MARKING SCHEME

2

Roll Number			

INDIAN SCHOOL MUSCAT
HALF YEARLY EXAMINATION
SUBJECT : INFORMATICS PRACTICES

CLASS: XII   Sub.Code:265   Time Allotted: 3 Hrs.

24.09.2019   Max.Marks: 70

General Instructions:

1. **All the Questions are Compulsory**
2. **Read the Question carefully before writing the answer**

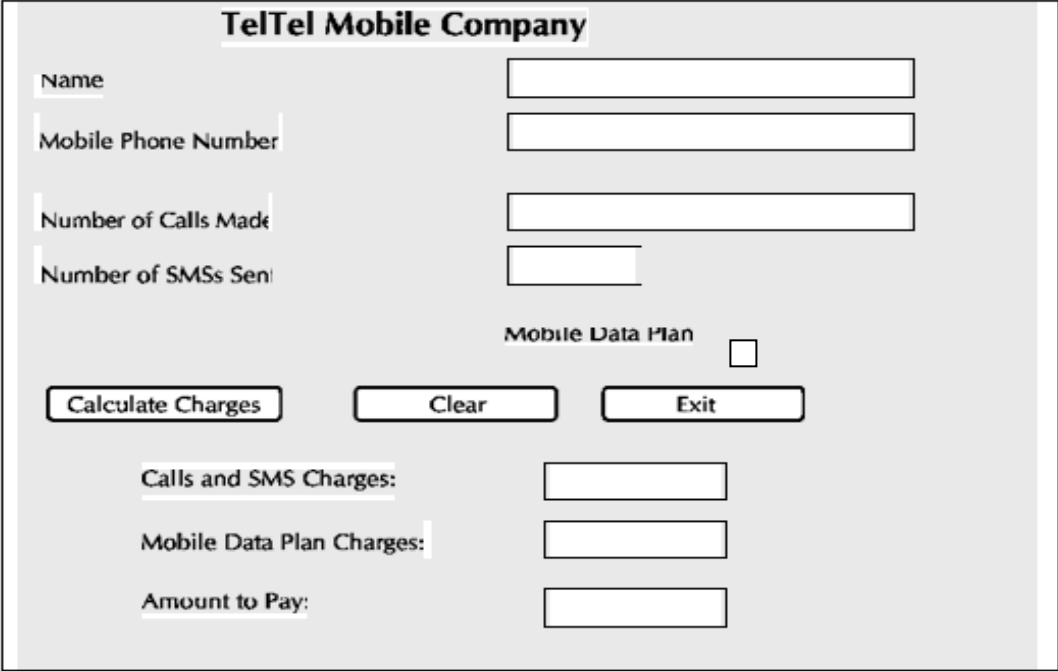| 1.	(a)	any two advantages of network.	1
	(b)	Fire Wall.- it is a hardware or soft ware it prevents unauthorized access	1
	(c)	Name the network device which is used to amplifying the signal. Repeater	1
	(d)	Write the full form of 1) MAC -Media Access Code 2) TCP/IP-Transmission control Protocol/Internet Protocol	1
	(e)	How ROUTER is different from Bridge? Explain. It is used to connect different networks	2
	(f)	Explain any two threats of network security. Explanation of Snooping, Eavesdropping (1+1 Mark)	2
	(g)	How Bus topology is different from Star Topology? Explain. Explanation Bus Topology 1 mark and Explanation Star Topology 1 Mark.	2
2.	(a)	How List Box is Different from Combo Box? Explain List Box Will not allow the user to enter new value, Combo Box allow the user to enter new value during the program execution.	1
	(b)	Write any one method and event of jTextField. setText(), getText(),setEnabled()… any one method	1
	(c)	Name two data types of Java used to store fractional numbers (numbers with decimals). Float and Double	1
	(d)	Distinguish between Java and Netbeans. Explnation **(OR)** What is the use of RAD? Explain Rapid Application Development which is used to develop the application very fast.	1

