

Informatics Practices

Class XII

Question-wise & Year-wise Collection of Questions from CBSE's AISSEE Question Papers from 2011 to 2017.

Open
Teaching
&
Learning
Materials

Question Bank (2011-2017)



COMPILED BY:

Rajesh Kumar Mishra

PGT (Comp.Sc.)

Kendriya Vidyalaya Khanapara

Guwahati (Assam)

 rkmalld@gmail.com



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Year-wise
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CLASS XII- INFORMATICS PRACTICES (065)

CBSE QUESTION BANK (2011-17)

[Question-wise & Year-wise Collection of Questions from CBSE's AISCCE Question Paper (2011-2017)]

Compiled By: Rajesh Kumar Mishra, PGT(CS), KV Khanapara, Guwahati

QUESTION NO. 1 (10 MARKS)

Year - 2011		M
(a)	Ms. Kant Sengupta wants to prevent unauthorized access to/from his company's local area network. Write the name of a system (software/hardware), which he should install to do the same.	1
(b)	Seven Brother Fashion Inc. is a fashion company with design unit and market unit 130 meters away from each other. The company recently connected their LANs using Ethernet cable to share the stock related information. But, after joining their LANs, they are not able to share the information due to loss of signal in between. Which device out of the following should you suggest to be installed for a smooth communication? (i) Modem (ii) Repeater (iii) UPS	1
(c)	Which of the following is not a feature of Networking? (i) Resource sharing (ii) Reliability (iii) Uninterrupted power supply (iv) Reduced cost	1
(d)	Name any two Indian scripts included in Unicode.	1
(e)	Mr. Vidya Chauhan is confused between Proprietary and Open source software. Mention at least two points of differences to help her understand the same.	2
(f)	Identify the type of topology from the following: (i) In it, each node is connected with the help of a single co-axial cable. (ii) In it, each node is connected with the help of independent cable with the help of a central switching (communication controller).	2
(g)	Define the following with reference to Threats to network security. (i) Worm (ii) Trojan Horse	2
Year - 2012		M
(a)	Raj kamal International school is planning to connect all computers, each spread over distance within 45 meters. Suggest an economical cable type having high-speed data transfer, which can be used to connect these computers.	1
(b)	Name two Indian Script included in UNICODE.	1
(c)	Write examples of one Proprietary and one Open Source Software.	1
(d)	Name any two most popularly used internet browsers.	1
(e)	Ms. Rani Sen, General Manager of Global Nations Corporate recently discovered that the communication between her company's accounts office and HR office is extremely slow and signals drop quite frequently. These offices are 125 meters away from each other and connected by an Ethernet cable. (i) Suggest her a device, which can be installed in between the offices for smooth communication. (ii) What type of network is formed by having this kind of connectivity out of LAN,MAN and WAN?	2
(f)	Give an advantage of using Star topology over Bus topology. Show a network layout of star topology to connect 5 computers.	2

(g)	Give suitable example of URL and Domain name.	2
Year - 2013		M
(a)	Write the name of the most suitable wireless communication channels for each of the following situations. (i) Communication between two offices in different countries. (ii) To transfer the data from one mobile phone to another.	1
(b)	What is UNICODE? Name one Indian language, which is supported by UNICODE.	1
(c)	Expand the following terms: (i) FLOSS (ii) HTTP	1
(d)	Mr. Chandervardhan is not able to identify the Domain Name in the given URL. Identify and write it for him. http://www.cbse.nic.in/aboutus.htm	1
(e)	What do you understand by Network Security? Name two common threats to it.	2
(f)	Write one advantage of Star Topology over Bus Topology and one advantage of Bus Topology Over Star Topology.	2
(g)	What is MAC address? What is the difference between MAC address and an IP address?	2
Year – 2014		M
(a)	Why is a switch called an intelligent hub ?	1
(b)	What was the objective behind developing UNICODE?	1
(c)	Expand the following terms: (i) OSS (ii) ODF	1
(d)	What is the use of Repeater in a Network?	1
(e)	Identify the following device : (i) A device that is used to connect different types of network. It performs the necessary translation so that the connected network can communicate properly? (ii) A device that converts data from digital bit stream into an analog signal and vice versa.	2
(f)	Write one advantage and one disadvantage of using Optical fiber cable.	2
(g)	Distinguish between Open Source Software and Proprietary Software.	2
Year - 2015		M
(a)	A school with 20 stand-alone computers is considering networking them together and adding a server. State 2 advantages of doing this.	1
(b)	Distinguish between LAN and WAN.	1
(c)	What is the purpose of Modem in network?	1
(d)	Write one example of IP Address.	1
(e)	Define 'Domain Name Resolution'.	2
(f)	Name two threats to security in a network. What is the role of Firewall in Network security?	2
(g)	Write one advantages and one disadvantage of Open Source Software over Proprietary software.	2
Year - 2016		M
(a)	Vidya College has three departments that are to be connected into a network. Which of the following communication medium (out of the given options), should be used by the college for connecting their departments for very effective High Speed communication? • Coaxial Cable	2

	<ul style="list-style-type: none"> Optical Fiber Ethernet Cable <p>Also name the type of network (out of PAN/LAN/WAN) formed.</p>	
(b)	State reason why Star topology requires more cable length than Bus topology.	2
(c)	Seema needs a network device that should regenerate the signal over the same network before the signal becomes too weak or corrupted. Amit needs a network device to connect two different networks together that work upon different networking models so that the two networks can communicate properly. Name the devices that should be used by Seema and Amit.	2
(d)	How is a domain name related to an IP address?	2
(e)	How is firewall useful in ensuring network security?	2
Year - 2017		M
(a)	Identify odd one out of the following: Optical Fiber/Coaxial Cable/ Bluetooth/Twisted Pair Cable. Give reason for your answer.	2
(b)	How is it easier to diagnose fault in Star topology than in Bus topology?	2
(c)	What is the purpose of logical address of computer?	2
(d)	Does Open source software only mean that the software is free of cost? Give reason for your answer.	2
(e)	Which of the following are valid IP addresses? Give reason(s) if invalid. i) 121.23.1.45 ii) 192.168.0. 254 iii)192.168.0.1 iv) 198.-1.1.1	2

QUESTION No.2 (10 MARKS)

Year - 2011		M
(a)	While working in Netbeans, Ms. Khorana wants to display 'Pass' or 'Needs to Reappear' message depending the marks entered in jTextField. Help her to choose more appropriate statement out of 'If statement' and 'Switch statement'.	1
(b)	How one can make a Text Field un-editable on a Frame?	1
(c)	Which HTML tags are used for making a table and adding rows in a HTML document?	1
(d)	How is tag different from tag of HTML?	1
(e)	What will be the value of P and Q after execution of the following code: int P,Q=100; for(P=10;P<=12;P++) { Q+=P; } JOptionPane.showMessageDialog(this, "P:" + P + "Q:" + Q + "");	2
(f)	Differentiate between XML and HTML.	2
(g)	Write java code that takes the cost of a pencil from jTextField1 and number of pencil from jTextField2 and calculate total amount as cost*number to be displayed in jTextField3 and 20% service tax out of total amount in jTextField4.	2

Year - 2012			M
(a)	While making a Form in Netbeans, Mr. Harihar Jha wants to display a list of countries to allow the users to select their own country. Suggest him to choose most appropriate control out of ListBox and ComboBox.		1
(b)	What is the purpose of break keyword while using Switch Case Statement? Illustrate with the help of an example.		1
(c)	Write the name of HTML tag used to include numbered list in a HTML Web Page.		1
(d)	Write HTML code for the following: To provide hyperlink to a website :http://www.cbse.nic.in”		1
(e)	What will be the content of the jTextArea1 after executing the following code (Assuming that the jTextArea1 had no content before executing this code)? for(int c=1; c=4; c++) { jTextArea1.setText(jTextArea1.getText()+””+Integer.toString(c*c)); }		2
(f)	Which of the following units measures the speed with which data can be transmitted from one node to another node of a network? Also give the expansion of the suggested unit. (i) KMph (ii) KMpl (iii) Mbps		2
(g)	Write java code that takes value for a number (n) in jTextField1 and cube (n*n*n) of it to be displayed in jTextField2.		2
Year - 2013			M
(a)	Which property of palette ListBox is used to enter the list of items while working in NetBeans?		1
(b)	What is the difference between the use of JTeaxtField and JPasswordField in a form?		1
(c)	“The variable/expression in the switch statement should either evaluate to an integer value or String value.” State True or False.		1
(d)	Name two attributes of FONT tag of HTML.		1
(e)	How many times will the following loops execute? Which one of them is Entry Control and which one is Exit Control?		2
	<u>Loop 1</u> int i=10, sum=0; while (i>1) { sum+=i; i-=3; }	<u>Loop 2</u> int i=10, sum=0; do { sum+=i; i-=3; } while (i>1);	
(f)	What will be displayed in jTextField1 and jTextField2 after the execution of the following loop? int Sum=0,Last=10; for (int C=1; C<=Last; C+=2) Sum++; jTextField1.setText(Integer.toString(Sum)); jTextField2.setText(Integer.toString(C));		2
(g)	Differentiate between the <TR> and <TD> tags of HTML with the help of an appropriate example.		2

Year - 2014			M
(a)	Is a string containing a single character same as a character?		1
(b)	Write a statement in Java to declare a String type variable with a name City.		1
(c)	Distinguish between '/' and '%' operators.		1
(d)	Which tag/attributes of HTML are used to- (i) Insert a picture in a web page. (ii) Insert an empty line in the web page.		1
(e)	What will be the values of variable agg and agg1 after the execution of the following loops? <div> <div> Loop1 int a=9,agg=9; while (a>10) { agg+=a; a-=2; } </div> <div> Loop2 int a=9,agg=9; do { agg1+=b; b-=2; } while (b>10); </div> </div>		2
(f)	What will be displayed in JTextArea1 after the execution of the following loop? for (int i=5; i>=2; i--) JTextArea1.setText (JTextArea1.getText()+ " "+ Integer.toString (i*i));		2
(g)	Give two attributes of Table element of HTML.		2
Year - 2015			M
(a)	Write the value of variable 'c' after execution of the following code: int d; int c; d=7; c=(5*++d)%3;		1
(b)	What is the difference between JTextField and JPasswordField components?		1
(c)	In a SWITCH statement, what is the purpose of 'default' section?		1
(d)	After typing the HTML code using text editor, how do you see how it would look as a web page?		1
(e)	Write Java code to assign the value 500 to variable x. Increase the value of x by 50 and store it in variable y.		2
(f)	Write the output that will be generated by the code given below: int i; i=7; int r; r=8; While (i<=10) {System.out.println(r*i); i=i+2; }		2
(g)	"With XML there are no predefined tags"- explain in brief with the help of an example.		2
Year - 2016			M
(a)	Identify the odd one out of the following Java statements. State reason for your choice (i) for (ii) do while (iii) switch (iv) while		1

(b)	Write the purpose of parseInt() method.	1
(c)	Identify invalid variable names out of the following. State reason if invalid. (i) for (ii) –salary (iii) salary12 (iv) product	1
(d)	What is the difference between statements (i) and (ii) (i) t = 2; (ii) if (t == 2) d = 3;	1
(e)	Write HTML tags to do the following : (i) Inserting a horizontal line in a web page. (ii) Inserting a line break	2
(f)	What does 'XML' stand for? How is the purpose of HTML different from XML?	2
(g)	Rewrite the following code using if else if statement: switch (decode) { case 1 : allowance = 4000; break; case 2 : allowance = 3200; break; default : allowance = 1000; }	2
Year - 2017		M
(a)	Write the value that will be assigned to variable x after executing the following statement: x = 20 - 5 + 3 * 20 / 5;	1
(b)	Consider the statement: choice = 'Y'; What is the data type of variable choice? Write Java statement to declare the variable 'choice'.	1
(c)	While working in Netbeans IDE, Amit wants that the text in a Text area should move to the next line without breaking the word. Which properties would help him do that?	1
(d)	Write Java statement to: Append a string "ABC" to the text that is already in the text area named JTextArea1.	1
(e)	Write the output of the following HTML code. <ol start="4"> Bake the mixture in oven for an hour Remove from oven Allow the mixture to stand for ten minutes Serve	2

	</code>	
(f)	<p>Given below is a code.</p> <pre><message> <text>Hello, world!</text> </message></pre> <p>Which language is used to write the above code? What are <message>, </message>, <text> and </text>?</p>	2
(g)	<p>Rewrite the following code using if else if statement instead of switch :</p> <pre>switch (success) { case -1: x1 = "No result" ; break; case 0: x1 = "Final result- Not successful"; break; default: x1 = "result NOT known"; break; }</pre>	2

QUESTION No.3 (10 MARKS)

