

COMPUTER SCIENCE (Theory) - Class XII


Sample Question Paper-II

Subject Code - 083


TIME : 3 Hrs


MM : 70


No.	Questions	Marks
1.	<p>(a) What is the difference between Actual Parameter and Formal Parameters? Also, give a suitable C++ code to illustrate both</p> <p>(b) Write the names of the header files to which the following belong: (i) frexp() (ii) isalnum()</p> <p>(c) Rewrite the following program after removing the syntactical errors (if any). Underline each correction.</p> <pre>#include <iostream.h> struct Pixels { int Color,Style;} void ShowPoint(Pixels P) { cout<<P.Color,P.Style<<endl;} void main() { Pixels Point1=(5,3); ShowPoint(Point1); Pixels Point2=Point1; Color.Point1+=2; ShowPoint(Point2); }</pre> <p>(d) Find the output of the following program:</p> <pre>#include <iostream.h> void Changethecontent(int Arr[], int Count) { for (int C=1;C<Count;C++)</pre>	2 1 2 3


No.	Questions	 myCBSEguide.com <small>A Complete guide for CBSE students</small>	Marks
	<pre> Arr[C-1]+=Arr[C]; } void main() { int A[]={3,4,5},B[]={10,20,30,40},C[]={900,1200}; Changethecontent(A,3); Changethecontent(B,4); Changethecontent(C,2); for (int L=0;L<3;L++) cout<<A[L]<<'#'; cout<<endl; for (L=0;L<4;L++) cout<<B[L] <<'#'; cout<<endl; for (L=0;L<2;L++) cout<<C[L] <<'#'; } </pre> <p>(e) Find the output of the following program:</p> <pre> #include <iostream.h> struct Game { char Magic[20];int Score; }; void main() { Game M={"Tiger",500}; char *Choice; Choice=M.Magic; Choice[4]='P'; Choice[2]='L'; M.Score+=50; cout<<M.Magic<<M.Score<<endl; </pre>		2


No.	Questions	Marks
	<pre> Game N=M; N.Magic[0]='A';N.Magic[3]='J'; N.Score-=120; cout<<N.Magic<<N.Score<<endl; } </pre> <p>(f) In the following program, if the value of N given by the user is 20, what maximum and minimum values the program could possibly display?</p> <pre> #include <iostream.h> #include <stdlib.h> void main() { int N,Guessnum; randomize(); cin>>N; Guessnum=random(N-10)+10; cout<<Guessnum<<endl; } </pre>	2
2.	<p>(a) What do you understand by Polymorphism? Give a suitable example of the same.</p> <p>(b) Answer the questions (i) and (ii) after going through the following program:</p> <pre> class Match { int Time; public: Match() //Function 1 { Time=0; cout<<"Match commences"<<endl; } } </pre>	2

No.	Questions	 myCBSEguide.com <small>A Complete guide for CBSE students</small>	Marks						
	<pre> } void Details() //Function 2 { cout<<"Inter Section Basketball Match"<<end1; } Match(int Duration) //Function 3 { Time=Duration; cout<<"Another Match begins now"<<end1; } Match(Match &M) //Function 4 { Time=M.Duration; cout<<"Like Previous Match "<<end1; } }; </pre> <p>i) Which category of constructor - Function 4 belongs to and what is the purpose of using it?</p> <p>ii) Write statements that would call the member Functions 1 and 3</p> <p>(c) Define a class in C++ with following description:</p> <p>Private Members</p> <ul style="list-style-type: none"> • A data member Flight number of type integer • A data member Destination of type string • A data member Distance of type float • A data member Fuel of type float • A member function CALFUEL() to calculate the value of Fuel as per the following criteria <table data-bbox="311 1854 826 2011"> <tr> <td>Distance</td> <td>Fuel</td> </tr> <tr> <td><=1000</td> <td>500</td> </tr> <tr> <td>more than 1000 and <=2000</td> <td>1100</td> </tr> </table>	Distance	Fuel	<=1000	500	more than 1000 and <=2000	1100		4
Distance	Fuel								
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more than 1000 and <=2000	1100								

