

21) Explain applications of arrays.

22) What are the advantages of pointers?

23) Discuss any three file mode parameters in C++.

24) Explain any three symbols used in E-R diagram.

25) Mention any three advantages of E-commerce.

26) Explain any three HTML tags.

PART – D

Answer **any seven** questions. Each question carries **5** marks. **(7 × 5 = 35)**

27) Given Boolean function $F(A, B, C, D) = \Sigma(0, 1, 2, 3, 6, 10, 13, 14, 15)$ reduce it by using Karnaugh map.

28) Write an algorithm to search an element in an array using linear search method.

29) Explain different operations on linked list.

30) Give the differences between procedural programming and object oriented programming.

31) Write the general syntax for defining and declaring a class with programming example.

32) What is function overloading? Explain the needs for function overloading.

33) What is a constructor? Write the syntax and programming example for default constructor.

34) What are the advantages of inheritance in C++?

35) Explain the features of database system.

36) Explain the various group functions in SQL.

37) Give the measures for preventing virus.