	(e)	What will be displayed in jTextField1 and jTextField2? **int x,y,z,t;** **x = 7;** **y= 10;** **z = x+y*3;** **t= x + y;** **jTextField1.setText(""+z); 37** **jTextField2.setText(""+t); 17**	2
	(f)	Consider the following code: **salary = 20000;** **grade= 'g';** **switch(grade)** **{** **case 'x' : salary = 25000;** **break ;** **case 'y' : salary = 30000;** **break ;** **}** 　　1.　20000 1 mark 　　2.　Fall through	2
	(g)	How Switch..case is different from If..Else? Explain with an example. Explanation 1+1 mark	2
3.	(a)	Arun has applied a Constraint on a column(field) such that Arun must have to insert a value in this field, when he inserts a new row in the table. Which constraint has Ajay used? Not Null	1
	(b)	Define Primary Key: it is used to identify the records uniquely no null values allowed	1
	(c)	'STUDENT' table has a column named 'REMARK' that stores Remarks. The values stored in REMARK are "PASS" or "NOT PASS" or "COMPTT" etc. Write SQL query to display details of all rows except those that have REMARK as "PASS" . Select * from student where remark not like "PASS";	1
	(d)	Write a Query to display the Structure of the table EMPLOYEE. Desc employee; **(OR)** Write a Query to display all the constraints along with the field names.	1
	(e)	Find the output of the following: Table: EMP | Empno	Ename	Salary	Deptno
1234	Rahul	2000	10
2315	Sagar	3000	20
4312	Janvi	3000	20
5345	Aishwarya	4000	30	 　i)　Select Deptno, Avg(Salary) from EMP group by Deptno; 10 2000 20 3000 30 4000	2

		ii) Select left(ename,4) from emp;rahu saga janv aish	
	(f)	How Update Command is different from Alter Command? Explain with an example. Update is used to change the table values update emp set deptno=10; Alter Command is used to change the structure of the table Alter table emp add sal int(4);	2
	(g)	What is the use of COMMT? How it is different from ROLLBACK? Explain.Commit is used to save all the transactions permanent, rollback is used to undo the above changes. **(OR)** What is the difference between DDL and DML? Explain with an Example. DDL in this category all the commands are based on table structure ex: Alter , Create. DML in this category all the commands are based on table values ex: update, Select	2
4.	(a)	Write the value that will be stored in the variable **t** after the execution of the following code. How many times will the loop execute ? 5	2

	(b)	Write the values of r and s after the execution of the following code
		     r=17 ($\frac{1}{2}$+$\frac{1}{2}$=1)
		     s=25
			1

	(c)	What will be displayed in jTextField1 and jTextField2 after the following code is executed : ```\nint ndigits = 0;\n\nint N = 30;\nwhile (N > 12) {\n ndigits = ndigits + 1;\n N = N-10;\n}\njTextField1.setText(" "+ndigits); 2\njTextField2.setText(" "+N); 10\n```	2
	(d)	Write the value of C after executing the following code : 2	2
	(e)	Write Java Code to accept any number from the user and check the number is "Prime" or "Not". Declaring proper variable name and accepting -$\frac{1}{2}$ mark Using for or while loop – 1 $\frac{1}{2}$ mark	2
	(f)	What is the difference between for loop and While loop? Explain with an example. Explanation of for loop – 1mark Explanation while loop – 1mark	2

	(g)	Mr.Mark works as a programmer in "TelTel Mobile Company" where he has designed a software to compute charges to be paid by the mobile phone user. A screenshot of the same is shown below :	

TelTel Mobile Company

Name

Mobile Phone Number

Number of Calls Made

Number of SMSs Sent

Mobile Data Plan ☐

[Calculate Charges]   [Clear]   [Exit]

Calls and SMS Charges:

Mobile Data Plan Charges:

Amount to Pay:

		Each Call is charged at < 1·00. Each SMS is charged at < 0·50. Users can also opt for Mobile Data Plan. Charges for Mobile Data Plan are flat < 50·00. Help Mr.Mark in writing the code to do the following :	
		1. When the 'Clear' button is clicked, all the text fields and checkbox should be cleared. Using setText(" ")	1
		2. 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. 'Amount to Pay' is calculated as : Calls and SMS Charges + Mobile Data Plan Charges (if any) Declaring proper variables and accepting value then using the formula for displaying result(1+1+1=3)	3
5	(a)	How NULL is different from 0(zero)? Explain with an example. Null is empty and 0 is a value with a proper explanation -1 mark (OR) Explanation INT data type and DECIMAL? Explain with an example. - !mark	1

| (b) | Rahul is not clear about the difference between the following two statements:
   (i) Select count(distinct(deptno)) from emp;   Display only unique count values 1
   (ii) Select count(deptno) from emp; no of records from the table.
Help him understand the difference between these two statements | 2 |

| (c) | Consider the following table named as "STAFF" with details. Write Mysql command for(i) to (iv) and output for(v) to (vii). | |

Table : STAFF

Tno	T_name	Department	Basic	Allowances
S1	Lakshmi	Physics	27200	1500
S2	Ramkrishana	Commerce	34500	1200
S3	Suresh Kumar	Chemistry	30600	1300
S4	Raj Mohan	Computer	44200	
S5	Rakesh Sharma	Physics	43800	2000
S6	Vivek Rawat	Chemistry	24500	2500
S7	Dinesh Goel	Computer	32300	1900
S8	Lokesh Rathore	Commerce	41700	1600
			278800	

(i)   To display all the STAFFs name and their total salary (Basic+ Allowances) whose name not ends with the character 'R'. Proper Select Query- 1 Mark

(ii)   Add a new column COMMISSION with integer size of 7.- Correct statement with Alter -1 Mark

(iii)   To increase the basic salary by 30000 those who are all in COMPUTER department.- Correct statement with update- 1mark

(iv)   To display all the STAFFs name whose BASIC is in the range.20000 to 40000. Correct select statement with between and

(v)   Select department, count(*) from STAFF group by department;

Physics-2 computer -2 commerce-2 chemistry-2

(vi)   Select LEFT(T_name,3) , Basic from STAFF where Allowances>1700;

     Rak , Viv,Din

(vii) Select Sum(basic),Max(allowances) from STAFF;   278800   2500

7

6	(a)	Write a Query to create the following table. Using the proper Syntax of Create command	2
	(b)	Consider the tables Mobile_Details and DEALERS (i) To Display set name, operating system from Mobile_details table and the corresponding Dealer Number and city from Dealers Table. Using correct fields join with another table – 2 marks (ii) To display how many dealers are there in each city. Select count(Deal_no),City from dealers group by city; 2 marks (iii) To display the dealer details for each dealer who are all selling Android handsets. Select Deal_no,Os from dealers, mobile_data where dealers.setcode=mobile_details.setcode and os="android"; 2 marks	
	(c)	Find the output of the following: (i) Select round(5678.56,-1)+truncate(3320.45,0); 5680+3320=9000 (ii) Select mod(dayofmonth("2018-02-20"),2); 0 (iii) Select POW(INSTR('My_Database','_'),2); 9 (iv) Select instr("Correction","r"); 3	2
7	(a)	any two E-Commerce web site names.	2
	(b)	Define Back End is used to store the data	1
	(c)	Mr.Paul is working as System Developer in Electronics Enterprises. Help him to choose most appropriate controls from List Box, Combo Box, Text Field, Text Area, Radio Button, Check Box, Label and Command Button for the following entries: {{TABLE}}	2

Table for 7(c):

SNo	Function
1	Select any number of facilities - check box/List box
2	To Enter the Name -TextField
3	Select the department- Combox
4	Select the gender- Radio Button

*******End of the Question Paper******