No.	Questions	 myCBSEguide.com <small>A Complete guide for CBSE students</small>	Marks
	<pre>char Voucher_No[10]; char Sales_Date[8]; public: SHOP(); void Sales_Entry(); void Sales_Detail(); };</pre>		
(i)	Write the names of data members which are accessible from objects belonging to class CUSTOMER.		
(ii)	Write the names of all the member functions which are accessible from objects belonging to class SALESMAN.		
(iii)	Write the names of all the members which are accessible from member functions of class SHOP.		
(iv)	How many bytes will be required by an object belonging to class SHOP?		
3.			
(a)	Write a function in C++ to combine the contents of two equi-sized arrays A and B by adding their corresponding elements as the formula $A[i]+B[i]$; where value i varies from 0 to $N-1$ and transfer the resultant content in the third same sized array C.		3
(b)	An array $P[20][30]$ is stored in the memory along the column with each of the element occupying 4 bytes, find out the Base Address of the array, if an element $P[2][20]$ is stored at the memory location 5000.		3
(c)	Write a function in C++ to perform Push operation on a dynamically allocated Stack containing real numbers.		4
(d)	Write a function in C++ to find sum of rows from a two dimensional array.		2
(e)	Evaluate the following postfix notation of expression: True, False, AND, True, True, NOT, OR, AND		2
4.			
(a)	Observe the program segment given below carefully and fill the blanks marked as Statement 1 and Statement 2 using seekg() and tellg() functions for performing the required task. <pre>#include <fstream.h> class Employee</pre>		1

No.	Questions	 myCBSEguide.com <small>A Complete guide for CBSE students</small>	Marks
	<pre> { int Eno;char Ename[20]; public: //Function to count the total number of records int Countrec(); }; int Item::Countrec() { fstream File; File.open("EMP.DAT",ios::binary ios::in); _____ //Statement 1 int Bytes = _____ //Statement 2 int Count = Bytes / sizeof(Item); File.close(); return Count; } </pre>	<ul style="list-style-type: none"> - To take the file pointer to the end of file. - To return total number of bytes from the beginning of file to the file pointer. 	
(b)	<p>Write a function in C++ to count the number of alphabets present in a text file "NOTES.TXT".</p>		2
(c)	<p>Write a function in C++ to add new objects at the bottom of a binary file "STUDENT.DAT", assuming the binary file is containing the objects of the following class.</p>		3
	<pre> class STUD { int Rno; char Name[20]; public: void Enter(){cin>>Rno;gets(Name);} void Display(){cout<<Rno<<Name<<endl;} }; </pre>		