Year - 2011		M						
(a)	Write MySql command that will be used to open an already existing database "CONTACTS".	1						
(b)	<p>The Doc_name Column of a table Hospital is given below:</p> <table><tr><td>Doc_name</td></tr><tr><td>Avinash</td></tr><tr><td>Hariharan</td></tr><tr><td>Vinayak</td></tr><tr><td>Deepak</td></tr><tr><td>Sanjeev</td></tr></table> <p>Based on the information, find the output of the following queries:</p> <p>(i) Select doc_name from Hospital where doc_name like "%v";</p> <p>(ii) Select doc_name from Hospital where doc_name like ":%e%";</p>	Doc_name	Avinash	Hariharan	Vinayak	Deepak	Sanjeev	2
Doc_name								
Avinash								
Hariharan								
Vinayak								
Deepak								
Sanjeev								
(c)	A table "Transport" in a database has degree 3 and cardinality 8. What is the number of rows and columns in it?	2						
(d)	Differentiate between Alternate key and Candidate key.	1						
(e)	Define a class with reference to Object Oriented Programming.	1						
(f)	A employee_Id consisting of 5 digits is stored in a string variable strEmpld. Now Mr. Deb wants to store this Id in integer type of variable IntEmpld. Write a java statement to do this.	1						
(g)	<p>Sarthak, a student of class XII, created a table "Class". Grade is one of the columns of this table. To find the details of students whose Grades have not been entered, he wrote the following MySql query, which did not give the desired result.</p> <p>SELECT * FROM Class WHERE Grade="Null";</p> <p>Help Sarthak to run the query by removing the errors from the query and write the correct Query.</p>	2						
Year - 2012		M						
(a)	Write MySql command to open an existing database.	1						

(b)	Ms. Mirana wants to remove the entire content of a table "BACKUP" alongwith its structure to release the storage space. What MySql statement should she use?	1
(c)	Give one difference between ROLLBACK and COMMIT commands used in MySql.	1
(d)	A table STUDENT has 4 rows and 2 columns and another table TEACHER has 3 row and 4 columns. How many rows and columns will be there if we obtain the Cartesian product of these two tables?	1
(e)	Mr. Sanghi created two tables with CITY as Primary key in Table1 and Foreign Key in Table2. While inserting a row in Table2, Mr. Sanghi is not able to enter a value in the column CITY. What could be the possible reason for it?	2
(f)	Item code consisting of 5 digits is stored in an integer type variable intItemCode. Mr. Srikant wants to store this Item code in a String type variable called strItemCode. Write appropriate java statement(s) to help her in performing the same.	2
(g)	Mr. Janak is using a table with following columns: Name, Class, Course_Id, Course_name He needs to display names of students, who have not been assigned any stream or have been assigned Course_name that ends with "economics". He wrote the following command, which did not give the desired result. SELECT Name, Class FROM Students WHERE Course_name=NULL OR Course_name="%economics"; Help Mr.Janak to run the query by removing the error and write the correct query.	2
Year - 2013		M
(a)	Write a SQL command to view the constraints of EMP table.	1
(b)	Mr. Krishnaswami is working on a database and has doubt about the concept of SAVEPOINT in a transaction. Write down the meaning of SAVEPOINT and provide a simple example considering yourself as an online web support executive.	1
(c)	What is the difference between CURDATE () and DATE () functions?	1
(d)	Table STUDENT has 4 rows and 2 columns. Table MARKS has 2 rows and 3 columns. How will be the cardinality and degree of the Cartesian product of STUDENT and MARKS?	1
(e)	There is a column Salary in a Table EMPLOYEE. The following two statements are giving different outputs. What may be the possible reason? SELECT COUNT(*) FROM EMPLOYEE; SELECT COUNT(SALARY) FROM EMPLOYEE;	2
(f)	Mr. Kapoor is a programmer at Ekansh Enterprises. He created 5 digit password and stored in a string variable called strPassword. He wants to store the same password in an Integer type variable called intPassword. Write an appropriate Java statement to transfer the content from strPassword to intPassword.	2
(g)	Mrs. Kumar is using table STUDENTS with the following columns: RNO, ADMNO, NAME, AGGREGATE She wants to display all information of students in descending order of name and within ascending order of aggregate. She wrote the following SQL query and she did not get the desired output: SELECT * FROM STUDENTS ORDER BY NAME, AGGREGATE DESC;	2
Year - 2014		M
(a)	Distinguish between ALTER TABLE and UPDATE commands of MySQL.	1

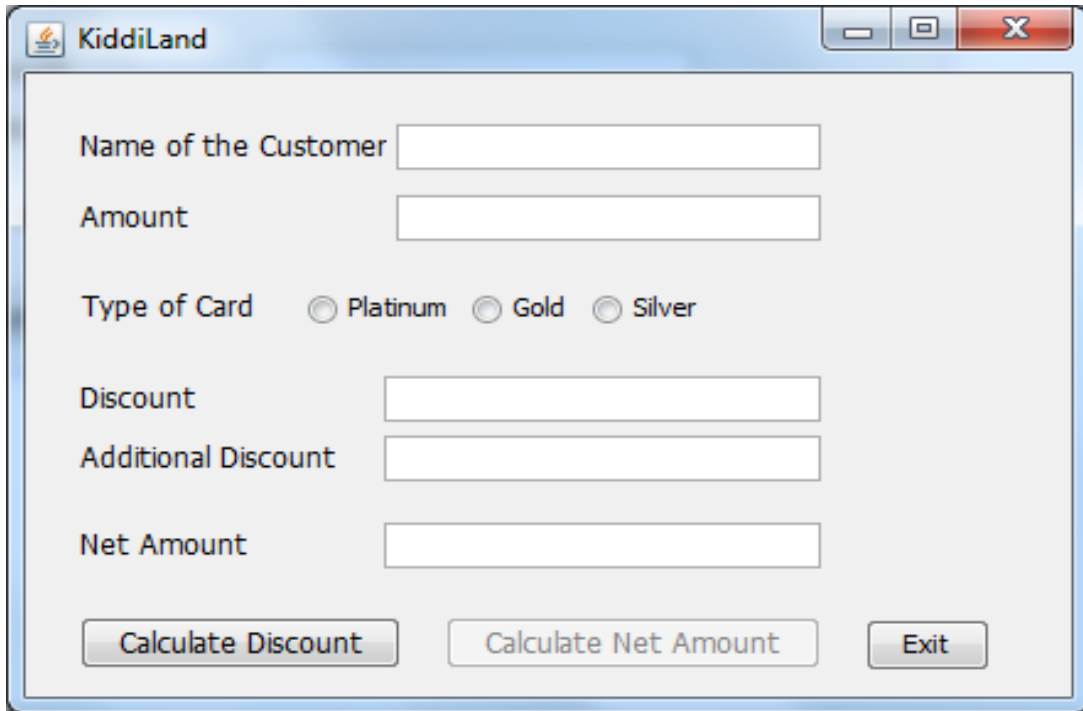
(b)	Mentioned two categories in which MySQL commands are broadly classified?	1
(c)	Give two characteristics of Primary key?	1
(d)	A table FUNFOOD has 13 rows and 17 columns. What is the cardinality and degree of this table?	1
(e)	A numeric column MONEY contains 34567.7896. Write a command to truncate MONEY. (i) Up to 2 decimal places. (i.e. expected result 34567.78) (ii) Up to -3 places (i.e expected result 34000)	2
(f)	What happens when ROLLBACK command is issued in a transaction process?	2
(g)	Shanya Khanna is using a table Employee. It has the following columns. Admno, Name, Agg, Stream [column Agg contains aggregate marks] Shewants to display highest Agg in each stream. She wrote the following statement: SELECT Stream, MAX(Agg) FROM Employee; But she did not get the desired result. Rewrite the above query with necessary changes to help her get the desired output.	2
Year - 2015		M
(a)	What is MySQL?	1
(b)	Is NULL value the same as 0 (zero)? Write the reason for your answer.	1
(c)	Write the UPDATE command to increase the commission (column name :COMM) by 500 of all the salesman who have achieved sales (Column name : SALES) more than 200000. The table's name is COMPANY.	1
(d)	While using SQL pattern matching, what is the difference between '_' (underscore) and '%' wildcard symbols?	1
(e)	How is primary key constraint different from Unique key constraints?	2
(f)	Write one similarity and one difference between CHAR and VARCHAR data types.	2
(g)	What is a Transaction? Which command is used to make changes done by a transaction permanent on a database?	2
Year - 2016		M
(a)	What is the meaning of 'Open source' in the term 'Open Source Database Management System'?	1
(b)	In a table 'Employee', a column 'Occupation' contains many duplicate values. Which keyword would you use if you wish to list only different values?	1
(c)	How is ALTER TABLE statement different from UPDATE statement?	1
(d)	Charvi wants to delete the records where the "FirstName" is "Rama" in the 'Emp' Table. She has entered the following SQL statement. An error is being displayed. Rewrite the correct statement. DELETE 'Rama' FirstName FROM Emp;	1
(e)	(i) Name 2 Group (Aggregate) functions of SQL.	1
	(ii) Consider the table:	1

	<table><tr><th colspan="2">Table: Company</th></tr><tr><th>CompanyCode</th><th>Donations</th></tr><tr><td>C101</td><td>13000</td></tr><tr><td>C102</td><td>NULL</td></tr><tr><td>C104</td><td>7000</td></tr><tr><td>C105</td><td>4000</td></tr></table> <p>What output will be displayed by the following SQL statement:</p> <p>SELECT AVG(Donations) FROM Company;</p>	Table: Company		CompanyCode	Donations	C101	13000	C102	NULL	C104	7000	C105	4000													
Table: Company																										
CompanyCode	Donations																									
C101	13000																									
C102	NULL																									
C104	7000																									
C105	4000																									
(f)	<p>Given below is the 'Emp' table:</p> <table><tr><th>ENO</th><th>NAME</th></tr><tr><td>1</td><td>Anita Khanna</td></tr><tr><td>2</td><td>Bishmeet Singh</td></tr></table> <p>SET AUTOCOMMIT = 0; INSERT INTO Emp VALUES(5,'Farzia'); COMMIT; UPDATE Emp SET NAME ='Farzziya' WHERE Eno= 5; SAVEPOINT A; INSERT INTO Emp VALUES(6,'Richard'); SAVEPOINT B; INSERT INTO Emp VALUES(7,'Rajyalakshmi'); SAVEPOINT C; ROLLBACK TO B;</p> <p>What will be the output of the following SQL query now:</p> <p>SELECT * FROM Emp;</p>	ENO	NAME	1	Anita Khanna	2	Bishmeet Singh	2																		
ENO	NAME																									
1	Anita Khanna																									
2	Bishmeet Singh																									
(g)	<p>Consider the table below.</p> <table><tr><th colspan="3">Table: Company</th></tr><tr><th>EMPID</th><th>DEPARTMENT</th><th>SALARY</th></tr><tr><td>E101</td><td>PERSONNEL</td><td>60000</td></tr><tr><td>E102</td><td>ACCOUNTS</td><td>65000</td></tr><tr><td>E103</td><td>MARKETING</td><td>40000</td></tr><tr><td>E104</td><td>PERSONNEL</td><td>62000</td></tr><tr><td>E105</td><td>PERSONNEL</td><td>50000</td></tr><tr><td>E106</td><td>MARKETING</td><td>35000</td></tr></table> <p>Identify error(s) in the following SQL statement. Rewrite the correct SQL statement.</p> <p>SELECT Department, Salary FROM Company GROUP BY Department;</p>	Table: Company			EMPID	DEPARTMENT	SALARY	E101	PERSONNEL	60000	E102	ACCOUNTS	65000	E103	MARKETING	40000	E104	PERSONNEL	62000	E105	PERSONNEL	50000	E106	MARKETING	35000	2
Table: Company																										
EMPID	DEPARTMENT	SALARY																								
E101	PERSONNEL	60000																								
E102	ACCOUNTS	65000																								
E103	MARKETING	40000																								
E104	PERSONNEL	62000																								
E105	PERSONNEL	50000																								
E106	MARKETING	35000																								
Year - 2017		M																								
(a)	How is a database related to a table ?	1																								
(b)	<p>Ariya wants to add another column 'Gender' in the already existing table 'CUSTOMERS'. She has written the following statement. However, it has errors. Rewrite the correct statement.</p> <p>MODIFY TABLE CUSTOMERS GENDER char(1);</p>	1																								
(c)	<p>In a hospital, the patients are allocated to wards. A database named 'Hospital' is created. One table in this database is: WARD with WardId, WardName, NumOfBeds as columns and WardId as the primary key.</p>	2																								

