INDIAN SCHOOL SOHAR
TERM I EXAMINATION (2019-20)
INFORMATICS PRACTICES (265)

CLASS: XII   **MAX. MARKS: 70**
DATE: 29/10/2019   **DURATION: 3 HRS.**

Instructions:
   i) All questions are compulsory.
   ii) Answer the questions after carefully reading the text.

1. a) Which of the following is not a feature of Networking?   1
      i) Resource sharing
      ii) Uninterrupted power supply
      iii) Reduced cost
      iv) Reliability

   b) i) Which device is used for connecting multiple networks over different protocols?   2
      ii) Mrs Shasikala is working in a Global Organization. She wants to login in her
      office computer from her home. Suggest the protocol for the same.

   c) Write any two scripts included in Indian Languages on ISCII.   1

   d) What is Unicode? List its benefits.   2

   e) Differentiate between Free and Open Source Software   2

   f) Expand the following terms: PNG, GSM   2

2. a) What are Events and Event Handlers?   2

   b) Differentiate between pre and post tested loops.   2

   c) What is the role of void keyword?   2

   d) Rewrite the following XML code after making corrections (if any):   2
      <email>
          <to>Mr. Jeevan
          <body>How are you?</to>
          </body>
          <sender id=1101>Vasu</sender>

   e) Write HTML code for creating following list: 2
      iii.   Laptop
               o   Dell
               o   Toshiba
      iv.   TV
               •   Sony
               •   Samsung

3. a) What is MySQL? What are its benefits?   2

b) How is a Having clause different from Where clause? 2

c) An attribute A of datatype varchar(20) has the value "Amit" . The attribute B of datatype char(20) has value "Karanita" . How many characters are occupied in attributes A and B each? 2

d) What does No Action referencing action with On Delete imply? 2

e) Consider the Stu table 2

ROLLNO	NAME
1	Ashi
2	Bimmi
4	Aakash

The following SQL queries are executed on the above table

INSERT INTO Stu VALUES(5,'Gagan');
COMMIT;
UPDATE Stu SET name='Abhi' WHERE Rollno = 4
SAVEPOINT A;
INSERT INTO Stu VALUES(6,'Chris');
SAVEPOINT B;
INSERT INTO Stu VALUES(7,'Babita');
SAVEPOINT C;
ROLLBACK TO B;
What will be the output of the following SQL query now:
SELECT * FROM Stu;

4. Mr. Pawan works as a programmer in "ABC Marketing Company" where he has designed a salary generator software to generate the salary of salesman in which Name and Salary are entered by the user. A screenshot of the same is shown below:

Help him in writing the code to do the following:

i) After selecting appropriate Radio Button, when 'Commission' button is clicked, 1

commission should be displayed in the respective text field as each Salesman will get a commission based on the units sold according to the following criteria:

Units Sold	Commission (in Rs)
1 to 20	500
20 to 40	1000
>40	2000

ii) When 'Gross Salary' button is clicked, Gross Salary should be calculated and displayed in the respective text field as per the given formulae: 1
Gross Salary= Salary+Commission

iii) After required selection of Checkbox(es), when 'Facility Charges' button is clicked, Facility charges will be displayed in the respective text field according to the following criteria: 1

Facility	Charges
Transport	500
Mess	2000

iv) Money will be deducted from the Gross Salary according to the facilities opted by the employee. When 'Net Salary' button is clicked, Net Salary should be calculated and displayed in the respective text field as per the given formulae: 1
Net Salary= Gross Salary-Deductions

v) What should be done to assign Alt+N as shortcut key for Net Salary button?   1

5. a) The following code has error(s). Rewrite the correct code underlining all the corrections made :   2

```
int n=5,int i=1,f=1;
do;{
f=f*i;
i++;
while(i<=n)
jTextField1.setText(""+f);
```

b) Find the output: 2
```
String City="Delhi",PinCode="110001",Str="";
City=City+" "+PinCode;
JOptionPane.showMessageDialog(null,City);
int l=City.length();
int i=0;
while(i<l){
Str=Str+City.substring(6);
i=i+15;
}
JOptionPane.showMessageDialog(null,Str);
```

c) Rewrite the following code using for loop: 2

```
int a=0,b=5;
while(a<=5)
  a++;b++;
  System.out.print(a + "\n" +b);
```

d) Rewrite the following code using switch: 2

```
char ch = Character.parseCharacter( charTF.getText( ) ) ;
if ( ch == 'A' ) || (ch == '1')
   System.out.println( "One" ) ;
else if( ch == 'B' )|| (ch == '2')
   System.out.println( "Two" ) ;
else
   System.out.println( "None" ) ;
```

e) What will be the result of following? 2

```
String s="book";
System.out.print(s.valueOf(200)+s.valueOf(300)+" Rs needed to buy 2 " +s);
```

6. a) Write the SQL command to create the following table including its constraints. 2

Table: **SUPPLIER**

Column Name	Data Type	Constraint
SNo	Char(2)	
PName	Char(5)	Not Null
SName	Varchar(25)	Not Null
Qty	Int(3)	>=50
Price	Float(9,2)	

b) Write queries of i-xi and predict the output of xiii-xiv

Table: Teacher

SID	Name	Dept	Sex	Exp
101	Siddharth	Computer	M	12
104	Raghav	Physics	M	5
107	Naman	Chemistry	M	10
114	Nupur	Computer	F	3
109	Janvi	Physics	F	9
105	Rama	Accounts	M	10
117	James	Computer	F	3
111	Binoy	Accounts	F	12
130	Samuel	Computer	M	15

Table: Salary

SID	Basic	Allow	DA
101	12000	1000	300
104	23000	2300	500
107	32000	4000	500
114	12000	5200	1000
109	42000	1700	200
105	18900	1690	300
130	21700	2600	300

i. Display NAME and DA of all staff who are in Accounts department and having more than 10 years of experience and DA is more than 300. 1

ii. Count the total number of departments. 1

iii. Display the departments having more than 2 staff members. 1

iv. List details of staff having 'pu' anywhere in their or their department names. 1

v. Display details of all female staff except working in Accounts department having less than 10 years of experience. 1

vi. List details of staff getting basic more than 30,000 in increasing order of their names. 1

vii. Show the minimum, maximum and average basic of each department. 1

viii. Show the ID, name and department of all staff. If the department is not known, show 'Not final'. 1

ix. Display details of staff whose allowances are not known. 1

x. Increase the DA of staff by 10%, if their basic is less than 25000. 1

xi. Add a new column 'Deductions' as int into salary table. 1

xii. Delete details of staff with experience less than 1 year. 1

xiii. Select NAME, DEPT, DA from TEACHER, SALARY Where DEPT LIKE '%o%' and DA >=500 and TEACHER.SID=SALARY.SID; 1

xiv. Select NAME, DA, BASIC from TEACHER, SALARY Where BASIC>20000 and TEACHER.SID=SALARY.SID; 1

xv. How many rows and columns will be there in the natural join of both tables? 1

xvi. Identify the Primary and Foreign keys in both the tables. 1

xvii. Write the output of the following SQL statements : 2
i) SELECT MOD(ROUND(124.60),5);
ii) SELECT SUBSTR(TRIM('   I LOVE PROGRAMMING   '),3,5);
iii) SELECT CONCAT("NEW ", "DELHI") "FULL NAME";
iv) SELECT WEEKDAY(CURDATE());

7. a) Define e-governance. How does e-governance help in building trust between the Government and citizens? 2

b) List of features of a good programming interface. 1

c) How can e-learning help students learn at their own pace? 1

d) How does e-business help organizations to provide better customer services? 1

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