This Question Paper consists of 39 questions and 8 printed pages.

Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   Code No. **68/ESS/1**

SET **C**

COMPUTER SCIENCE
(330)

Day and Date of Examination : _____

Signature of Invigilators :   1. _____

2. _____

General Instructions :

1.   Candidate must write his/her Roll Number on the first page of the Question Paper.

2.   Please check the Question Paper to verify that the total pages and total number of questions contained in the Question Paper are the same as those printed on the top of the first page. Also check to see that the questions are in sequential order.

3.   Making any identification mark in the Answer-Book or writing Roll Number anywhere other than the specified places will lead to disqualification of the candidate.

4.   Write your Question Paper code No. **68/ESS/1-C** on the Answer-Book.

COMPUTER SCIENCE
(330)

[Time : 3 Hours]   **[Maximum Marks : 60]**

Note :

(i) This question paper consists of **39** questions in all.

(ii) All questions are compulsory.

(iii) Marks are given against each question.

(iv) **Section - A consists of :**

(a) **Q.No. 01** to **12** Multiple Choice type questions (MCQ's) carrying **01** mark each. Select and write the most appropriate option out of the **four** options given in each of these questions.

(b) **Q.No. 13** to **24** carry **01** mark each and **Q.No. 25** to **27** - Objective type questions of **02** marks each (with **02** sub-parts of **01** mark each). Attempt these questions as per the instructions given for each of the questions **13 - 27**.

(v) **Section - B consists of :**

(a) **Q.No. 28** to **35** - Very Short questions carrying **02** marks each to be answered in the range of **30** to **50** words.

(b) **Q.No. 36** and **37** - Short Answer type questions carrying **03** marks each to be answered in the range of **50** to **80** words.

(c) **Q.No. 38** and **39** - Long Answer type questions carrying **04** marks each to be answered in the range of **80** to **120** words.

NOTE :

(1) Answers of **all** questions are to be given in the Answer-Book given to you.

(2) **15** minutes time has been allotted to read this question paper. The question paper will be distributed at 02.15 p.m. From 02.15 p.m. to 02.30 p.m., the students will read the question paper only and will not write any answer on the Answer-Book during this period.

SECTION - A

1. Which of the following is used to create Bulleted List in HTML ?   **1**
(A) <bl>   (B)   (C)   (D) <dl>

2. Which category of header files among the following has exp(x) function in C++ ?   **1**
(A) string   (B) mathematical   (C) character   (D) text

3. Which of the following is used for displaying the text "OCTOBER" in BOLD in HTML ?   **1**
(A) <bold> OCTOBER </bl>
(B) <bl> OCTOBER </underline>
(C) OCTOBER
(D) <bb> OCTOBER </bb>

4. Identify the closing tag for
 :   **1**
(A)   </br>   (B)   <br//>   (C)   no ending tag   (D)   <*br>

5. Find the output produced by the following program segment. Assume all header functions   **1**
are included.
void main()
{
int x = 88;
int *y = &x ;
cout << *y;
}
(A)   88   (B)   *88   (C)   &88   (D)   &x

6. Which of the following attribute is used to specify the width of border for an image in HTML ?   **1**
(A)   line   (B)   box   (C)   border   (D)   blackline

7. Which of the following is used to create line break in HTML ?   **1**
(A)   < break >   (B)   < br >   (C)   < line >   (D)   < linebreak >

8. Which of the following can be added in an Impress presentation ?   **1**
(A)   Text   (B)   Picture   (C)   Audio   (D)   All the above

9. Which of the following is supported by Word Processor ?   **1**
(A)   Creating data   (B)   Formatting data
(C)   Printing data   (D)   All the above

10. Which among the following is an example of spread sheet software ?   **1**
(A)   MS Word   (B)   Impress   (C)   Lotus 1-2-3   (D)   All the above

11. Identify the attribute of the < img > tag that is used to specify the URL of the image that helps   **1**
you to create a image in webpage.
(A)   source   (B)   url   (C)   src   (D)   path

12. What is the use of Ctrl + Q in presentation ?   **1**
(A)   Open a presentation   (B)   Close a presentation
(C)   Queue a presentation   (D)   Print a Presentation

13. What will be the output produced by the below given program if the value of the variable x   **1**
is 18 ?
#include <iostream.h>
int main()
{
int x;
int y;
cin >> x;
y = 3;
if (x/y < 12)
cout << "Good Morning";
else
cout << "Good Afternoon"; return 0;
}

14. The decimal equivalent of $(AAA)_{16}$ is _____.   **1**

15. Which tag is used to create a heading with the biggest size in a webpage ?   **1**

16. What is the header file for log10(x) ?   **1**

17. What is the ASCII value of 'B' ?   **1**

18. Expand ARPANET.   **1**

19. Consider the below given program, what output will be produced if the value for the variable   **1**
ch is entered as 'a' ?

```
#include <iostream.h>
void main()
{
char ch;
cin >> ch;
switch(ch)
  {
     case 'A' :
     cout << "A Grade";
     break;
     case 'B' :
     cout << "B Grade";
     break;
     case 'C' :
     cout << "C Grade";
     break;
     case 'D' :
     cout << "D Grade";
     break;
     default :
     cout << "NO Grade";
  }
}
```