No.	Questions	 myCBSEguide.com <small>A Complete guide for CBSE students</small>	Marks																																																		
5.	<p>(a) What do you understand by Primary Key & Candidate Keys?</p> <p>Consider the following tables GAMES and PLAYER and answer (b) and (c) parts of this question:</p> <p>Table: GAMES</p> <table border="1" data-bbox="209 577 1385 949"> <thead> <tr> <th>GCode</th> <th>GameName</th> <th>Type</th> <th>Number</th> <th>Prize Money</th> <th>Schedule Date</th> </tr> </thead> <tbody> <tr> <td>101</td> <td>Carom Board</td> <td>Indoor</td> <td>2</td> <td>5000</td> <td>23-Jan-2004</td> </tr> <tr> <td>102</td> <td>Badminton</td> <td>Outdoor</td> <td>2</td> <td>12000</td> <td>12-Dec-2003</td> </tr> <tr> <td>103</td> <td>Table Tennis</td> <td>Indoor</td> <td>4</td> <td>8000</td> <td>14-Feb-2004</td> </tr> <tr> <td>105</td> <td>Chess</td> <td>Indoor</td> <td>2</td> <td>9000</td> <td>01-Jan-2004</td> </tr> <tr> <td>108</td> <td>Lawn Tennis</td> <td>Outdoor</td> <td>4</td> <td>25000</td> <td>19-Mar-2004</td> </tr> </tbody> </table> <p>Table: PLAYER</p> <table border="1" data-bbox="209 949 1385 1308"> <thead> <tr> <th>PCode</th> <th>Name</th> <th>Gcode</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Nabi Ahmad</td> <td>101</td> </tr> <tr> <td>2</td> <td>Ravi Sahai</td> <td>108</td> </tr> <tr> <td>3</td> <td>Jatin</td> <td>101</td> </tr> <tr> <td>4</td> <td>Nazneen</td> <td>103</td> </tr> </tbody> </table>	GCode	GameName	Type	Number	Prize Money	Schedule Date	101	Carom Board	Indoor	2	5000	23-Jan-2004	102	Badminton	Outdoor	2	12000	12-Dec-2003	103	Table Tennis	Indoor	4	8000	14-Feb-2004	105	Chess	Indoor	2	9000	01-Jan-2004	108	Lawn Tennis	Outdoor	4	25000	19-Mar-2004	PCode	Name	Gcode	1	Nabi Ahmad	101	2	Ravi Sahai	108	3	Jatin	101	4	Nazneen	103	2
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	<p>(b) Write SQL commands for the flowing statements:</p> <p>(i) To display the name of all GAMES with their GCodes</p> <p>(ii) To display details of those GAMES which are having PrizeMoney more than 7000.</p> <p>(iii) To display the content of the GAMES table in ascending order of Schedule Date.</p> <p>(iv) To display sum of PrizeMoney for each Type of GAMES</p>	4																																																			
	<p>(c) Give the output of the following SQL queries:</p> <p>(i) SELECT COUNT(DISTINCT Number) FROM GAMES;</p> <p>(ii) SELECT MAX(ScheduleDate),MIN(ScheduleDate) FROM GAMES;</p> <p>(ii) SELECT Name, GameName FROM GAMES G, PLAYER P WHERE G.Gcode=P.Gcode AND G.PrizeMoney>10000;</p>	2																																																			

No.	<div style="text-align: right;">  myCBSEguide.com <small>A Complete guide for CBSE students</small> </div> Questions	Marks																				
	<p>Center to center distances between various buildings is as follows:</p> <table border="1" data-bbox="209 416 1385 763"> <tr> <td>Harsh Building to Raj Building</td> <td>50 m</td> </tr> <tr> <td>Raz Building to Fazz Building</td> <td>60 m</td> </tr> <tr> <td>Fazz Building to Jazz Building</td> <td>25 m</td> </tr> <tr> <td>Jazz Building to Harsh Building</td> <td>170 m</td> </tr> <tr> <td>Harsh Building to Fazz Building</td> <td>125 m</td> </tr> <tr> <td>Raj Building to Jazz Building</td> <td>90 m</td> </tr> </table> <p>Number of Computers in each of the buildings is follows:</p> <table border="1" data-bbox="209 831 1385 1070"> <tr> <td>Harsh Building</td> <td>15</td> </tr> <tr> <td>Raj Building</td> <td>150</td> </tr> <tr> <td>Fazz Building</td> <td>15</td> </tr> <tr> <td>Jazz Bulding</td> <td>25</td> </tr> </table>	Harsh Building to Raj Building	50 m	Raz Building to Fazz Building	60 m	Fazz Building to Jazz Building	25 m	Jazz Building to Harsh Building	170 m	Harsh Building to Fazz Building	125 m	Raj Building to Jazz Building	90 m	Harsh Building	15	Raj Building	150	Fazz Building	15	Jazz Bulding	25	
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e1)	Suggest a cable layout of connections between the buildings.																					
e2)	Suggest the most suitable place (i.e. building) to house the server of this organisation with a suitable reason.																					
e3)	Suggest the placement of the following devices with justification:																					
(i)	Internet Connecting Device/Modem																					
(ii)	Switch																					
e4)	The organisation is planning to link its sale counter situated in various parts of the same city, which type of network out of LAN, MAN or WAN will be formed? Justify your answer.																					
f)	Compare freeware and Shareware.	1																				
g)	How Trojan Horses are different from Worms? Mention any one difference.	1																				

