


Pre-board Examination (2018-19)
Class – XII
(Informatics Practice)

Time: 3Hours

M.M 70

Note: - Attempt all the entire questions.

1.	a)	Write one example each of URL and IP Address.	2
	b)	Identify the Topology shown below:- 	2
	c)	The 'Chalchitra' theatre has a computer network. The network is in one building i) Name this type of Network (LAN, MAN or WAN). ii) Name one communication channel is suitable for fast communication between the two or more computers.	2
	d)	What is Unicode? Give any one example.	2
	e)	Explain in brief any 2 security threats to Computer networks.	2
2.	a)	While working in Netbeans, Ms. Sonia has designed a login page where she wants to display "Welcome" or "Try again" message depending on the password entered by the user in text field named 'jTextField1'. If password entered is "India", 'Welcome' message should be displayed otherwise 'Try again' message should be displayed. Help her in choosing more appropriate statement out of 'If statement' and 'Switch statement'. Give reason for your choice.	2
	b)	Write Java code to assign the value 10 to variable x and store its square value in another variable y.	2
	c)	Deepti works as a programmer in a travel company. She has developed the following code to display travel detail according to user's choice. Help her in rewriting the same code using SWITCH CASE: if(choice==1)	2

	<pre> jTextField1.setText("New Delhi to Goa"); else if(choice==2) jTextField1.setText("New Delhi to Paris"); else if(choice==3) jTextField1.setText("New Delhi to Bangkok"); else jTextField1.setText("Pl. choose valid option"); </pre>													
	<p>d) How many times will the loop execute?</p> <pre> int value1 =7, value2=19; do { JOptionPane.showMessageDialog(null,value1+value2); value1=value1+2; value2=value2-2; } while(value1<=value2); </pre>	2												
	<p>e) Shambhavi has to design two web pages with following specifications:</p> <ol style="list-style-type: none"> One web page should have an unordered list. Another web page should have background "Yellow" in colour. <p>Suggest her suitable tag(s) and attribute(s) for the above specifications.</p>	2												
3	<p>a) In Marks column of 'Student' table, for Rollnumber 2, the Class Teacher entered the marks as 45. However there was a totaling error and the student has got her marks increased by 5. Which MySQL command should she use to change the marks in 'Student' table?</p>	2												
	<p>b) Write the full forms of the following: i. DDL ii. DML</p>	2												
	<p>c) Ms. Archana, a class XI student has just started learning MySQL. Help her in understanding the basic difference between Alter and Update command with suitable example. Also suggest her suitable command for the following purpose:</p> <ol style="list-style-type: none"> To display the list of the database already existing in MySQL. To use the database named City. To remove the pre-existing database named Clients. To remove all the records of the table named "Club" at one go along with its structure permanently. 	4												
	<p>d) Observe the given table named "Loan" carefully and predict the output of the following queries:</p> <table border="1" data-bbox="300 1659 1279 1780"> <thead> <tr> <th>CustID</th> <th>Name</th> <th>PhoneNo</th> <th>LoanAmount</th> <th>Bank</th> <th>Chaque_Date</th> </tr> </thead> <tbody> <tr> <td>001</td> <td>Mr. Amit</td> <td>888987795</td> <td>20000</td> <td>HDFC</td> <td>15/07/2012</td> </tr> </tbody> </table>	CustID	Name	PhoneNo	LoanAmount	Bank	Chaque_Date	001	Mr. Amit	888987795	20000	HDFC	15/07/2012	4
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001	Mr. Amit	888987795	20000	HDFC	15/07/2012									

