INDIAN SCHOOL SOHAR
FINAL EXAMINATION (2018-19)
INFORMATICS PRACTICES

CLASS: XI   **MAX. MARKS: 70**

DATE: 03 /03/2019   **DURATION: 3HRS**

Instructions:

a. *All the questions are compulsory.*

b. *Answer the questions after carefully reading the text.*

1. **Answer the following questions:**

    a. What is an Operating System? Name two types of OS.   2

    b. Write any two advantages and disadvantages of Light Pen.   2

    c. Differentiate between volatile and non-volatile memory.   2

    d. Write short note on:

     i) Worms   ii) Utilities   2

    e. What is Spam? Why has it become a big internet issue?   2

2.

    a. What is the difference between 'x' and "x" in java?   1

    b. What is fall through?   1

    c. Differentiate between exit and entry controlled loop.   2

    d. Write the corresponding java expressions for the following: 2

     i)A= $2-4y(P+Q)^2$ ii) e^x-x

    e. Define the following terms: 2

     i) Robustness   ii) Pretty Printing

3.

    a. Write any four advantages of DBMS.   2

     b. Explain SUBSTR function with suitable example.   2

    c. Differentiate between Update and Insert commands.   2

    d. Explain the difference between Table and Column constraint.   2

    e. Differentiate between IN and BETWEEN clauses in SELECT statement.Give example.   2

4.

a) Predict the output after execution of the following code: 2

```
int a=5,b;
b=a++ + ++a - a- -;
System.out.print(b);
System.out.println(a++);
System.out.print(a--);
System.out.print(a);
```

b) Rewrite the following code using 'if' statement: 2

```
switch(i) {
case 1:
case 2: x+=1;break;
case 3: x+=2;break;
default: x+=3; }
```

c) Find the errors from the following code segment and rewrite the corrected code: 2

```
int n=Integer.parseInteger(jtext1.getText);
int i=1,j;
for( ; i<n; i++; )
j*=i;
jtext2.setText(j);
```

d) Rewrite the following code using while loop 2

```
for(int a=5,i=0;++i<5; )
{
switch(i){
case 0:++a; break;
case 1:a*=1;break;
case 2:a*=2;break;
}}
System.out.print(a);
```

e) Write a program in java to print the sum of the following series for n number of terms: 2

$$1 + \frac{1}{8} + \frac{1}{27} + \frac{1}{64} + \frac{1}{125} + \ldots \ldots$$

f) Write java code that reads the Fahrenheit temperature from jTxtfld1 and display its equivalent degree Celsius in jLbl1. C=5/9(F-32) Where, C= Celsius and F=Fahrenheit. 2

g) Read the following case study and answer the questions that follow:

A courier service imposes charges to customer's order in two different forms: Wholesaler and Retailer.

The cost is calculated on unit basis as follows:

For Units	Wholesaler Price(Rs)	Retailer Price(Rs)
1-15	50	65
16-30	40	55
31-50	30	45
>50	25	35

i) Write the code to disable the text box 'TotcostTF' and set wholesaler as the default

   customer type .   1

ii) When user clicks the clear button,clear the text field TotcostTF and set units 1-15 as the

   default value of units ordered.   1

iii) When calculate button is clicked calculate and display the total cost.An extra amount

   (ie,2% of cost) is charged as VAT on each delivery.(Total cost=cost + VAT)   2

iv) When Exit button is clicked exit the application.   1

5.

a. Write SQL Commands for the following on the basis of information given below:

Voter : Table structure

Column name	Data Type	Constraint
Vid	Char(3)	
Vname	Varchar(20)	
DOB	Date	
Age	Integer(2)	Not null
Address	Varchar(15)	
Status	Varchar(10)	

Voter:Table

Vid	Vname	DOB	Age	Address	Status
V01	Ashna	2000-02-01	19	Mumbai	Single
V02	Joby	1998-10-12	20	Puna	Single
V03	Cathrene	1990-03-28	28	Kanpur	Married
V04	Hiral	1995-10-20	23		Married
V05	Blesson		18	Delhi	Single
V06	Nadir	1987-11-19	32		Married

i) Create table Voter based on the structure given above. 2

ii) Insert a new row with values: V07,Midun,30,Mumbai. 1

iii) Add a Primary key constraint to Vid. 1

iv) Display the name,age and place of all voters whose birthday comes in october month. 1

v) Change the status and address of Joby to Married and Mumbai respectively. 1

vi) List the details of all voters except from Mumbai and Delhi in descending order of their age. 1

vii) Display the id and place of voters whose name starts with 'N' and contains only 5 characters. 1

viii) Change the datatype of address to char of size 15. 1

ix) List the position of 'an' in voter's name whose address is mentioned. 1

x) Remove the leading and trailing spaces from the address of all Married voters aged above 20. 1

xi) List the name and date of birth of all voters (if date of birth is not mentioned, replace the text with 'not-available'). 1

xii) Remove the details of voters born after 2000. 1

xiii) Create a new table "Voterlist" consisting of all details of voters whose ages are between 18 and 20. 1

b. Write the output of the following queries:

i) Select Char(74,97,85.8,'97.7') as Value; 1
ii) Select dayofweek(curdate()) + sqrt(9); 1
iii) Select Truncate(7654.456,2),Round(7654.456,-2); 1

c. Remove the errors (if any) from the following queries and rewrite the corrected ones.
i) Select Mod(day(sysdate())%5); 1
ii) Drop from table voter; 1
iii) Select substr("voterslist",length("voters")); 1

6.
a. Name two e-business portals. 1
b. How has e governance benefitted to common man? 1
c. Write any two benefits that e-business offers to an organization. 1
d. Define e-learning? Why do you think e-learning courses have high dropout rate? 2

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