COMPUTER SCIENCE (Theory) - Class XII


Marking Scheme

Sample Question Paper-II

Subject Code - 083

TIME : 3 Hrs

MM : 100

No.	Answers	Marks	
1.	 <small>A Complete guide for CBSE students</small>		
(a)			Actual Parameter
	It is a parameter, which is used in function call to send the value from calling environment	It is a parameter, which is used in function header, to receive the value from actual parameter	
	<pre>#include <iostream.h> void Calc(int T) //T is formal parameter { cout<<5*T; } void main() { int A=45; Calc(A);//A is actual parameter }</pre>		
	<p>(1 Mark for two differences)</p> <p>(1 Mark for the suitable example)</p> <p style="text-align: center;">OR</p> <p>(Full 2 Mark for explanation of differences with the help of an example)</p>		
(b)	(i) math.h (ii) ctype.h		1
	(½ Mark for mentioning each correct header filename)		

No.	Answers	Marks
(c)	<pre> #include <iostream.h> struct Pixels { int Color,Style;}; void ShowPoint(Pixels P) { cout<<P.Color<<P.Style<<endl;} void main() { Pixels Point1={5,3}; ShowPoint(Point1); Pixels Point2=Point1; Point1.Color+=2; ShowPoint(Point2); } </pre> <p><i>(½ Mark for each correction)</i></p>	2
(d)	<pre> 7#9#5# 30#50#70#40# 2100#1200# </pre> <p><i>(1 Mark for each line of output)</i></p>	3
(e)	<pre> TiLeP550 AiLJP430 </pre> <p><i>(1 Mark for each line of output)</i></p>	2
(f)	<p>Maximum Value: 19 Minimum Value: 10</p> <p><i>(2 Marks for correct values)</i></p>	2

No.	Answers	Marks
2.		
(a)	<p>Polymorphism: It is a method of using the same operator or function (method) to work using different set of inputs. Function overloading is one of the examples of polymorphism, where more than one function carrying same name behave differently with different set of parameters passed to them.</p> <pre> void Display() { cout<<"Hello!"<<endl; } void Display(int N) { cout<<2*N+5<<endl; } </pre> <p><i>(1 Mark each for appropriate definition)</i> <i>(1 Mark for appropriate example)</i></p>	2
(b)	<p>i) Copy constructor, It will help to copy the data from one object to another. <i>(½ Mark for mentioning copy constructor)</i> <i>(½ Mark for remaining answer)</i></p> <p>ii) Match M; //Function 1 Match N(10); //Function 3</p> <p><i>(½ Mark for each statement)</i></p>	2
(c)	<pre> class FLIGHT { int Fno; char Destination[20]; float Distance, Fuel; void CALFUEL(); public: </pre>	4

No.	Answers	Marks
	<pre> void FEEDINFO(); void SHOWINFO(); }; void FLIGHT::CALFUEL() { if (Distance<=1000) Fuel=500; else if (Distance<=2000) Fuel=1100; else Fuel=2200; } void FLIGHT::FEEDINFO() { cout<<"Flight No :";cin>>Fno; cout<<"Destination :";gets(Destination); cout<<"Distance :";cin>>Distance; CALFUEL(); } void FLIGHT::SHOWINFO() { cout<<"Flight No :"<<Fno<<endl; cout<<"Destination :"<<Destination<<endl; cout<<"Distance :"<<Distance<<endl;; cout<<"Fuel :"<<Fuel<<endl;; } </pre> <p><i>(½ Mark for correct syntax for class header)</i></p> <p><i>(½ Mark for correct declarations of data members)</i></p>	

