Total number of printed pages : 3 *2020/XI/CSC*

2020

COMPUTER SCIENCE

Total marks : 70 Time : 3 hours

General instructions:

i) Approximately 15 minutes is allotted to read the question paper and revise the answers.

ii) The question paper consists of 32 questions. All questions are compulsory.

iii) Marks are indicated against each question.

iv) Internal choice is given in some questions.

N.B: Check that all pages of the question paper is complete as indicated on the top left side.

1.	What is the full form of EEPROM?	**1**
2.	What is the purpose of indentation in C++?	**1**
3.	What a microprocessor?	**1**
4.	What is meant by fragmentation?	**1**
5.	How is the statement terminated in C++?	**1**
6.	What is a hybrid computer?	**1**
7.	What is a single contiguous allocation?	**1**
8.	Define operating system.	**1**
9.	What is a modular programming?	**1**
10.	What is the use of $\therefore$ operator?	**1**
11.	State the difference between ‘x’ and “x” in C++.	**1**
12.	What is the purpose of *break* statement?	**1**
13.	Why is independent inspection better than dry run?	**2**
14.	What value is returned by the main() function?	**2**
15.	What is meant by prefix and postfix operator?	**2**
16.	Write down any two advantages of function prototype in C++.	**2**

17. What does the modulus operator % do? What will be the result of 7.2%2.1? **2**

18. What are console I/O functions? **2**

19. Define array. What is the purpose of subscript in an array? **2**

20. Give the statements to describe an algorithm. **2**

21. What is a structure? Declare a structure in C++ with name, roll number and total marks as component. **2**

22. What is the difference between return() and exit() statement? **2**

23. Explain the term "Analyze the problem". **2**

24. **a.** Define cache. Differentiate between L1 cache and L2 cache.

Or **4**

b. What are the different types of memory in a computer? Explain.

25. What is a flowchart? Draw a flowchart to find the compound interest of an amount for a certain period of time and rate of interest. **4**

26. Find the output of the following programs: **2+2=4**

i) void main()

```
{
  int x=5, y=5;
  cout << x++;
  cout<< "," ;
  cout << ++x;
  cout << ",";
  cout << y++ << "," << ++y;
}
```

ii) main()

```
{
  int r, x, y;
  x=50;
  y=10;
  r= (x>45)?x:y;
  cout<<r;
}
```

27. Explain the following string manipulation functions: **4**

i) strcpy(s1, s2)
ii) strcat(s1, s2)
iii) strcmp(s1, s2)
iv) strlen(s1)

28. Write a program in C++ using function to calculate the average of three input values and return the average using return statement. **4**

29. **a.** Write a program in C++ to find the maximum and minimum value in an array.

Or **4**

b. Write a program to input an array *num* with 10 different integer values and search a particular value and its position in array.

30. **a.** Describe the differences between one dimensional array and two dimensional array?

Or **4**

b. Give the proper array declaration for the following-

i) Declare an integer array which can hold 25 values.

ii) Declare one dimensional array of four characters called letters.

31. Explain the different types of functions which is used to change the case of a character with one example each. **4**

32. **a.** How is structure different from an array? Explain.

Or **4**

b. Define a macro. Write a program in C++ to demonstrate # define preprocessor directive.

****