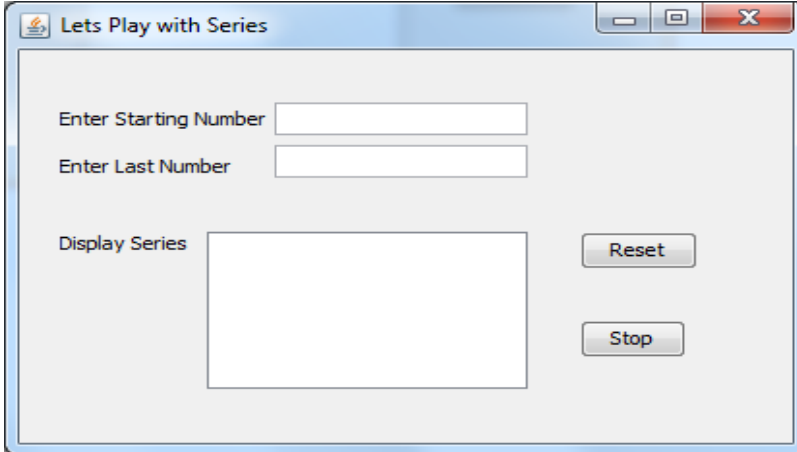
	Write another suitable table you could expect to see in the 'Hospital' database, with 3 suitable columns identifying Primary key and Foreign key in the table that you expect.									
(d)	Explain the following statement with the help of example: "In a transaction either all the SQL statements be committed or all rolled back."	2								
(e)	Given below is the 'Department' table: <table><tr><th>DEPCODE</th><th>DEPNAME</th></tr><tr><td>101</td><td>ADMIN</td></tr><tr><td>102</td><td>RECEPTION</td></tr><tr><td>103</td><td>PERSONNEL</td></tr></table> SET AUTOCOMMIT = 0; UPDATE DEPARTMENT SET DEPNAME = 'OFFICE' WHERE DEPNAME = 'ADMIN'; INSERT INTO DEPARTMENT VALUES (104, 'HRD'); UPDATE DEPARTMENT SET DEPNAME = 'FRONT OFFICE' WHERE DEPNAME = 'RECEPTION'; COMMIT; DELETE FROM DEPARTMENT WHERE DEPNAME = 'FRONT OFFICE'; ROLLBACK; SELECT * FROM DEPARTMENT; What will be the output of the above given SELECT statement?	DEPCODE	DEPNAME	101	ADMIN	102	RECEPTION	103	PERSONNEL	2
DEPCODE	DEPNAME									
101	ADMIN									
102	RECEPTION									
103	PERSONNEL									
(f)	How is HAVING clause similar to WHERE clause? How is HAVING clause different from WHERE clause? Explain with the help of examples of each.	2								

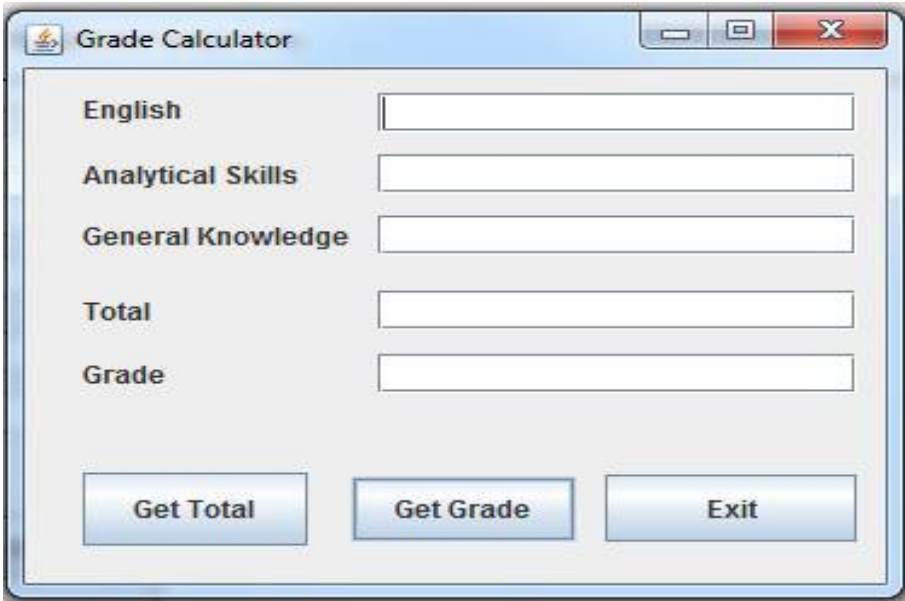
QUESTION NO. 4 (15 MARKS)

Year - 2011		M
(a)	<p>What will be displayed in of jTextField1 after executing the following code?</p> <pre>int m=16; m=m+1; if(m<15) jTextField1.setText(Integer.toString(m)); else jTextField1.setText(Integer.toString(m+15));</pre>	2
(b)	<p>Rewrite the following program code using a Switch statement.</p> <pre>if(code==1) Month="January"; else if(code==2) Month="February"; else if(code==3) Month="March"; else if(code==4) Month="April"; else</pre>	2


	Month="No Match";	
(c)	What will be displayed in JTextArea1 after executing the following statement: <code>JTextArea1.setText("cbse\n Final_Exam\t IP");</code>	1
(d)	The following code has some error(s). Rewrite the correct code underlining all the correction made: <pre> Int K=2; sum=0; //Declaring K and sum as Integer do { sum=K; K+=2; } while (K=<20) JTextField1(Integer.toString(sum)); </pre>	2
(e)	Given a string object namely 'subject', having value as "123" stored in it. What will be result of the following: <code>JOptionPane.showMessageDialog(null,""+(subject.length()+Integer.parseInt(subject)));</code>	1
(f)	The following code has some error(s). Rewrite the correct code underlining all the correction made: <pre> int Sum=0, Step=5; Int I; for(i=0, i=<5; i++) { Step += 5; Sum += Step; } JTextArea1.showText(""+Sum); </pre>	2
(g)	Mr. Radhey Shyam Bansal the owner of the Kiddi Land Enterprise has asked his programmer Ekta to develop the following GUI in Netbeans.  <p>Mr. Bansal accepts payment through three types of credit cards. The discount is given according to the following scheme:</p>	5

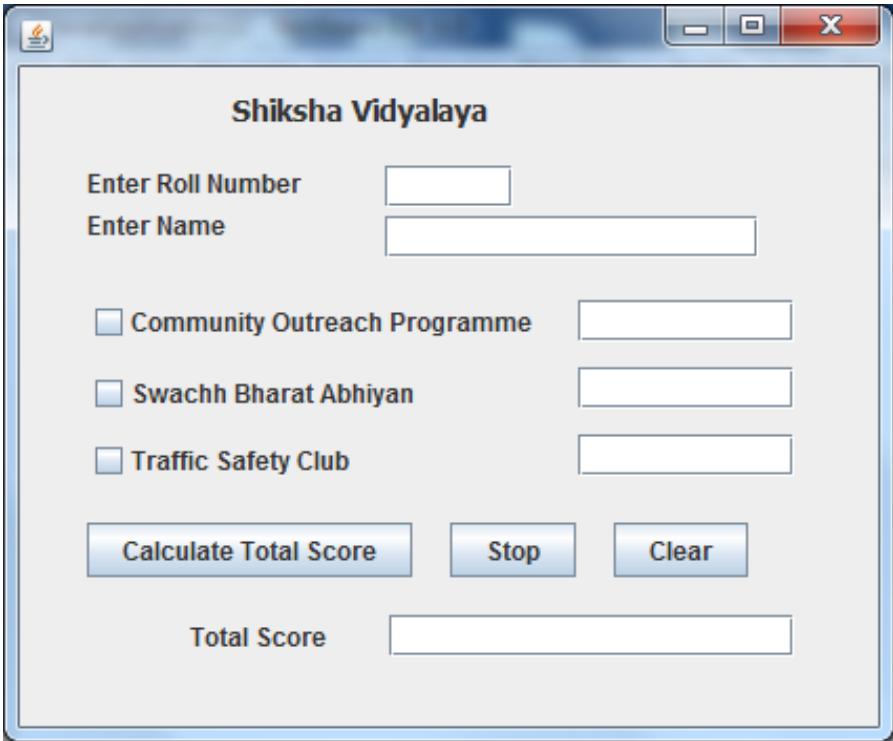
	<table><tr><th>Type of Card</th><th>Discount</th></tr><tr><td>Platinum</td><td>20% of Amount</td></tr><tr><td>Gold</td><td>15% of Amount</td></tr><tr><td>Silver</td><td>10% of Amount</td></tr></table> <p>If the bill amount is more than Rs. 25,000/- then the customer gets an additional offer of 5%. Write java code for the following:</p> <p>(i) To assign Additional Discount as 0 and Net amount as 0. Also set them as un-editable. (1)</p> <p>(ii) To calculate discount as per the given criteria and display the same in jTextField3 To assign Additional Discount (jTextField4) as 5% of amount (jTextField2) as per the above condition. Also enable “Calculate Net Amount” button, when ‘Calculate Discount’ button is clicked. (2)</p> <p>(iii) To calculate net amount as Bill Amount- (Discount+Additional Discount) and display the net amount in corresponding TextField, when “Calculate Net Amount” button is clicked. (2)</p>	Type of Card	Discount	Platinum	20% of Amount	Gold	15% of Amount	Silver	10% of Amount	
Type of Card	Discount									
Platinum	20% of Amount									
Gold	15% of Amount									
Silver	10% of Amount									
Year - 2012		M								
(a)	What message will be displayed after the execution of the following code? int Age=64, Relaxation=4; int ModiAge=Age – Relaxation; if (ModiAge<60) jOptionPane.showMessageDialog(Null,”NOT Eligible”); else jOptionPane.showMessageDialog(Null,”Eligible”);	2								
(b)	Rewrite the following program code using a If statement. int c = jComboBox1.getSelectedIndex() ; switch(c) { case 0 : Amount = Bill; break; case 1 : Amount=0.9*Bill; break; case 2 : Amount=0.8*Bill; break; default : Amount=Bill; }	2								
(c)	How many times does the following while loop get executed? int K=5; int L=36; while(K<=L) { K+=6; }	1								
(d)	What will be displayed in jTextField1 after executing the following statement? jTextArea1.setText(“GREAT\n COUNTRY\tINDIA”);	1								
(e)	What will be the values of variables ‘m’ and ‘n’ after the execution of the following code? int P,Q = 0; for(P=1; P<=4; P++) {	2								

	<pre>Q += P; Q --; }</pre>	
(f)	<p>Given a string object named Pay having value as "68000" stored in it. Obtain the output of the following:</p> <pre>JOptionPane.showMessageDialog(null, "+Salary.length()+Integer.parseInt(Salary));</pre>	2
g)	<p>Janav Raj is a programmer at Path Educo Enterprises. He created the following GUI in NetBeans. Help him to write code for the following:</p>  <p>(i) To display series of odd or even number (depending on Starting Number-jTextField1 is even or odd) in the JTextArea on the click of command button [Display The Series]. For example: If the Start Number is 5 and Last Number is 11 Text Area Content will be 5 7 9 11 If the Start Number is 2 and Last Number is 10 Text Area Content will be 2 4 6 8 10</p> <p>(ii) To clear both the text fields and text area, on clicking [Reset] button.</p> <p>(iii) To terminate the application on the click of [stop] button. (Assume suitable names for the various controls on the Form)</p>	
Year - 2013		M
(a)	<p>What will be the context of JTextArea1 and JTextField1 after the execution of the following statements?</p> <p>(i) JTextArea1.setText("Just\tAnother\nDay");</p> <p>(ii) string Subject="Informatics Practices"; JTextField1.setText((Subject.length()+10)+" ");</p>	2
(b)	<p>Rewrite the following program code using a if statement.</p> <pre>String Remarks; int Code=Integer.parseInt(JTextField1.getText()); switch(Code) { case 0 : Remarks="100% Tax Exemption"; break; case 1 : Remarks="50% Tax Exemption"; break;</pre>	2

	<pre> case 2 : Remarks="3% Tax Exemption"; break; default: Remarks="! Invalid Entry"; } </pre>	
(c)	<p>Observe the following code carefully and find which statement will never get executed in the code?</p> <pre> int t=1; //Statement 1 do //Statement 2 { //Statement 3 if (t>13) //Statement 4 jTextField1.setText("Something"); //Statement 5 else //Statement 6 jTextField1.setText("Pass"); //Statement 7 t+=3; //Statement 8 } //Statement 9 while (t<=15); //Statement 10 </pre>	1
(d)	Write a java statement to make the jTextField1 non-editable.	1
(e)	<p>What will be the displayed in jTextField1 and jTextField2 after the execution of the following code?</p> <pre> int Last,First=3,Second=5; Last=First + Second++; jTextField1.setText(Integer.toString(Last)); jTextField2.setText(Integer.toString(Second)); </pre>	2
(f)	<p>What will be the contents of Str1 and Str2 after the following code is executed?</p> <pre> String Str2,Str1; Str1="Dear Friend"; Str2="Hello"; Str1=Str2.concat(Str1); </pre>	2
(g)	<p>Aditya is a programmer at Edudel enterprises. He created the following GUI in NetBeans.</p>  <p>Help him to write code in java for the following:</p>	5