No.	Answers	Marks
(d)	<p>(1 Mark for appropriate definition of function CALFUEL())</p> <p>(1 Mark for appropriate definition of FEEDINFO() with a call for CALFUEL())</p> <p>(1 Mark for appropriate definition of SHOWINFO())</p>	4
	<p>(i) None of data members are accessible from objects belonging to class AUTHOR. (1 Mark for correct answer)</p>	
	<p>(ii) Enter(), Show() (1 Mark for correct answer)</p>	
	<p>(iii) Data members: Voucher_No, Sales_Date, Salary Member function: Sales_Entry(), Sales_Detail(), Enter(), Show(), Register(), Status() (1 Mark for correct answer)</p>	
3.	<p>(a) <pre>void AddNSave(int A[],int B[],int C[],int N) { for (int i=0;i<N;i++) C[i]=A[i]+B[i]; }</pre></p> <p>(1 Mark for correct Function Header with appropriate parameters)</p> <p>(1 Mark for appropriate loop)</p> <p>(1 Mark for correct expression for addition of corresponding elements)</p>	3
	<p>(b) Given, W=4 N=20 M=30 Loc(P[2][20])=5000</p>	3

No.	Answers	Marks
	<p>Column Major Formula:</p> <p>Loc(P[I][J]) = Base(P) + W*(N*J + I)</p> <p>Loc(P[2][20]) = Base(P) + 4*(20*20 + 2)</p> <p>Base(P) = 5000 - 4*(400 + 2)</p> <p>= 5000 - 1608</p> <p>= 3392</p> <p><i>(1 Mark for writing correct formula (for column major) OR substituting formula with correct values)</i></p> <p><i>(1 Mark for writing calculation step - at least one step)</i></p> <p><i>(1 Mark for correct address)</i></p> <p>(c) struct NODE</p> <pre> { float Data; NODE *Link; }; class STACK { NODE *Top; public: STACK(); void Push(); void Pop(); void Display(); ~STACK(); }; void STACK::Push() { NODE *Temp; Temp=new NODE; </pre>	3

No.	Answers	Marks
	<pre>cin>>Temp->Data; Temp->Link=Top; Top=Temp; }</pre> <p>(1 Mark for declaring Temp pointer) (1 Mark for creating a new node and assigning/entering appropriate values in it) (1 Mark for connecting link part of new node to top) (1 Mark for assigning Top as the new node i.e. Temp)</p>	
(d)	<pre>void MatAdd(int M[][4],int N,int M) { for (int R=0;R<N;R++) { int SumR=0; for (int C=0;C<M;C++) SumR+=M[C][R]; cout<<SumR<<endl; } }</pre> <p>(½ Mark for correct function header) (½ Mark for appropriate outer loop) (½ Mark for appropriate inner loop) (½ Mark for correctly initializing SumR and calculatin the sum)</p>	2
(e)	<p>(½ Mark for correctly evaluating each operator)</p> <p style="text-align: center;">OR</p>	2

No.

Answers



Marks

(1 Mark for correct answer)

Step 1: Push

True

Step 2: Push

False
True

Step 3: AND

Push

True

Pop
Op2=False

Pop
Op1=True
Op2=False

False

Step 4: Push

True
False

Step 5: Push

True
True
False

Step 6: NOT

True
False

Pop
Op2=True

False
True
False

Push

Step 7: OR

Push

True
False

Pop
Op2=False

False

Pop
Op1=True
Op2=False

True
False

Step 8: AND

Push

False

Pop
Op2=True


Pop
Op1=False
Op2=True

False

Step 9: Pop

Result
False

No.	Answers	Marks
4.	<p>(a) File.seekg(0,ios::end); //Statement 1 File.tellg(); //Statement 2 <i>(½ Mark for each correct Statement)</i></p>	1
	<p>(b) void CountAlphabet() { ifstream FIL("NOTES.TXT"); int CALPHA=0; char CH=FIL.get(); while (!FIL.eof()) { if (isalpha(CH)) CALPHA++; CH=FIL.get(); } cout<<"No. of Alphabets:"<<CALPHA<<endl; }</p> <p><i>(½ Mark for opening NOTES.TXT correctly)</i> <i>(½ Mark for initializing a counter variable as 0)</i> <i>(½ Mark for correctly reading a character from the file)</i> <i>(½ Mark for correctly incrementing the counter)</i></p>	2
	<p>(c) void Addnew() { fstream FIL; FIL.open("STUDENT.DAT",ios::binary ios::app); STUD S; char CH; do {</p>	3