		002	Mr. Zen	852222256	` 50000	SBI	16/05/2012		
		003	Mr. Tom	778225896	` 65000	ICICI	15/07/2012		
		i. select count(file_no)-count(loan_amt) from loan; ii. select Cust_Name,Loan_Amt from loan where month(cheque_dt)=7; iii. SELECT concat(left(file_no,2),right(cust_name,2)) AS "ID" from loan where Bank='ICUCI Ltd.'; iv. select round(loan_amt-loan_amt*10/100) As "Discounted Payment" from loan where loan_amt>700000;							
4	a)	Write any one difference in HTML and XML.							1
	b)	The following code has error(s). Rewrite the correct code underlining all the corrections made : <pre>int start=2;end=20; do; { start=start+start; while(start<=end)</pre>							2
	c)	i. Find the output of the following Java code snippet after execution of each java statement labelled as Line 1, Line 2, Line 3, Line 4: <pre>String userid="INDIA",pwd=""; pwd=userid.substring(0,2); //Line 1 int l=userid.length(); //Line 2 pwd=pwd.toLowerCase(); //Line 3 pwd=pwd.concat(""+l); //Line 4</pre> ii. Rewrite the following code using for loop: <pre>int attempt=0; while(attempt<=3) { String login=jTextField1.getText(); String pwd=jTextField2.getText(); if(login.equals("XII") && pwd.equals("IP")) { jOptionPane1.showMessageDialog(null, "Welcome"); break; } else jOptionPane1.showMessageDialog(null, "Pl try again"); attempt++;</pre>							4


	}							
d	<p>Read the form carefully and answer the following questions:-</p>  <p>a) Name of the student enter by user.</p> <p>b) Any one Course out of Pharmacy, Architecture and Arts & Design is chosen by the user.</p> <p>c) If the student required concession, the required checkbox is selected by user.</p> <p>d) Based on the course selected the fees per quarterly display in text filed according to the given criteria.</p> <table border="0"> <tr> <td>Course in Pharmacy</td> <td>2000.0</td> </tr> <tr> <td>Course in Architecture</td> <td>2500.0</td> </tr> <tr> <td>Course in Art and Design</td> <td>2300.0</td> </tr> </table> <p>e) If the student is eligible for Concession, a concession of 7% of Fee per quarter is calculated as the concession amount, otherwise concession amount is 0.</p> <p>f) Fee to be paid is the Fee per quarter with the concession amount (if any) deducted from it.</p> <p>Help Ms. Priya in writing the code to do the following:</p> <p>(i) When 'Calculate Charges' button is clicked, 'Fee per quarter', 'Concession Amount', 'Fee to be Paid' should be calculated and displayed in the respective text fields.</p> <p>(ii) When 'CLEAR' button is clicked, all the text fields, radio buttons and checkbox should be cleared.</p> <p>(iii) When 'Exit' button is clicked, the application should close.</p>	Course in Pharmacy	2000.0	Course in Architecture	2500.0	Course in Art and Design	2300.0	6
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5	<p>Consider the following table 'Furniture'. Write SQL commands for the statements (i) to (viii) and write output for SQL queries (ix) and (x).</p>	10						

Table Furniture:-

FCODE	NAME	PRCIE	MANUFDATE	WCODE
10023	Coffee table	4000	19-DEC-2016	W03
10001	Dining table	20500	12-JAN-2017	W01
10012	Sofa	35000	06-JUN-2016	W02
10024	Chair	2500	07-APR-2017	W03
10090	Cabinet	18000	31-MAR-2015	W02

- i) To display FCODE, NAME, and PRICE of item less than ` 5000 (1)
- ii) To display the NAME and PRICE of those Furniture item that have 'table' anywhere in their names. (1)
- iii) To display WCODE of Furniture Items. There should be no duplicate values. (1)
- iv) To display the NAMES and PRICE increased by 500.00 of all the furniture items. (Price should only be displayed as increased; there should be no increase in the data in the table) (1)
- v) To display FCODE and NAME of each Furniture Item in descending order of FCODE. (1)
- vi) To display the details of all the Furniture Items which have Manufacturing date(MANUFDATE) between 01-JAN-2016 and 15-JUN-2017 (inclusive of both the dates).
- vii) To display the average PRICE of all the Furniture Items, which are made of Wood with WCODE as W02 . (1)
- viii) To display WCODE wise, WCODE and the highest price of Furniture Items. (1)
- ix) SELECT SUM(PRICE) FROM Furniture WHERE WCODE='W03'; (1)
- x) SELECT COUNT(DISTINCT PRICE) FROM Furniture; (1)