	<p>(i) To calculate Total marks obtained and display in jTextField4 on the click of command button "Get Total". (2)</p> <p>(ii) To calculate Grade obtained and display in jTextField5 on the click of command button "Get Grade". Criteria for Grade calculation is given below: (2)</p> <table><tr><th>Marks</th><th>Grade</th></tr><tr><td>Above 80</td><td>A</td></tr><tr><td>Above 65 and <=55</td><td>B</td></tr><tr><td>Above 50 and <=65</td><td>C</td></tr><tr><td><=50</td><td>D</td></tr></table> <p>(iii) To stop execution and exit from the application on the click of command button "Exit". (1)</p>	Marks	Grade	Above 80	A	Above 65 and <=55	B	Above 50 and <=65	C	<=50	D	
Marks	Grade											
Above 80	A											
Above 65 and <=55	B											
Above 50 and <=65	C											
<=50	D											
Year - 2014		M										
(a)	Define Object Oriented Programming.	2										
(b)	Rewrite the following Java code using switch case statement: Int option=Integer.parseInt (JTextField1.getText ()); If (option ==1) JTextField2.setText ("Regular Employee"); else if (option ==2) JTextField2.setText ("On Probation"); else if (option ==3) JTextField2.setText("Visiting Faculty "); else if (option == 4) JTextField2.setText ("On Contract "); else JTextField2.setText ("Invalid option");	2										
(c)	What will be the value of X1 after executing of the following code: String X1= "Spread" , X2= "PEACE"; X1= X2.concat (X1);	1										
(d)	Write Jave statement to make a jTextField1 disabled.	1										
(e)	What will be displayed in jTextArea1 after the execution of the following code: int G=1; do { jTextArea1.setText(Integer.toString(G++)); G=G+1; } While (G<=5);	2										
(f)	Give the output of the following Java code: String name= "Chennai Express"; int TM= name.length(), TN; TN= 80-TM; jTextField2.setText(Integer.toString(TM)); jTextField3.setText(Integer.toString(TN));	2										
(g)	Mr. Rangaswami works at a Recreation Park as a system analyst. He has created the	5										

	<p>following GUI.</p> <p>When a group arrives at the Recreation Park, the number of people in the group and whether the group wants to enjoy the Water Park or not is entered. Entry fee is Rs. 500 per person. The person can choose to play at Water park by selecting the checkbox. Rides of Water Park will cost Rs. 250 extra per person.</p> <div data-bbox="395 344 1206 851">  </div> <p>Help him to write code for the following:</p> <p>(i) On the click of 'Calculate' button, textfield for 'Entry Fees' should display Entry Fees per person x number of people. If 'Water Park' check box is selected, textfield for 'Water Park charges' should display Water Park Charges per Person x Number of People. textfield for 'total Amount' should display sum of Entry Fees and Water Park charges for all the people in the group. (3)</p> <p>(ii) Write java code to clear all Textboxes on the click of 'Clear' Button. (1)</p> <p>(iii) Write java Code to close the application on the click of 'Exit' Button. (1)</p>	
Year - 2015		
(a)	<p>The following code has some error(s). Rewrite the correct code underlining all the corrections made.</p> <pre>int marks, temperature; marks = jTextField1.getText(); temperature = Integer.parseInt(jTextField2.getText()); if (marks<80) and (temperature>=40) { System.out.println("Not Good"); } else; { System.out.println("OK"); }</pre>	M 2
(b)	<p>How many times will the following WHILE loop execute?</p> <pre>int y = 7, sum = 0; while (y<=15) { sum = sum +y; y=y+2; }</pre>	2

(c)	<p>Rewrite the following program code using IF ELSE IF instead of SWITCH statement:</p> <pre>String tour; int c1 = Integer.parseInt(jTextField1.getText()); switch (c1) { case 8 : tour = "\n You are going to camp Ramgarh"; break; case 9 : tour = "\n You are going to Manali, Rohtang Pass"; break; case 10: tour = "\n You are going to Chail"; break; default : tour = " No School tour for you this time"; }</pre>	2
(d)	<p>Write the values of sum and x after executing of the following code:</p> <pre>int sum , x; sum =7; x= 5; sum=sum+(x++);</pre>	2
(e)	<p>What will be the contents of jTextField1 and jTextField2 after executing the following code</p> <pre>String s= "Best"; jTextField1.setText(s.length()+ ""); jTextField2.setText(s.toUpperCase());</pre>	2
(f)	<p>The students of "Shiksha Vidyalaya" work for different extracurricular activities like 'community Outreach Program', 'Swachh Bharat Abhiyan' and 'Traffic Safety Club'. The Programmer at the school has developed a GUI application as shown below:</p>  <ul style="list-style-type: none"> • A student can participate in more than activities. • Each student gets 10 points for each activity- namely Community Outreach Programme, Swachh Bharat ABhiyan and Traffic Safety Club. 	5

	<p>Help the programmer to write code for the following: (3+1+1)</p> <p>(i) When 'Calculate Total Score' button is clicked, the points for each activity (that is selected) should be displayed in the text field in from of that activity's checkbox and the Total score should be displayed in the appropriate Text field.</p> <p>(ii) When Clear button is clicked, all the Textfields and Checkboxes should be cleared.</p> <p>(iii) When Stop button is clicked, the application should close.</p>	
Year - 2016		M
(a)	Identify programming languages out of the following: HTML,C++,JAVA, MySQL	1
(b)	Write Java statement to extract selected item from a given listbox named "jList1."	1
(c)	<p>What will be displayed in jTextField1 and jTextField2 after the following code is executed:</p> <pre>int t; int x; x = 12; t = (3*x++)/3; jTextField1.setText(""+t); jTextField2.setText(""+x);</pre>	1
(d)	<p>Write the output that will be displayed in the textfields by the following Java code:</p> <pre>String x; String stream="Commerce"; jTextField1.setText((stream.length()+9)+""); x = stream.concat("Humanities"); jTextField2.setText(x); jTextField3.setText(" "+ x.substring(2,5)); jTextField4.setText(stream.toLowerCase());</pre>	2
(e)	<p>Write the value that will be stored in variable sum after execution of following code:</p> <pre>int sum = 0, m=4; for(int i=9; i >= 6; i--) { if(i%3==0) sum = sum + i; else sum = sum - i; }</pre>	2
(f)	<p>The following code has error(s). Rewrite the correct code underlining all the corrections made :</p> <pre>int a = 0; int b = 15; do ; a= a+3; b = b-3; while a <= b ;</pre>	2
(g)	Ms. Sharma works as a programmer in "ABC Car Rental Company" where she has designed a software to compute charges to be paid by the client. A screenshot of the same is shown below:	6

ABC CAR RENTALS

NAME

PHONE NUMBER

☐ Deluxe Car
 ☐ GUIDE REQUIRED
☐ Semi Deluxe Car
☐ Ordinary Car

Car Required for No. of Days

Amount
 Guide Charges
 Total Amount

A client can take any car out of Deluxe/ SemiDeluxe/ Ordinary for rent.

A client can also opt for services of a guide. Charges vary depending on the type of car opted. Charges of services of Guide are extra.

Help Ms. Sharma in writing the code to do the following:

- (i) After selecting appropriate Radio Button and checkbox (if required), when 'CALCULATE' button is clicked, Amount, Guide Charges and Total Amount should be calculated and displayed in the respective text fields **(2)**

Category of Car	Amount(in Rs.)
Deluxe Car	1000 per day
Semi Deluxe Car	800 per day
Ordinary Car	700 per day

Amount is obtained by multiplying per day charges of Car with number of days for which the car is taken.

If 'Guide Required' checkbox is selected, Guide charges per day are Rs.500.00.

Guide Charges is calculated as : Car required for No. of days * 500;

Total Amount = Amount + Guide Charges **(2)**

- (ii) When 'CLEAR' button is clicked, all textfields and checkboxes should be cleared. **(1)**

- (iii) When 'CLOSE' button is clicked, the application should close. **(1)**

Year - 2017

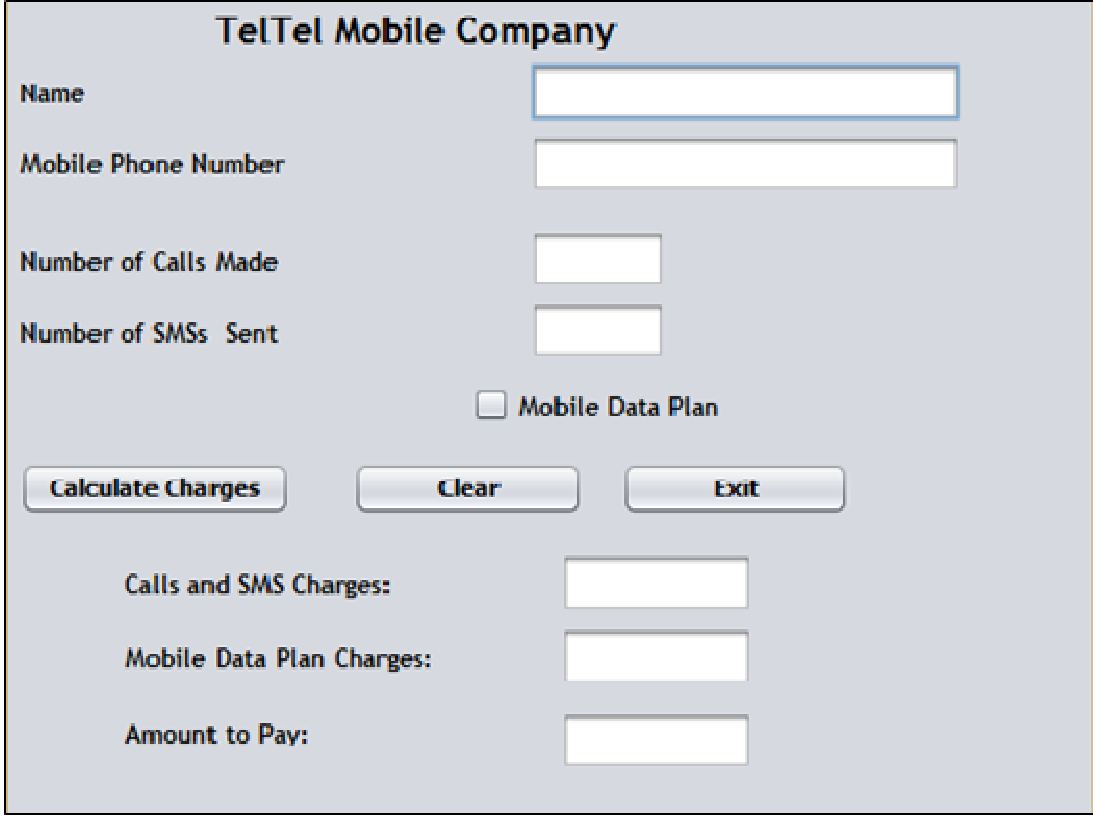
M

- (a)** Write the values of r and s after execution of following code:

```
int p = 11;
int q = 21;
int r; int s;
r = ++q;
s = p++;
r++;
```

1

(b)	<p>What will be displayed in jTextField1 and jTextField2 after the following code is executed:</p> <pre> int ndigits = 0; int N = 35; while (N > 12) { ndigits = ndigits + 1; N = N-10; } jTextField1.setText(""+ndigits); jTextField2.setText(""+N); </pre>	2
(c)	<p>Write the value of C after executing the following code:</p> <pre> int P; int R = 8; int oddNum; int C = 0; for (P = 1; P < R; P=P+3) { oddNum = P %2; if (oddNum == 1) { C= C+1; } } </pre>	2
(d)	<p>Write the value that will be stored in variable t after the execution of the following code . How many times will the loop execute?</p> <pre> int sum = 0; int score = 0; double t; do { score = score +1; sum = sum + score; } while (score <=3); t = sum / 3; </pre>	2
(e)	<p>The following code has error(s). Rewrite the correct code underlining all the corrections made :</p> <pre> int j; int i = 15; int flag = 1; while(j = 2 j < I ; j++) { if(i % j = 0) { flag == 0; break; } } </pre>	2

	}	
(f)	<p>Ms. Fauzia works as a programmer in “TelTel Mobile Company” where she has designed a software to compute charges to be paid by the mobile phone user. A screenshot of the same is shown below:</p>  <p>Each Call is charged at Rs.1.00 . Each SMS is charged at Rs. 0.50. Users can also opt for Mobile Data Plan. Charges for Mobile Data Plan are flat Rs.50.00. Help Ms. Fauzia in writing the code to do the following:</p> <p>(i) When the ‘Calculate Charges’ button is clicked, ‘Calls and SMS Charges’, ‘Mobile Data Plan Charges’ and ‘Amount to Pay’ should be calculated and displayed in the respective text fields. (4) ‘Amount to Pay’ is calculated as: Calls and SMS Charges + Mobile Data Plan Charges(if any)</p> <p>(ii) When ‘Clear’ button is clicked, all the textfields and checkbox should be cleared. (1)</p> <p>(iii) When the ‘Exit’ button is clicked, the application should close. (1)</p>	6