No.	Answers	 myCBSEguide.com <small>A Complete guide for CBSE students</small>	Marks
	<pre>S.Enter(); FIL.write((char*)&S,sizeof(S)); cout<<"More(Y/N)?">>cin>>CH; } while(CH!='Y'); FIL.close(); }</pre> <p>(½ Mark for opening STUDENT.DAT correctly) (½ Mark for user input for the new object) (1 Mark for appropriate loop) (1 Mark for writing the record on to the binary file)</p>		
5.	<p>(a) An attribute or set attributes which are used to identify a tuple uniquely is known as Primary Key. If a table has more than one such attributes which identify a tuple uniquely than all such attributes are known as Candidate Keys.</p> <p>(1 Mark for each definition)</p>		2
	<p>(b) Write SQL commands for the flowing statements:</p> <p>(i) SELECT GameName,Gcode FROM GAMES; (1 Mark for correct query)</p> <p style="text-align: center;">OR</p> <p>(½ Mark for partially correct answer)</p> <p>(ii) SELECT * FROM Games WHERE Prizemoney>7000; (1 Mark for correct query)</p> <p style="text-align: center;">OR</p> <p>(½ Mark for partially correct answer)</p> <p>(iii) SELECT * FROM Games ORDER BY ScheduleDate; (1 Mark for correct query)</p>		4

No.	Answers	Marks
	<p style="text-align: center;">OR</p> <p style="text-align: center;"><i>(½ Mark for partially correct answer)</i></p> <p>(iv) SELECT SUM(Prizemoney),Type FROM Games GROUP BY Type; <i>(1 Mark for correct query)</i></p> <p style="text-align: center;">OR</p> <p style="text-align: center;"><i>(½ Mark for partially correct answer)</i></p>	
6.	<p>(c) (i) 2 <i>(½ Mark for correct output)</i></p> <p>(ii) 19-Mar-2004 12-Dec-2003 <i>(½ Mark for correct output)</i></p> <p>(iii) Ravi Sahai Lawn Tennis <i>(½ Mark for correct output)</i></p> <p>(iv) 3 <i>(½ Mark for correct output)</i></p> <p>(a) $X+X.Y = X$</p> <p>L.H.S $= X+X.Y$</p> <p>$= X.1+X.Y$</p> <p>$= X.(1+Y)$</p> <p>$= X.1$</p> <p>$= X$</p> <p>$= R.H.S$</p> <p>$X+X'.Y = X+Y$</p> <p>L.H.S. $= X+X'.Y$</p>	2

No.

Answers



Marks

$$\begin{aligned}
 &= (X+X').(X+Y) \\
 &= 1.(X+Y) \\
 &= X+Y \\
 &= \text{R.H.S}
 \end{aligned}$$

(1 Mark for stating any one of the Absorption Law)

(1 Mark for verifying the law)

(b)

F(U,V)=U'.V+U.V'

(2 Marks for the final expression)

OR

(1 Mark for any one of the correct terms out of U'.V or U.V')

2

(c)

F(P,Q,R) = P'.Q'R'+P'.Q'R+P'.Q.R+P.Q'.R

(1 Mark for the correct expression)

1

(d)

	U'V'	U'V	UV	UV'
W'Z'	0	4	1 12	8
W'Z	1	8	1 3	9
WZ	1 3	1 7	1 5	11
WZ'	2	6	1 14	10

F(U,V,W,Z)=UV+WZ+UZ

(½ Mark for placing all 1s at correct positions in K-Map)

(½ Mark for each grouping)

(1 Mark for writing final expression in reduced/minimal form)

Note: Deduct ½ mark if wrong variable names are used

3

No.

