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This Question Paper consist	s of 6 questions and 7 printed pages.	
Roll No.		Code No. 57/ESS/4
		SET A
• • •	computer science (330)	
Day and Date of Examinati	on	- <u></u>
Signature of Invigilators	1	-
	2	

General Instructions :

2 - 1

- 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. 57/ESS/4, Set-A on the Answer-Book.

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COMPUTER SCIENCE

(330)

Time : 3 Hours]

[Maximum Marks : 60

Not	e :	(i) Answer all questions.	
		(ii) Marks allotted to each question are given in the right-hand side.	
		(iii) Use C++ programming language to answer the programming question	ons.
	· <u>-</u>		
1	(a)	Differentiate between :	2×3=6
		(i) Line Printer and Thermal Printer	
		(ii) Ring and Bus Topology	
	· •	(iii) Peer to Peer and Client Server Architecture	
	(b)	Explain data processing cycle in brief.	2
	(c)	Give any two characteristics of natural languages with respect to	2
		computers.	
2	(a)	Name four basic mouse actions.	1
	(b)	Define Applets in Java.	1
	(0)	Denne Appiets in Java.	1
	(c)	Why is 'Dial-up connection known as Remote Modem Access' connection ?	1
	(d)	Why do we say that Java is a combination of interpreted and compiled language ?	2

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3	(a)	Name the header files to which the following built in $\frac{1}{2} \times 2 = 1$		
		functions belong :		
		(i) getchar()		
		(ii) exit()		
	(b)	Give any two benefits of modularity.		
	(c)	Name the object oriented concept with respect to the features $1 \times 2=2$		
		described below :		
		(i) Hiding the background details from the user		
		(ii) Hierarchical classification of classes		
	(d)	Which of the following are valid identifiers?		
		Keyboard, mouse1, CPU, 3monitors, #computers, while		
	(e)	Predict the output of the following code : 2		
		<pre>#include<iostream.h></iostream.h></pre>		
		void main()		
		{		
		int values[5]={100, 45, 50, 20, 90}		
		<pre>int m,j,k=2;</pre>		
		<pre>m=values[k-2];</pre>		
		k=values[3];		
		j=values[4]/40;		
		cout<<k<<"** "<<<="" b="">j<<"** "<<++m<<"**"<<values[< b="">j];</values[<></k<<"**>		
		}		
4	(a)	Differentiate between (Give examples to support your answer) $2 \times 2=4$		
		(i) implicit and explicit conversion.		
		(ii) dowhile and for loop		
	(b)	Which character do the following escape sequences correspond to : 1		
		\n, \a		
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2 Rewrite the program given below after removing the syntax errors. (c) (Underline all the changes made) #include<iostream.h> Void sum (char, float) void main() ः C C C C C int num=20;char var=m; <u>ل</u>ک sum (var, num); (JT <u>ि}</u>} cha x) int z=y++; cout<<y>>z; 0 0 5 (d) ^UWrite a menu driven program to display the following menu : (\mathcal{L}) (_⊓(i) Compare strings (ii) Append strings ⊂(iii) Reverse strings 「(iv) Exit Depending upon the option selected, the corresponding operation should be performed.

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3 Predict the output of the following code : (e) #include<iostream.h> int mixnmatch (int&a, int b=4) { b=a/b;a=a*b; () return b7 } void main()-{ int p=10, q=5; int r=mixnmatch(q); cout<<p<<"###" <<q<<"###"<<r<endl; r=mixnmatch(p,q); cout<<p><"###"</p> <<q<<"###"<<r<<endl; r=mixnmatch(p,6); cout<<p><<"###" <<q<<"###"<<r<<endl;</p> Assume an array NUMBERS of size 10 containing integers declared 3 (a) globally. Write a function that takes an integer pos as an argument and deletes the value present at pos. For example, if the elements in NUMBERS are 10, 20, 30, 40, 50, 60, 70, 80, 90, 100 and the value of pos (passed as an argument) is 5, then the element 50 should be deleted. 1 (b) Declare a two dimensional array having 3 rows and 5 columns. The array should be able to store decimal numbers. How much memory will be allocated to the array? Define a class Monitor in C++ with the following descriptions : 3 (c) Private members : of type string Class teacher of type integer M code of type integer Grade of type character Section of type string designation Public members : A constructor to assign initial values of M_code as 100, Class_teacher as "Guru", Designation as "Line_Monitor" grade as 12 and section as A. A function Enterdata() which allows the user to enter all the data members and then calls the Check(). A function ShowData() to display the contents of all the data members on the screen. Contd... 5 57/ESS/4-330-A]