6 a) Write SQL query to create a table 'Inventory' with the following structure: 2

Field	Type	Constraint
MaterialId	Integer	Primary Key
Material	Varchar(50)	NOT NULL
Category	Char	

b)	<p>Consider the following tables PATIENT and TEST and answer the questions that follow:</p> <p>Table: PATIENT</p> <table border="1" data-bbox="321 527 1300 940"> <thead> <tr> <th>FCODE</th> <th>NAME</th> <th>PHONE</th> <th>MANUFDATE</th> <th>TESTED</th> </tr> </thead> <tbody> <tr> <td>6473</td> <td>Amit Sharma</td> <td>912356899</td> <td>19-JUN-2017</td> <td>T102</td> </tr> <tr> <td>7143</td> <td>Rose Mathew</td> <td>886744536</td> <td>12-NOV-2017</td> <td>T101</td> </tr> <tr> <td>8786</td> <td>Tina Sharma Arora</td> <td>889088765</td> <td>06-DEC-2017</td> <td>T102</td> </tr> <tr> <td>6477</td> <td>Vijay</td> <td>714567445</td> <td>07-DEC-2017</td> <td>T502</td> </tr> <tr> <td>7658</td> <td>Venkat Fazal</td> <td>865545343</td> <td>31-DEC-2017</td> <td>T101</td> </tr> </tbody> </table> <p>Note : NAME holds the Names of patients. DTADMIT holds Dates on which patient was admitted to hospital. TESTID holds Ids of Medical tests done on patients</p> <p>Table: TEST</p> <table border="1" data-bbox="321 1102 1300 1451"> <thead> <tr> <th>TESTED</th> <th>TESTNAME</th> <th>COST</th> </tr> </thead> <tbody> <tr> <td>T101</td> <td>Platelet Count</td> <td>200.00</td> </tr> <tr> <td>T102</td> <td>Hemogram</td> <td>190.00</td> </tr> <tr> <td>T301</td> <td>Malaria Detection</td> <td>135.00</td> </tr> <tr> <td>T502</td> <td>Glucose Test</td> <td>150.00</td> </tr> </tbody> </table> <p>Name the Primary keys in both the tables and foreign key in ' PATIENT ' table . State the reason for your choice.</p>	FCODE	NAME	PHONE	MANUFDATE	TESTED	6473	Amit Sharma	912356899	19-JUN-2017	T102	7143	Rose Mathew	886744536	12-NOV-2017	T101	8786	Tina Sharma Arora	889088765	06-DEC-2017	T102	6477	Vijay	714567445	07-DEC-2017	T502	7658	Venkat Fazal	865545343	31-DEC-2017	T101	TESTED	TESTNAME	COST	T101	Platelet Count	200.00	T102	Hemogram	190.00	T301	Malaria Detection	135.00	T502	Glucose Test	150.00	2
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c)	<p>With reference to the above given tables (in Q6 b), Write commands in SQL for (i) to (iii)</p> <p>i. To display Names of Patients, TESTID and Test names for those Patients who were admitted between '01-DEC-2017' and '15-DEC-2017' (both dates inclusive). (2)</p> <p>ii. To display Names of Patients, Test names and Cost of Test for those Patients</p>	6																																													

		who have “Sharma” in their names. (2) iii. To increase the cost of those tests in the table “ TEST ” by `50.00 that have cost below ` 200.00 (2)	
7	a)	How does e-governance help in building trust between the Government and citizens?	2
	b)	How can e-learning help students learn at their own pace?	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:	2