QUESTION NO. 5 (10 MARKS)

Year - 2011		M
(a)	What is the purpose of ALTER TABLE command in MySQL? How is it different from UPDATE command?	2
(b)	Table employee has 4 records and Table Dept has 3 records in it. Mr. Jain wants to display all information stored in both of these related tables. He forgot to specify equi-join condition in the query. How many rows will get displayed on execution of this query?	1
(c)	Consider the table EXAM given below. Write commands in MySQL for (i) to (iv) and output for (v) to (vii)	7
Table: EXAM		

	<table><tr><th>No</th><th>Name</th><th>Stipend</th><th>Subject</th><th>Average</th><th>Division</th></tr><tr><td>1</td><td>Karan</td><td>400</td><td>English</td><td>68</td><td>FIRST</td></tr><tr><td>2</td><td>Aman</td><td>680</td><td>Mathematics</td><td>72</td><td>FIRST</td></tr><tr><td>3</td><td>Javed</td><td>500</td><td>Accounts</td><td>67</td><td>FIRST</td></tr><tr><td>4</td><td>Bishakh</td><td>200</td><td>Informatics</td><td>55</td><td>SECOND</td></tr><tr><td>5</td><td>Sugandha</td><td>400</td><td>History</td><td>35</td><td>THIRD</td></tr><tr><td>6</td><td>Suparna</td><td>550</td><td>Geography</td><td>45</td><td>THIRD</td></tr></table> <p>(i) To list the names of those students, who have obtained Division as FIRST in the ascending order of NAME.</p> <p>(ii) To display a report listing NAME, SUBJECT and Annual stipend received assuming that the stipend column has monthly stipend.</p> <p>(iii) To count the number of students, who have either accounts or informatics as subject.</p> <p>(iv) To insert a new row in the table EXAM: 6,"Mohan",500,"English",73,"Second"</p> <p>(v) SELECT AVG(Stipend) FROM EXAM WHERE DIVISION="THIRD"</p> <p>(vi) SELECT COUNT(DISTINCT Subject) FROM EXAM;</p> <p>(vii) SELECT MIN(Average) FROM EXAM WHERE Subject="English";</p>	No	Name	Stipend	Subject	Average	Division	1	Karan	400	English	68	FIRST	2	Aman	680	Mathematics	72	FIRST	3	Javed	500	Accounts	67	FIRST	4	Bishakh	200	Informatics	55	SECOND	5	Sugandha	400	History	35	THIRD	6	Suparna	550	Geography	45	THIRD							
No	Name	Stipend	Subject	Average	Division																																													
1	Karan	400	English	68	FIRST																																													
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5	Sugandha	400	History	35	THIRD																																													
6	Suparna	550	Geography	45	THIRD																																													
Year - 2012			M																																															
(a)	What is the purpose of ORDER BY clause in MySql? How is it different from GROUP BY clause?	2																																																
(b)	Table SCHOOL has 4 rows and 5 columns. What is the Cardinality and Degree of this table?	1																																																
(c)	Consider the Table SHOPPE given below. Write command in MySql for (i) to (iv) and output for (v) to (vii) Table SHOPPE: <table><tr><th>Code</th><th>Item</th><th>Company</th><th>Qty</th><th>City</th><th>Price</th></tr><tr><td>102</td><td>Biscuit</td><td>Hide & Seek</td><td>100</td><td>Delhi</td><td>10.00</td></tr><tr><td>103</td><td>Jam</td><td>Kissan</td><td>110</td><td>Kolkata</td><td>25.00</td></tr><tr><td>101</td><td>Coffee</td><td>Nestle</td><td>200</td><td>Kolkata</td><td>55.00</td></tr><tr><td>106</td><td>Sauce</td><td>Maggi</td><td>56</td><td>Mumbai</td><td>55.00</td></tr><tr><td>107</td><td>Cake</td><td>Britannia</td><td>72</td><td>Delhi</td><td>10.00</td></tr><tr><td>104</td><td>Maggi</td><td>Nestle</td><td>150</td><td>Mumbai</td><td>10.00</td></tr><tr><td>105</td><td>Chocolate</td><td>Cadbury</td><td>170</td><td>Delhi</td><td>25.00</td></tr></table> <p>(i) To display names of the items whose name starts with 'C' in ascending order of Price.</p> <p>(ii) To display code, Item name and City of the products whose quantity is less than 100.</p> <p>(iii) To count distinct Company from the table.</p> <p>(iv) To insert a new row in the table Shoppe '110','Pizza','Papa Jones', 120, "Kolkata", 50.0</p> <p>(v) Select Item from Shoppe where Item IN ("Jam","Coffee");</p> <p>(vi) Select Count(distinct(City)) from Shoppe;</p> <p>(vii) Select MIN(Qty) from Shoppe where City="Mumbai";</p>	Code	Item	Company	Qty	City	Price	102	Biscuit	Hide & Seek	100	Delhi	10.00	103	Jam	Kissan	110	Kolkata	25.00	101	Coffee	Nestle	200	Kolkata	55.00	106	Sauce	Maggi	56	Mumbai	55.00	107	Cake	Britannia	72	Delhi	10.00	104	Maggi	Nestle	150	Mumbai	10.00	105	Chocolate	Cadbury	170	Delhi	25.00	7
Code	Item	Company	Qty	City	Price																																													
102	Biscuit	Hide & Seek	100	Delhi	10.00																																													
103	Jam	Kissan	110	Kolkata	25.00																																													
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104	Maggi	Nestle	150	Mumbai	10.00																																													
105	Chocolate	Cadbury	170	Delhi	25.00																																													
Year - 2013			M																																															
(a)	What is the use of COMMIT statement in SQL? How is it different from ROLLBACK statement?	2																																																
(b)	Mr. James created a table CLIENT with 2 rows and 4 columns. He added 2 more rows to it and deleted one column. What is the Cardinality and Degree of the Table CLIENT ?	1																																																

(c)	Consider the following table FITNESS with details about fitness products being sold in the store. Write command of SQL for (i) to (iv) and output for (v) to (vii).	7																														
Table: FITNESS																																
<table><tr><th>PCODE</th><th>PNAME</th><th>PRICE</th><th>MANUFACTURER</th></tr><tr><td>P1</td><td>Treadmill</td><td>21000</td><td>Coscore</td></tr><tr><td>P2</td><td>Bike</td><td>20000</td><td>Aone</td></tr><tr><td>P3</td><td>Cross Trainer</td><td>14000</td><td>Reliable</td></tr><tr><td>P4</td><td>Multi Gym</td><td>34000</td><td>Coscore</td></tr><tr><td>P5</td><td>Massage chair</td><td>5500</td><td>Regrosene</td></tr><tr><td>P6</td><td>Belly Vibrator Belt</td><td>6500</td><td>Ambaway</td></tr></table>				PCODE	PNAME	PRICE	MANUFACTURER	P1	Treadmill	21000	Coscore	P2	Bike	20000	Aone	P3	Cross Trainer	14000	Reliable	P4	Multi Gym	34000	Coscore	P5	Massage chair	5500	Regrosene	P6	Belly Vibrator Belt	6500	Ambaway	
PCODE	PNAME	PRICE	MANUFACTURER																													
P1	Treadmill	21000	Coscore																													
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P3	Cross Trainer	14000	Reliable																													
P4	Multi Gym	34000	Coscore																													
P5	Massage chair	5500	Regrosene																													
P6	Belly Vibrator Belt	6500	Ambaway																													
(i) To display the names of all the products with price more than 20000.																																
(ii) To display the names of all products by the manufacturer "Aone".																																
(iii) To change the price data of all the products by applying 25% discount reduction.																																
(iv) To add a new row for product with the details: "P7", "Vibro Exerciser", 28000, "Aone".																																
(v) SELECT * FROM FITNESS WHERE MANUFACTURER NAME LIKE "%e";																																
(vi) SELECT COUNT (DISTINCT (MANUFACTURER)) FROM FITNESS;																																
(vii) SELECT MAX (PRICE) FROM FITNESS;																																
Year - 2014		M																														
(a)	What is the difference between "%" and " _ " wild card character with reference to LIKE clause of MySQL?	2																														
(b)	Name a function of MySQL used to give the first occurrence of a string2 in string1.	1																														
(C)	Consider the following table names EXAM with details of marks. Write command of MySQL for (i) to (IV) and Output for (v) to (VII).	7																														
Table : EXAM																																
<table><tr><th>Adno</th><th>SName</th><th>Percentage</th><th>Clsection</th><th>Stream</th></tr><tr><td>R001</td><td>Sushant</td><td>90.2</td><td>12A</td><td>Science</td></tr><tr><td>R002</td><td>Vaidyanath</td><td>80.5</td><td>12B</td><td>Humanities</td></tr><tr><td>R003</td><td>Miara</td><td>68.9</td><td>12B</td><td>Science</td></tr><tr><td>R004</td><td>Niara</td><td>96.0</td><td>12A</td><td>Commerce</td></tr><tr><td>R005</td><td>Shinjini</td><td>88.9</td><td>12D</td><td>Commerce</td></tr></table>			Adno	SName	Percentage	Clsection	Stream	R001	Sushant	90.2	12A	Science	R002	Vaidyanath	80.5	12B	Humanities	R003	Miara	68.9	12B	Science	R004	Niara	96.0	12A	Commerce	R005	Shinjini	88.9	12D	Commerce
Adno	SName	Percentage	Clsection	Stream																												
R001	Sushant	90.2	12A	Science																												
R002	Vaidyanath	80.5	12B	Humanities																												
R003	Miara	68.9	12B	Science																												
R004	Niara	96.0	12A	Commerce																												
R005	Shinjini	88.9	12D	Commerce																												
(i) To display all information of the students of humanities in descending order of percentage.																																
(ii) To display Adno, Name, Percentage and Stream of those students whose name is less than 6 characters long.																																
(iii) To add another column BusFees with datatype and size as decimal (8,2).																																
(iv) To increase percentage by 2% of all the humanities students.																																
(v) SELECT COUNT(*) FROM EXAM;																																
(vi) SELECT Sname, Percentage FROM EXAM WHERE Name LIKE "N%";																																
(vii) SELECT ROUND(Percentage,0) FROM EXAM WHERE Adno="R005";																																