20. What will be the output produced by the below given program ?   **1**

```
#include <iostream.h>
void main()
{
int i=0, s=0;
while ( i < 4 )
  {
     s= s+ i;
     i++;
  }
  cout << s; return 0;
}
```

21. What will be the output produced by the below given program ?   1
```
#include <iostream.h>
void main()
{
struct emp
{
int eno ;
float sal ;
};
struct emp E;
E.eno = 1234;
E.sal = 15643.5;
cout << E.eno << E.sal;
}
```

22. What is statement 1 in the below given program ?   1
Assume all header files are included.
```
#include <iostream.h>
void change(int); //Statement1
void main()
{
int a = 5;
cout <<"a = " << a << endl;
change(a);
cout <<"a = " << a;
}
void change(int b)
{
b = 10;
}
```

23. Give one example of Protocol used in communication.   1

24. The octal equivalent of $(343)_{10}$ is _____.   1

25. Give one word for the following :   2
    (i) Cell in Calc is _____.
    (ii) Individual page of a spreadsheet is known as _____.

26. Fill in the blanks :   2
    (a) Writing data on the data file requires _____ header file.
    (b) ios :: app opens the file in _____ mode.

27. State whether the following statements are True or False :   2
    (a) A pointer is a variable that refers to the location of another variable.
    (b) Object pointers are used to create objects during run time.

SECTION - B

28. What do you mean by digital transmission ?   **2**

                    OR

What do you mean by twisted pair cable ?

29. Define Key.   **2**

          OR

Define row.

30. Write SQL queries for the following based on the below given BUS table.   **2**

BUS			
BUS NO	**BUS NAME**	**YEAR**	**TYPE**
B001	NEERU	2024	VOLVO
B002	RAVANA	2022	SCANIA
B003	MAHAVEER	2019	VOLVO
B004	ROLI	2024	TATA
B005	VIKRAM	2019	BENZ

(a)   Delete the BUS NO B004

(b)   Display the details of 2024 buses

31. Name the ways by which cursor can be brought to the beginning and ending of a file in   **2**
writer Window ?

32. Expand HTML and also mention how do you write a html program ?   **2**

33. Define the following terms : (Any two)   **2**

(a)   Member Functions

(b)   Objects

(c)   :: operator

(d)   Inline Member Function

34. #include <iostream.h>   **2**
#include <string.h>
struct ITEM
{
char iname [20];
int price;
};
void main()
{
_____ // statement 1
_____ // statement 2
cout << s1.iname ;
cout << s2.price ;
}
Complete the above code for the following :
Statement 1 : Create two objects s1 and s2 of type ITEM.
Statement 2 : Input the value for the variable iname of the StructureVariable s1.

35. Write SQL queries to create the below given BUS table.   **2**

BUS		
BUS NO	VARCHAR(6)	PRIMARY KEY
BUS NAME	VARCHAR(15)	
YEAR	INT(4)	
TYPE	CHAR	

OR

Differentiate fixed length and variable length datatype.

36. Create a webpage using the following instructions :   **3**
   (a)   Heading 'Examination' on the center of the webpage with the font arial, size 3.
   (b)   The Paragraph "I feel My Exam has gone good" on towards the center of the webpage.
   (c)   An image to be set having the file name "NIOS2024.jpg" with a height of 15 and width of 10.

37. Define the following terms : (Any three)   **3**
   (i)   Relation
   (ii)   Schema
   (iii) Foreign key
   (iv)   Alternate key
   (v)   Attribute

38. Answer the questions from (i) to (iv) based on the below given program (assume all header **4**
files are included).

```
class Graduate {
        int Rollno;
        char GName[20];
        float Marks1;
protected:
        void Result();
public:
Graduate();
        void Enroll();
        void Display();
};
class Lecturer{
        long TCode;
        char TName[20];
Protected:
        float Salary;
public:
        Lecturer();
        void Enter();
        void Show();
};
class Learn: public Graduate, private Lecturer {
long CCode[10];
char LearnName[50];
char StartDate[8], EndDate[8];
public;
Learn();
void Commence();
void CDetail();
};
```

(i)   Write the names of member functions, which are accessible from objects of class Learn.
(ii)   Write the names of all the data members, which is/are accessible to member function
        Commence of class Learn.
(iii)   Write the names of all the members, which are accessible from objects of class Lecturer.
(iv)   Which type of Inheritance is illustrated in the above C++ code ?

OR

Define Virtual Base Class. Display the structure by taking an example or with syntax.

39. (i)   Write a program to create an array of N elements, accept a number from the user, **4**
        delete the accepted number from the array and print the new array.

OR

(ii)   Write a C++ program that accepts two numbers (a, b) from the user and passes to a
        function, the function will perform (a*a) + (b*b) to the main program which will display
        the output to the user.

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