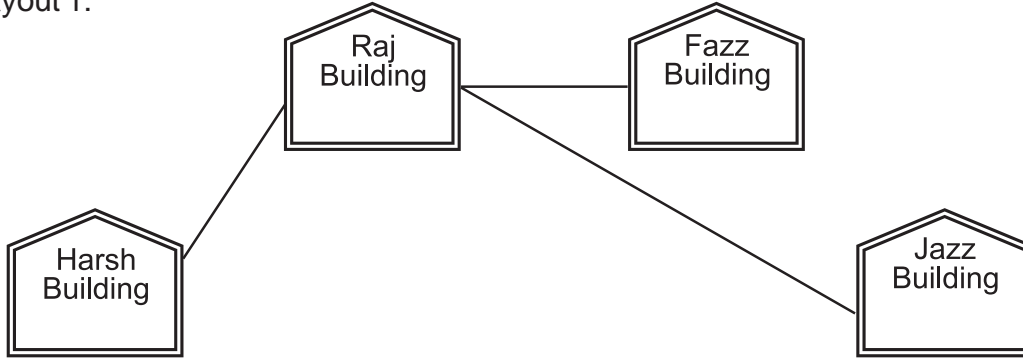
Answers

Marks

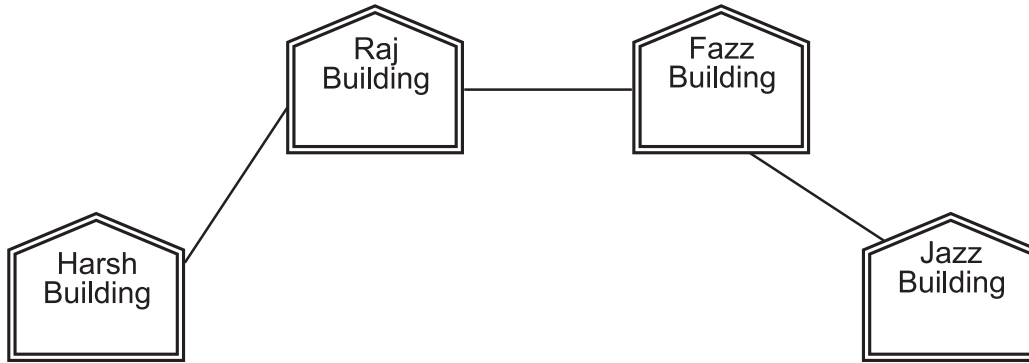
e) Suggest a cable layout of connections between the buildings.

4

Layout 1:



Layout 2: Since the distance between Fazz Building and Jazz Building is quite short



(1 Mark for any one of the two suggested layouts)

e2) The most suitable place / block to house the server of this organisation would be Raj Building, as this block contains the maximum number of computers, thus decreasing the cabling cost for most of the computers as well as increasing the efficiency of the maximum computers in the network.

(1 Mark for correct answer with suitable reason)

e3) (i) Raj Building
(ii) In both the layouts, a hub/switch each would be needed in all the buildings, to interconnect the group of cables from the different computers in each block

(½ Mark for each correct answer)

e4) The type of network that shall be formed to link the sale counters situated in various parts of the same city would be a MAN, because MAN (Metropolitan Area Networks) are the networks that link computer facilities within a city.

(1 Mark for correct answer with suitable justification)

No.	Answers	Marks
f)	<p>Freeware, the name derived from words "free" and "software". It is a computer software that is available for use at no cost or for an optional fee. Freeware is generally proprietary software available at zero price, and is not free software. The author usually restricts one or more rights to copy, distribute, and make derivative works of the software.</p> <p>Shareware is usually offered as a trial version with certain features only available after the license is purchased, or as a full version, but for a trial period. Once the trial period has passed the program may stop running until a license is purchased. Shareware is often offered without support, updates, or help menus, which only become available with the purchase of a license. The words "free trial" or "trial version" are indicative of shareware.</p> <p><i>(1 Mark for appropriate difference)</i></p>	1
g)	<p>A Trojan horse is a term used to describe malware that appears, to the user, to perform a desirable function but, in fact, facilitates unauthorized access to the user's computer system</p> <p>A computer worm is a self-replicating computer program. It uses a network to send copies of itself to other nodes (computers on the network) and it may do so without any user intervention.</p> <p><i>(1 Mark for appropriate difference)</i></p>	1