Year - 2015		M																																
(a)	Distinguish between Single Row and Aggregate functions of MySQL. Write one example of each.	2																																
(b)	<p>Consider the following table named “SOFTDRINK”. Write commands of SQL for (i) to (iv) and output for (v) to (vii).</p> <table><tr><th colspan="4">Table: SOFTDRINK</th></tr><tr><th>DRINKCODE</th><th>DNAME</th><th>PRICE</th><th>CALORIES</th></tr><tr><td>101</td><td>Lime and Lemon</td><td>20.00</td><td>120</td></tr><tr><td>102</td><td>Apple Drink</td><td>18.00</td><td>120</td></tr><tr><td>103</td><td>Nature Nectar</td><td>15.00</td><td>115</td></tr><tr><td>104</td><td>Green Mango</td><td>15.00</td><td>140</td></tr><tr><td>105</td><td>Aam Panna</td><td>20.00</td><td>135</td></tr><tr><td>106</td><td>Mango Juice Bahar</td><td>12.00</td><td>150</td></tr></table> <p>(i) To display names and drink codes of those drinks those have more than 120 calories. (ii) To display drink codes, names and calories of all drinks, in descending order of calories. (iii) To display names and price of drinks that have price in the range 12 to 18 (both 12 and 18 included) (iv) Increase the price of all drinks in the given table by 10%. (v) SELECT COUNT(DISTINCT(PRICE)) FROM SOFTDRINK; (vi) SELECT MAX (CALORIES) FROM SOFTDRINK; (vii) SELECT DNAME FROM SOFTDRINK WHERE DNAME LIKE “%Mango%”;</p>	Table: SOFTDRINK				DRINKCODE	DNAME	PRICE	CALORIES	101	Lime and Lemon	20.00	120	102	Apple Drink	18.00	120	103	Nature Nectar	15.00	115	104	Green Mango	15.00	140	105	Aam Panna	20.00	135	106	Mango Juice Bahar	12.00	150	7
Table: SOFTDRINK																																		
DRINKCODE	DNAME	PRICE	CALORIES																															
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102	Apple Drink	18.00	120																															
103	Nature Nectar	15.00	115																															
104	Green Mango	15.00	140																															
105	Aam Panna	20.00	135																															
106	Mango Juice Bahar	12.00	150																															
(c)	What is the degree and cardinality of ‘SOFTDRINK’ Table ?	1																																
Year - 2016		M																																
(a)	<p>Srishti has created the following table with the name ‘Veterinary’.</p> <table><tr><th>Column Name</th><th>Constraint</th></tr><tr><td>AnimalId</td><td>Primary Key</td></tr><tr><td>VaccinationsDate</td><td></td></tr><tr><td>AnimalName</td><td>Not Null</td></tr><tr><td>OwnerName</td><td></td></tr></table> <p>One of the rows inserted is as follows :</p> <table><tr><th>AnimalId</th><th>VaccinationDate</th><th>AnimalName</th><th>OwnerName</th></tr><tr><td>A101</td><td>2015-02-12</td><td>Sheru</td><td>Amit Sharma</td></tr></table> <p>(i) What are the data type of columns AnimalId and VaccinationDate in the table Veterinary ? (ii) Srishti is now trying to insert the following row</p> <table><tr><th>AnimalId</th><th>VaccinationDate</th><th>AnimalName</th><th>OwnerName</th></tr><tr><td>A102</td><td>2015-08-09</td><td>NULL</td><td>Abhimanyu Shah</td></tr></table> <p>Will she be able to successfully insert it? Give reason.</p>	Column Name	Constraint	AnimalId	Primary Key	VaccinationsDate		AnimalName	Not Null	OwnerName		AnimalId	VaccinationDate	AnimalName	OwnerName	A101	2015-02-12	Sheru	Amit Sharma	AnimalId	VaccinationDate	AnimalName	OwnerName	A102	2015-08-09	NULL	Abhimanyu Shah	2						
Column Name	Constraint																																	
AnimalId	Primary Key																																	
VaccinationsDate																																		
AnimalName	Not Null																																	
OwnerName																																		
AnimalId	VaccinationDate	AnimalName	OwnerName																															
A101	2015-02-12	Sheru	Amit Sharma																															
AnimalId	VaccinationDate	AnimalName	OwnerName																															
A102	2015-08-09	NULL	Abhimanyu Shah																															
(b)	<p>Write the output of the following query.</p> <p>(i) SELECTMID('LearningIsFun',2,4); (ii) SELECTROUND(76.384,2);</p>	2																																

	(iii) SELECT INSTR('INFORMATION FORM','RM');																															
	(iv) SELECT DAYOFYEAR('2015-01-30');																															
(c)	<p>Table “Order” is shown below. Write commands in SQL for (i) to (iv) and output for (v) and (vi)</p> <p style="text-align: center;">Table: Order</p> <table><tr><th>OrderId</th><th>OrderDate</th><th>SalesPerson</th><th>OrderAmount</th></tr><tr><td>O101</td><td>2015-09-12</td><td>Ravi Kumar</td><td>34000</td></tr><tr><td>O102</td><td>2015-08-15</td><td>Rashmi Arora</td><td>50000</td></tr><tr><td>O103</td><td>2015-11-01</td><td>Ravi Kumar</td><td>55000</td></tr><tr><td>O104</td><td>2015-12-09</td><td>Manjeet Singh</td><td>60000</td></tr><tr><td>O105</td><td>2015-11-10</td><td>Rashmi Arora</td><td>50000</td></tr></table> <p>(i) To display names of Salespersons (without duplicates).</p> <p>(ii) To list Orderid and respective Order amount in descending order of order amount.</p> <p>(iii) To count the number of orders booked by Salespersons with names starting with ‘R’</p> <p>(iv) To list Order ids, order dates and order amounts that were booked after 1st September 2015.</p> <p>(v) SELECT OrderId,OrderDate,OrderAmount FROM Order WHERE OrderDate >’2015-09-01’;</p> <p>(vi) SELECT OrderId, OrderAmount FROM Order where OrderAmount between 50000 and 60000;</p>	OrderId	OrderDate	SalesPerson	OrderAmount	O101	2015-09-12	Ravi Kumar	34000	O102	2015-08-15	Rashmi Arora	50000	O103	2015-11-01	Ravi Kumar	55000	O104	2015-12-09	Manjeet Singh	60000	O105	2015-11-10	Rashmi Arora	50000	6						
OrderId	OrderDate	SalesPerson	OrderAmount																													
O101	2015-09-12	Ravi Kumar	34000																													
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O104	2015-12-09	Manjeet Singh	60000																													
O105	2015-11-10	Rashmi Arora	50000																													
Year - 2017		M																														
(a)	<p>Consider the Table “Infant” shown below.</p> <p style="text-align: center;">Table: Infant</p> <table><tr><th>ItemCode</th><th>Item</th><th>DatePurchase</th><th>UnitPrice</th><th>Discount</th></tr><tr><td>101</td><td>Frock</td><td>2016-01-23</td><td>700</td><td>10</td></tr><tr><td>102</td><td>Cot</td><td>2015-09-23</td><td>5000</td><td>25</td></tr><tr><td>103</td><td>Soft Toy</td><td>2016-06-17</td><td>800</td><td>10</td></tr><tr><td>104</td><td>Baby Socks</td><td>2014-10-16</td><td>100</td><td>7</td></tr><tr><td>105</td><td>Baby Suit</td><td>2015-09-20</td><td>500</td><td>5</td></tr></table> <p>NOTE : Discount column stores discount %.</p> <p>Write the commands in SQL for (i) to (viii) and output for (ix) and (x)</p> <p>(i) To display the details about the Cot.</p> <p>(ii) To list the names of items and their unit price that have unit price less than 800 and discount more than 5%.</p> <p>(iii) To list the names of items and their date of purchase that were purchased after 31st December , 2015.</p> <p>(iv) To display the number of items that have more than 10% as discount</p> <p>(v) To display Item code and unit price in decreasing order of unit price.</p> <p>(vi) To increase the Unit price of each item by 10% of their unit price.</p> <p>(vii) To display the highest unit price of items.</p>	ItemCode	Item	DatePurchase	UnitPrice	Discount	101	Frock	2016-01-23	700	10	102	Cot	2015-09-23	5000	25	103	Soft Toy	2016-06-17	800	10	104	Baby Socks	2014-10-16	100	7	105	Baby Suit	2015-09-20	500	5	10
ItemCode	Item	DatePurchase	UnitPrice	Discount																												
101	Frock	2016-01-23	700	10																												
102	Cot	2015-09-23	5000	25																												
103	Soft Toy	2016-06-17	800	10																												
104	Baby Socks	2014-10-16	100	7																												
105	Baby Suit	2015-09-20	500	5																												

	<p>(viii) To display the names of items that have 'Baby' anywhere in their item names</p> <p>(ix) SELECT MID(Item,1,2) FROM Infant;</p> <p>(x) SELECT AVG(UnitPrice)FROM Infant WHERE DATEPURCHASE >'2015-01-01';</p> <p>NOTE : Discount column stores discount %.</p> <p>Write the commands in SQL for (i) to (viii) and output for (ix) and (x)</p>	
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QUESTION NO. 6 (10 MARKS)

Year - 2011		M																																												
(a)	<p>Write a MySql command for creating a table "BANK" whose structure is given below:</p> <p style="text-align: center;">Table : BANK</p> <table><tr><th>Field Name</th><th>Datatype</th><th>Size</th><th>Constraint</th></tr><tr><td>Acct_number</td><td>Integer</td><td>4</td><td>Primary Key</td></tr><tr><td>Name</td><td>Varchar</td><td>3</td><td></td></tr><tr><td>BirthDate</td><td>Date</td><td></td><td></td></tr><tr><td>Balance</td><td>Integer</td><td>8</td><td>Not Null</td></tr></table>	Field Name	Datatype	Size	Constraint	Acct_number	Integer	4	Primary Key	Name	Varchar	3		BirthDate	Date			Balance	Integer	8	Not Null	2																								
Field Name	Datatype	Size	Constraint																																											
Acct_number	Integer	4	Primary Key																																											
Name	Varchar	3																																												
BirthDate	Date																																													
Balance	Integer	8	Not Null																																											
(b)	<p>In a database there are two tables "ITEM" and "CUSTOMER" as shown below:</p> <p style="text-align: center;">Table : ITEM</p> <table><tr><th>ID</th><th>ItemName</th><th>Company</th><th>Price</th></tr><tr><td>1001</td><td>Moisturiser</td><td>XYZ</td><td>40</td></tr><tr><td>1002</td><td>Sanitizer</td><td>LAC</td><td>35</td></tr><tr><td>1003</td><td>Bath Soap</td><td>COP</td><td>25</td></tr><tr><td>1004</td><td>Shampoo</td><td>TAP</td><td>95</td></tr><tr><td>1005</td><td>Lens Solution</td><td>COP</td><td>350</td></tr></table> <p style="text-align: center;">Table : CUSTOMER</p> <table><tr><th>C_ID</th><th>CustomerName</th><th>City</th><th>ID</th></tr><tr><td>01</td><td>Samridhh Ltd</td><td>New Delhi</td><td>1002</td></tr><tr><td>05</td><td>Big Line Inc</td><td>Mumbai</td><td>1005</td></tr><tr><td>12</td><td>97.8</td><td>New Delhi</td><td>1001</td></tr><tr><td>15</td><td>Tom N Jerry</td><td>Bangalore</td><td>1003</td></tr></table> <p>Write the command in SQL queries for the following:</p> <p>(i) To display the details of Items whose Price is in the range of 40 and 95(Both values included)</p> <p>(ii) To display the CustomerName, City from table Customer and ItemName and Price from table Item, with their corresponding matching ID.</p> <p>(iii) To increase the price of all the products by 50.</p>	ID	ItemName	Company	Price	1001	Moisturiser	XYZ	40	1002	Sanitizer	LAC	35	1003	Bath Soap	COP	25	1004	Shampoo	TAP	95	1005	Lens Solution	COP	350	C_ID	CustomerName	City	ID	01	Samridhh Ltd	New Delhi	1002	05	Big Line Inc	Mumbai	1005	12	97.8	New Delhi	1001	15	Tom N Jerry	Bangalore	1003	5
ID	ItemName	Company	Price																																											
1001	Moisturiser	XYZ	40																																											
1002	Sanitizer	LAC	35																																											
1003	Bath Soap	COP	25																																											
1004	Shampoo	TAP	95																																											
1005	Lens Solution	COP	350																																											
C_ID	CustomerName	City	ID																																											
01	Samridhh Ltd	New Delhi	1002																																											
05	Big Line Inc	Mumbai	1005																																											
12	97.8	New Delhi	1001																																											
15	Tom N Jerry	Bangalore	1003																																											

2

(c) In a database School there are two tables Employee and Dept as show below.

Table : Employee

EmpId	Name	Sal	Deptno
T001	Vishakha	34000	10
T001	Mridul	32000	50
T001	Manish	45000	20

Table : Dept

Deptno	DName	LocationId
10	Lights	HH02
20	Dance	FF02
30	Production	AB01

- (i) Identify the foreign key in the table Employee.
- (ii) What output, will you get, when an equi-join query is executed to get the NAME from Employee Table and corresponding DNAME from Dept table?

Year - 2012

(a)

Write a MySql command to creat the Table STOCK including its Constraints.

Table STOCK:

Name of Column	Type	Size	Contrainst
Id	Decimal	4	Primary Key
Name	Varchar	20	
Company	Varchar	20	
Price	Decimal	8	Not Null

2

(b)

In a database there are two tables:

<u>ICode</u>	<u>Iname</u>	Price
101	Television	75000
202	Computer	42000
303	Refrigerator	90000
404	Washing Machine	27000

Table BRAND:

<u>ICode</u>	Brand
101	Sony
202	HP
303	LG
404	IFB

Write MySQL queries for the following:

- (i) To display ICode, IName and corresponding Brand of those Items, whose price is between 20000 and 45000 (both values inclusive).
- (ii) To display ICode, Price and BName of the item which has IName as "Television"?
- (iii) To increase the price of all the Items by 15%.