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1×3=3

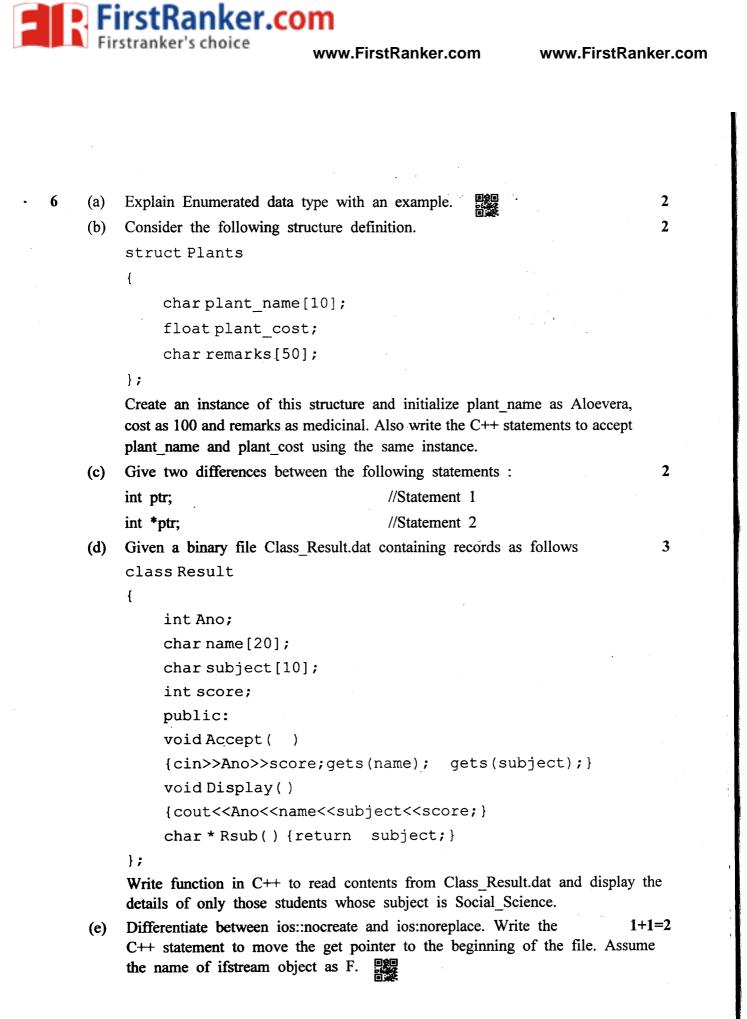
```
(d) Answer the questions i to iii based on the following code :
                                                          class
             Trends
     {
    char code[10];
    public:
         char category[4];
         void input();
         void output();
     };
     class
             Fabrics : public Trends
     {
                type[50];
         char
    protected
                  :
         float
                  fprice;
     public :
         void indata();
         void
               outdata();
     };
     class
             Training : protected
                                          Fabrics
     Ł
          long Tcode;
         protected:
          float price[5];
          intqty;
          public
                  :
              void enter();
              void show();
     };
     (i)
          Which type of inheritance is shown in the above example?
         Write the names of all the members accessible through an object of
     (ii)
          class Training.
     (iii) Name the data members accessible inside the function indata().
     Write a function to sort an array of integers in descending order
(e)
     using Selection sort.
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