6

(c)	Given below is a Table Patient.	2																																																					
	<table><tr><td>Name</td><td>P_No</td><td>Date_Adm</td><td>Doc_No</td></tr><tr><td>Vimal Jain</td><td>P0001</td><td>2011-10-11</td><td>D201</td></tr><tr><td>Ishita Kohli</td><td>P0012</td><td>2011-10-11</td><td>D506</td></tr><tr><td>Vijay Verma</td><td>P1002</td><td>2011-10-17</td><td>D201</td></tr><tr><td>Vijay Verma</td><td>P1567</td><td>2011-10-22</td><td>D233</td></tr></table> <p>(i) Identify Primary Key in the table given above.</p> <p>(ii) Write MySql query to add a column Department with data type varchar and size 30 in the table Patient.</p>	Name	P_No	Date_Adm	Doc_No	Vimal Jain	P0001	2011-10-11	D201	Ishita Kohli	P0012	2011-10-11	D506	Vijay Verma	P1002	2011-10-17	D201	Vijay Verma	P1567	2011-10-22	D233																																		
Name	P_No	Date_Adm	Doc_No																																																				
Vimal Jain	P0001	2011-10-11	D201																																																				
Ishita Kohli	P0012	2011-10-11	D506																																																				
Vijay Verma	P1002	2011-10-17	D201																																																				
Vijay Verma	P1567	2011-10-22	D233																																																				
Year - 2013		M																																																					
(a)	Write SQL command to create the table VEHICLE with given constraint: Table : VEHICLE	2																																																					
	<table><tr><td>COLUMN_NAME</td><td>DATATYPE(SIZE)</td><td>CONSTRAINT</td></tr><tr><td>RegNo</td><td>CHAR(10)</td><td>Primary Key</td></tr><tr><td>Regdate</td><td>DATE</td><td></td></tr><tr><td>Owner</td><td>VARCHAR(30)</td><td></td></tr><tr><td>Address</td><td>VARCHAR(40)</td><td></td></tr></table>	COLUMN_NAME	DATATYPE(SIZE)	CONSTRAINT	RegNo	CHAR(10)	Primary Key	Regdate	DATE		Owner	VARCHAR(30)		Address	VARCHAR(40)																																								
COLUMN_NAME	DATATYPE(SIZE)	CONSTRAINT																																																					
RegNo	CHAR(10)	Primary Key																																																					
Regdate	DATE																																																						
Owner	VARCHAR(30)																																																						
Address	VARCHAR(40)																																																						
(b)	In a database BANK, there are two tables with a sample data given below: Table : EMPLOYEE	6																																																					
	<table><tr><td>ENO</td><td>ENAME</td><td>SALARY</td><td>ZONE</td><td>AGE</td><td>GRADE</td><td>DEPT</td></tr><tr><td>1</td><td>Mona</td><td>70000</td><td>East</td><td>40</td><td>A</td><td>10</td></tr><tr><td>2</td><td>Muktar</td><td>71000</td><td>West</td><td>45</td><td>B</td><td>20</td></tr><tr><td>3</td><td>Nalini</td><td>60000</td><td>East</td><td>26</td><td>A</td><td>10</td></tr><tr><td>4</td><td>Sanaj</td><td>65000</td><td>South</td><td>36</td><td>A</td><td>20</td></tr><tr><td>5</td><td>Surya</td><td>58000</td><td>North</td><td>30</td><td>B</td><td>30</td></tr></table> <p>DEPARTMENT</p> <table><tr><td>DEPT</td><td>DNAME</td><td>HOD</td></tr><tr><td>10</td><td>Computers</td><td>1</td></tr><tr><td>20</td><td>Economics</td><td>2</td></tr><tr><td>30</td><td>English</td><td>5</td></tr></table> <p>Note:</p> <ul style="list-style-type: none">- ENAME refers to Employee Name- DNAME refers to Department Name- DEPT refers to Department Code- HOD refers to Employee number (ENO) of the Head of the Department. <p>Write SQL queries for the following:</p> <p>(i) To display ENO, ENAME, SALARY and corresponding DNAME of all the employees whose age is between 25 and 35 (both values inclusive).</p> <p>(ii) To display DNAME and corresponding ENAME from the tables DEPARTMENT and EMPLOYEE. Hint: HOD of the DEPARTMENT table should be matched with ENO of the EMPLOYEE table for getting the desired result.</p> <p>(iii) To display ENAME, SALARY, ZONE and INCOME TAX (Note: Income Tax to be calculated as 30% of salary) of all the employees with appropriate column headings.</p>	ENO	ENAME	SALARY	ZONE	AGE	GRADE	DEPT	1	Mona	70000	East	40	A	10	2	Muktar	71000	West	45	B	20	3	Nalini	60000	East	26	A	10	4	Sanaj	65000	South	36	A	20	5	Surya	58000	North	30	B	30	DEPT	DNAME	HOD	10	Computers	1	20	Economics	2	30	English	5
ENO	ENAME	SALARY	ZONE	AGE	GRADE	DEPT																																																	
1	Mona	70000	East	40	A	10																																																	
2	Muktar	71000	West	45	B	20																																																	
3	Nalini	60000	East	26	A	10																																																	
4	Sanaj	65000	South	36	A	20																																																	
5	Surya	58000	North	30	B	30																																																	
DEPT	DNAME	HOD																																																					
10	Computers	1																																																					
20	Economics	2																																																					
30	English	5																																																					
(c)	In a database STUDENT, there is a Table RESULT with the following contents:	2																																																					

Table :RESULT					
REGNO	NAME	MARKS	SECTION	CLASSTEACHER	ADMNO
10004	Mohit	90	A	Ms Nathani	Z101
10211	Mukta	85	B	Mr. Gokhle	Z109
10923	Mohit	92	B	Mr. Gokhle	Z120
10313	Sana	80	A	Ms Nathani	Z234

(i) Identify the attributes, which can be chosen as Candidate Keys in the table RESULT.

(ii) Write SQL Query to change the Marks of Mukta to 95 in the table RESULT.

Year - 2014						M																																																																					
(a)	Write MySQL command to create the table “Toyz” with the following structure and constraints. Table : TOYZ					------------	----------------	-------------		Colun_Name	Datatype(Size)	Constraints		Toy_no	Int(10)	Primary Key		Tou_name	Varchar(20)			Type	Char(10)			Price	Decimal(8,2)			Colour	Varchar(15)							2																																					
(b)	In the Database –SAMS and VENDOR are two tables with the following information. Write MySQL queries for (i) to (iii), based on the tables SAMS and VENDORS. Table: SAMS							-------	-----------------	-------	--------	-------		ICode	IName	Price	Colour	VCode		S001	Refrigerator	20000	Blue	P01		S002	Mobile Phone	45000	Black	P02		S003	LCD	60000	Silver	P03		S004	Washing Machine	12500	Smoke	P01		S005	Air Conditioner	16000	White	P03	Table: VENDOR				-------	--------		VCode	VName		P01	Satish		P02	Manoj		P03	Subodh		P04	Jacob	(i) To display ICode, IName and VName of all the Vendors, who manufacture “Refrigerator” (ii) To display IName, ICode, VName and Price of all the products whose price is more than 20000 (iii) To display vendor names and names of all items manufactured by vendor whose code is “P03”					6
(c)	With reference to SAMS table, which column should be set as the Primary key? Which column is the foreign key? Give reasons.					2																																																																					
Year - 2015						M																																																																					
(a)	Write MySQL command to create the Table ‘LIBRARY’ with given constraints.					2																																																																					

	<table><tr><th colspan="3">Table: LIBRARY</th></tr><tr><th>COLUMN_NAME</th><th>DATATYPE(SIZE)</th><th>CONSTRAINT</th></tr><tr><td>BookId</td><td>Int(10)</td><td>Primary Key</td></tr><tr><td>BookName</td><td>Varchar(40)</td><td>Not Null</td></tr><tr><td>Type</td><td>Char(4)</td><td></td></tr><tr><td>Author</td><td>Varchar(40)</td><td></td></tr><tr><td>No_Copies</td><td>Int(6)</td><td></td></tr><tr><td>Price</td><td>Decimal(8,2)</td><td></td></tr></table>	Table: LIBRARY			COLUMN_NAME	DATATYPE(SIZE)	CONSTRAINT	BookId	Int(10)	Primary Key	BookName	Varchar(40)	Not Null	Type	Char(4)		Author	Varchar(40)		No_Copies	Int(6)		Price	Decimal(8,2)																		
Table: LIBRARY																																										
COLUMN_NAME	DATATYPE(SIZE)	CONSTRAINT																																								
BookId	Int(10)	Primary Key																																								
BookName	Varchar(40)	Not Null																																								
Type	Char(4)																																									
Author	Varchar(40)																																									
No_Copies	Int(6)																																									
Price	Decimal(8,2)																																									
(b)	<p>In a database company, there are two tables given below:</p> <table><tr><th colspan="4">Table: SALES</th></tr><tr><th>SALESMANID</th><th>NAME</th><th>SALES</th><th>LOCATIONID</th></tr><tr><td>S1</td><td>ANITA SINGH ARORA</td><td>250000</td><td>102</td></tr><tr><td>S2</td><td>Y.P.SINGH</td><td>1300000</td><td>101</td></tr><tr><td>S3</td><td>TINA JAISWAL</td><td>1400000</td><td>103</td></tr><tr><td>S4</td><td>GURDEEP SINGH</td><td>1250000</td><td>102</td></tr><tr><td>S5</td><td>SIMI FAIZAL</td><td>1450000</td><td>103</td></tr></table> <table><tr><th colspan="2">Table: LOCATION</th></tr><tr><th>LOCATIONID</th><th>LOCATIONNAME</th></tr><tr><td>101</td><td>Delhi</td></tr><tr><td>102</td><td>Mumbai</td></tr><tr><td>103</td><td>Kolkata</td></tr><tr><td>104</td><td>Chennai</td></tr></table> <p>Write SQL queries for the following:</p> <p>(i) To display SalesmanID, names of salesmen, LocationID with corresponding location names.</p> <p>(ii) To display names of salesmen, sales and corresponding location names who have achieved Sales more than 1300000.</p> <p>(iii) To display names of those salesmen who have 'SINGH' in their names.</p> <p>(iv) Identify Primary key in the table SALES. Give reason for your choice.</p> <p>(v) Write SQL command to change the LocationID to 104 of the Salesman with ID as S3 in the table 'SALES'.</p>	Table: SALES				SALESMANID	NAME	SALES	LOCATIONID	S1	ANITA SINGH ARORA	250000	102	S2	Y.P.SINGH	1300000	101	S3	TINA JAISWAL	1400000	103	S4	GURDEEP SINGH	1250000	102	S5	SIMI FAIZAL	1450000	103	Table: LOCATION		LOCATIONID	LOCATIONNAME	101	Delhi	102	Mumbai	103	Kolkata	104	Chennai	2 2 2 1 1
Table: SALES																																										
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102	Mumbai																																									
103	Kolkata																																									
104	Chennai																																									
Year - 2016			M																																							
(a)	<p>Write SQL query to create a table 'Song' with the following structure:</p> <table><tr><th>Field</th><th>Type</th><th>Constraint</th></tr><tr><td>Songid</td><td>Integer</td><td>Primary key</td></tr><tr><td>Title</td><td>Varchar(50)</td><td></td></tr><tr><td>Duration</td><td>Integer</td><td></td></tr><tr><td>ReleaseDate</td><td>Date</td><td></td></tr></table>	Field	Type	Constraint	Songid	Integer	Primary key	Title	Varchar(50)		Duration	Integer		ReleaseDate	Date		2																									
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Duration	Integer																																									
ReleaseDate	Date																																									
(b)	<p>Consider the tables given below.</p> <table><tr><th colspan="3">Table: Party</th></tr><tr><th>PartyId</th><th>Description</th><th>CostPerPerson</th></tr><tr><td>P101</td><td>Birthday</td><td>400</td></tr><tr><td>P102</td><td>Wedding</td><td>700</td></tr><tr><td>P103</td><td>Farewell</td><td>350</td></tr><tr><td>P104</td><td>Engagement</td><td>450</td></tr></table>	Table: Party			PartyId	Description	CostPerPerson	P101	Birthday	400	P102	Wedding	700	P103	Farewell	350	P104	Engagement	450	2																						
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P103	Farewell	350																																								
P104	Engagement	450																																								

	<p>Table: Client</p> <table><tr><th>ClientId</th><th>ClientName</th><th>Address</th><th>Phone</th><th>NoOfGuests</th><th>PartyId</th></tr><tr><td>C101</td><td>A.K. Antony</td><td>A-151, Adarsh Nagar</td><td>99101956</td><td>80</td><td>P101</td></tr><tr><td>C102</td><td>Fauzia Aria</td><td>K-5/52, Vikas Vihar</td><td>893466448</td><td>500</td><td>P102</td></tr><tr><td>C103</td><td>Rashi Khanna</td><td>D-6, Hakikat Nagar</td><td>981166568</td><td>50</td><td>P101</td></tr><tr><td>C104</td><td>S.K. Chandra</td><td>76-A/2, MG Colony, Adarsh Avenue.</td><td>65877756</td><td>100</td><td>P104</td></tr></table> <p>(i) Name the Primary keys in both the tables</p> <p>(ii) 'P101' data is present twice in column 'PartyId' in 'Client' table – Is there any discrepancy? Give reason for your answer.</p>	ClientId	ClientName	Address	Phone	NoOfGuests	PartyId	C101	A.K. Antony	A-151, Adarsh Nagar	99101956	80	P101	C102	Fauzia Aria	K-5/52, Vikas Vihar	893466448	500	P102	C103	Rashi Khanna	D-6, Hakikat Nagar	981166568	50	P101	C104	S.K. Chandra	76-A/2, MG Colony, Adarsh Avenue.	65877756	100	P104	
ClientId	ClientName	Address	Phone	NoOfGuests	PartyId																											
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C104	S.K. Chandra	76-A/2, MG Colony, Adarsh Avenue.	65877756	100	P104																											
(c)	<p>With reference to the above given tables (in Q6 b), Write commands in SQL for (i) and (ii) and output for (iii) given below:</p> <p>(i) To display Client names of clients, their phone numbers,PartyId and party description who will have number of guests more than 50 for their parties.</p> <p>(ii) To display Client Ids, their addresses, number of guests of those clients who have 'Adarsh' anywhere in their addresses.</p> <table><tr><th>ClientId</th><th>ClientName</th><th>Address</th><th>Phone</th><th>NoOfGuests</th><th>PartyId</th></tr></table> <p>(iii) SELECTClientId, ClientName, NoOfGuests, description,Costperperson FROM Client, Party WHERE Client.Partyid= Party.Partyid AND NOofGuests BETWEEN 50 AND 100;</p>	ClientId	ClientName	Address	Phone	NoOfGuests	PartyId	6																								
ClientId	ClientName	Address	Phone	NoOfGuests	PartyId																											
Year - 2017		M																														
(a)	<p>"XYZ" Company conducts workshops for employees of organizations. The company requires data of workshops that are organized. Write SQL query to create a table 'Workshop' with the following structure:</p> <table><tr><th>Field</th><th>Type</th><th>Constraint</th></tr><tr><td>WorkshopId</td><td>integer</td><td>Primary Key</td></tr><tr><td>Title</td><td>Varchar(50)</td><td></td></tr><tr><td>DateWorkshop</td><td>Date</td><td></td></tr><tr><td>NumSpeakers</td><td>Integer</td><td></td></tr></table>	Field	Type	Constraint	WorkshopId	integer	Primary Key	Title	Varchar(50)		DateWorkshop	Date		NumSpeakers	Integer		2															
Field	Type	Constraint																														
WorkshopId	integer	Primary Key																														
Title	Varchar(50)																															
DateWorkshop	Date																															
NumSpeakers	Integer																															
(b)	<p>Consider the tables given below and answer the questions that follow :</p> <p style="text-align: center;">Table: Event</p> <table><tr><th>EventId</th><th>Event</th><th>NumPerformers</th><th>CelebrityID</th></tr><tr><td>101</td><td>Birthday</td><td>10</td><td>C102</td></tr><tr><td>102</td><td>Promotion Party</td><td>20</td><td>C103</td></tr><tr><td>103</td><td>Engagement</td><td>12</td><td>C102</td></tr><tr><td>104</td><td>Wedding</td><td>15</td><td>C104</td></tr></table> <p style="text-align: center;">Table: Celebrity</p>	EventId	Event	NumPerformers	CelebrityID	101	Birthday	10	C102	102	Promotion Party	20	C103	103	Engagement	12	C102	104	Wedding	15	C104	2										
EventId	Event	NumPerformers	CelebrityID																													
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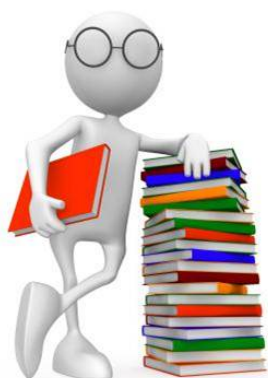
	<table><tr><th>CelebrityID</th><th>Name</th><th>Phone</th><th>FeeCharged</th></tr><tr><td>C101</td><td>Faiz Khan</td><td>99101956</td><td>200000</td></tr><tr><td>C102</td><td>Sanjay Kumar</td><td>893466448</td><td>250000</td></tr><tr><td>C103</td><td>Neera Khan Kapoor</td><td>981166568</td><td>300000</td></tr><tr><td>C104</td><td>Reena Bhatia</td><td>65877756</td><td>100000</td></tr></table> <p>(i) Name the Primary keys in both the tables and Foreign key in 'Event' table. Can NumPerformers (Number for performers) be set as the Primary key? Give reason.</p> <p>(ii) How many rows will be present in the Cartesian join of the above mentioned 2 tables? In the table 'Event', the CelebrityID 102 is present twice in the column "CelebrityId". Is there any discrepancy? Give reason.</p>	CelebrityID	Name	Phone	FeeCharged	C101	Faiz Khan	99101956	200000	C102	Sanjay Kumar	893466448	250000	C103	Neera Khan Kapoor	981166568	300000	C104	Reena Bhatia	65877756	100000	
CelebrityID	Name	Phone	FeeCharged																			
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C103	Neera Khan Kapoor	981166568	300000																			
C104	Reena Bhatia	65877756	100000																			
(c)	With reference to the above given tables (in Q6 b), Write commands in SQL for (i) to (iii) (i) To display EventId, Event name, Celebrity Id and Names of celebrities for only those events that have more than 10 performers. (ii) To display Event name, Celebrity Id and Names of celebrities who have "Khan" anywhere in their names. (iii) To display Event name, Names of celebrities and Fee charged for those celebrities who charge more than 200000 .	6																				

QUESTION NO. 7 (5 MARKS)

Year - 2011				M
(a)	Give one social impact of e-Business.			1
(b)	Write three important features of e-Governance? Give URL of one of the commonly used e- Governance portal.			2
(c)	Anuja is creating a form for her practical file. Help her to choose most appropriate controls from List Box, Combo Box, TextField, TextArea, RadioButton, Checkbox, Label and Command button for the following entries from user. <div><div>(i)</div>A message “Enter Marks” in front of a TextField.<div>(ii)</div>An input to choose more than one subjects from a set of choices.<div>(iii)</div>An input for entering remarks.<div>(iv)</div>An input for accepting Gender.</div>			2
Year - 2012				M
(a)	What social impact does e-Governance have on society?			1
(b)	Write two important feature of e-Business. Give two most commonly used e-Business sites.			2
(c)	Mr. Anurag Das working as Manager in Vivian Enterprises wants to create a form in NetBeans to take various inputs from user. Choose appropriate controls from Label, TextBox, Radio Button, CheckBox, ListBox, ComboBox & Command Button and write them in the third column:			2
	SNO	Control used to	Control	
	1.	Enter Name, Address and Salary		
	2.	Select Gender (Male / Female)		
	3.	Select Department from available List		
	4.	Choose Hobby of Employee (Singing/Dancing/Skating/Swimming)		

Year - 2013		M															
(a)	How has popularity of e-Business benefited a common man? Write domain name of one popular e-Business site as an example.	2															
(b)	Give domain names of two most commonly used e-Commerce site.	1															
(c)	Shobhit is creating a form for his company. Help her to choose most appropriate controls from ListBox, ComboBox, TextField, TextArea, RadioButton, CheckBox, Label and Command Button for the following entries: <table border="1"><thead><tr><th>SNo</th><th>Function</th></tr></thead><tbody><tr><td>1</td><td>To enter NATIONALITY from all the nationalities given as options</td></tr><tr><td>2</td><td>To enter AGE between a range 20 to 25</td></tr><tr><td>3</td><td>To allow to select one or more FAVORITE SPORTS out of the given 6</td></tr><tr><td>4</td><td>To enter SUGGESTION in the form of a paragraph</td></tr></tbody></table>	SNo	Function	1	To enter NATIONALITY from all the nationalities given as options	2	To enter AGE between a range 20 to 25	3	To allow to select one or more FAVORITE SPORTS out of the given 6	4	To enter SUGGESTION in the form of a paragraph						
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3	To allow to select one or more FAVORITE SPORTS out of the given 6																
4	To enter SUGGESTION in the form of a paragraph																
Year - 2014		M															
(a)	Define e-Business. Name one popularly used e-Business website.	1															
(b)	How does e-Governance help in reducing corruption? Write two points.	2															
(c)	Suruchi works for a Shopping Mart.She wants to create controls on a form for the following operations. Choose most appropriate control out of Text box, Label, Radio Button, list box, combo box, Check Box and Command button. <table border="1"><thead><tr><th>S.No.</th><th>FUNCTIONS</th><th>CONTROL/S</th></tr></thead><tbody><tr><td>1</td><td>Enter the Item Code</td><td></td></tr><tr><td>2</td><td>Select Item Size (from a list of sizes)</td><td></td></tr><tr><td>3</td><td>Enter Quantity</td><td></td></tr><tr><td>4</td><td>Submit the Form</td><td></td></tr></tbody></table>	S.No.	FUNCTIONS	CONTROL/S	1	Enter the Item Code		2	Select Item Size (from a list of sizes)		3	Enter Quantity		4	Submit the Form		2
S.No.	FUNCTIONS	CONTROL/S															
1	Enter the Item Code																
2	Select Item Size (from a list of sizes)																
3	Enter Quantity																
4	Submit the Form																
Year - 2015		M															
(a)	How does e-learning allow students to study at their own pace?	2															
(b)	How does e-governance empower citizens? Write one point.	1															
(c)	Sabeena is creating a form for the hotel where she works. Help her to choose most appropriate controls from ListBox, ComboBox, TextField, TextArea, RadioButton, CheckBox, Label and Command Button for the following. <table border="1"><thead><tr><th>S.No.</th><th>Function</th></tr></thead><tbody><tr><td>1</td><td>To input name</td></tr><tr><td>2</td><td>To allow enter gender out of M or F</td></tr><tr><td>3</td><td>To allow selecting type of room out of Delux, SemiDelux, General</td></tr><tr><td>4</td><td>To allow entries preferences of guest in the form of paragraph</td></tr></tbody></table>	S.No.	Function	1	To input name	2	To allow enter gender out of M or F	3	To allow selecting type of room out of Delux, SemiDelux, General	4	To allow entries preferences of guest in the form of paragraph	2					
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2	To allow enter gender out of M or F																
3	To allow selecting type of room out of Delux, SemiDelux, General																
4	To allow entries preferences of guest in the form of paragraph																
Year - 2016		M															
(a)	How is an e-commerce business more cost effective than traditional business? Write two points.	2															
(b)	How is e-learning beneficial for old people? Write one point.	1															
(c)	Ms. Ariya is creating a form for PAN CARD application. Help her to choose most appropriate controls from ListBox, ComboBox, TextField, TextArea, RadioButton, CheckBox, Label and Command Button for the following entries.	2															

	<table><tr><th>S.No.</th><th>Function</th></tr><tr><td>1</td><td>To enter NAME</td></tr><tr><td>2</td><td>To enter MOBILE NUMBER</td></tr><tr><td>3</td><td>To allow user to choose one CATEGORY out of the categories : Company,Trust,Individual.</td></tr><tr><td>4</td><td>To enter NATURE OF BUSINESS/PROFESSION in the form of a paragraph</td></tr></table>	S.No.	Function	1	To enter NAME	2	To enter MOBILE NUMBER	3	To allow user to choose one CATEGORY out of the categories : Company,Trust,Individual.	4	To enter NATURE OF BUSINESS/PROFESSION in the form of a paragraph	
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3	To allow user to choose one CATEGORY out of the categories : Company,Trust,Individual.											
4	To enter NATURE OF BUSINESS/PROFESSION in the form of a paragraph											
Year - 2017		M										
(a)	List two disadvantages of e-governance to a disabled person.	2										
(b)	How can online retailers usually offer customers a wider range of products at prices that are lesser than those of traditional stores?	1										
(c)	Ms. Cathy is creating a form for Vidya University Sports Council application. Help her to choose the most appropriate controls from ListBox, ComboBox, TextField, TextArea, RadioButton, CheckBox, Label and Command Button for the following entries. <table><tr><th>S.NO.</th><th>FUNCTION</th></tr><tr><td>1.</td><td>To let the user enter NAME</td></tr><tr><td>2.</td><td>To let the user enter MOBILE NUMBER</td></tr><tr><td>3.</td><td>To let the user choose one PROFESSION out of the categories : Teaching / Non -Teaching/Research Scholar</td></tr><tr><td>4.</td><td>To let the user select facilities out of Gym, Yoga, Table Tennis, Badminton and Aerobics. More than one facility may be chosen</td></tr></table>	S.NO.	FUNCTION	1.	To let the user enter NAME	2.	To let the user enter MOBILE NUMBER	3.	To let the user choose one PROFESSION out of the categories : Teaching / Non -Teaching/Research Scholar	4.	To let the user select facilities out of Gym, Yoga, Table Tennis, Badminton and Aerobics. More than one facility may be chosen	2
S.NO.	FUNCTION											
1.	To let the user enter NAME											
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CBSE QUESTION BANK (2011-2017)

COMPILED BY:

Rajesh Kumar Mishra

PGT (Comp.Sc.)

**Kendriya Vidyalaya Khanapara,
Guwahati (Assam)**

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