## INDIAN SCHOOL SOHAR TERM II EXAMINATION (2018-19) <br> INFORMATICS PRACTICES

CLASS: XI
MAX. MARKS: 70
DATE: 26/11/2018 DURATION: 3 HRS

## Instructions:

a. All the questions are compulsory.
b. Answer the questions after carefully reading the text.

1. Answer the following questions:
a) What are Constraints? 1
b) What is LAMP? 1
c) What is the use of IFNULL() function?Give suitable example. 2
d) How is MID() different from RIGHT() function. 2
e) Differentiate between DDL and DML commands. 2
f) Differentiate between DROP and DELETE. 2
2. 

a) Which property would you set for setting the password character as '\$’?
b) Write java code to display an image in a label named imglabel1 during runtime.
c) Name two top level and mid level containers.
d) What is casting? When do we need it?
e) What are these methods used for?
i)removeltem()
ii)append()
f) Compare and contrast a list box and a combo box.
3.
a) Evaluate the following expressions where $a, b, c$ are integers and $d, f$ are floating point numbers.

The values are: $a=5, b=3$ and $d=1.5$
i) $f=a+(b++)^{*}(--d) \quad$ ii) $f=(++b) * b-a$
b) Write equivalent Java expression for the following:
i) $3 e^{x}+\left|x^{2}-y^{2}\right|$
ii) $z=x^{3}+y^{3}-\frac{\sqrt{x y}}{2}$
c) Predict the output after execution of the following code:
i) float $x=9$;
float $\mathrm{y}=5$;
int $\mathrm{z}=$ (int) ( $\mathrm{x} / \mathrm{y}$ );
switch(z) \{
case 1: $x=x+2$;
case $2: x=x+3$;
default: $x=x+1 ;\}$
System.out.println("value of x:" +x);
ii) int $x=5$;
for(int $i=1 ; i<5 ; i++)$ \{
if(i\%5==0) \{
x++;
System.out.print(x+" "); \}
System.out.print(x); \}
d) Rewrite the following code using 'if' statement:
switch(choice) \{
case 2: System.out.println("Prime");break;
case 3 :
case 4 :System.out.println("Even");break;
default: System.out.println("Not valid");\}
e) Find the errors from the following code segment and rewrite the corrected code:
i) int $x=1 ; y=5$;
while ( $++x<=10$ ); \{
if( $\mathrm{y} \% 2=0$ )
System.out.print(x+y);
else
System.out.print( $x-y$ );
ii) int ord=5;
float cost=0;
if(opt1.isselected())
Cost=ord X 50;
Txtcost.setText(cost);
f) Rewrite the following code using do while loop
for(int i=2; i<20; i=i+2)
System.out.println(i);
JOptionPane.showMessageDialog(null,"thank you");
g) Write a program in java to print the sum of the following series:
$\frac{1}{2}+\frac{3}{4}+\frac{5}{6}+\frac{7}{8}+$ $\qquad$ $+\frac{n}{n+1}$
h) Write a program in java to check whether the given number is a palindrome or not.
(eg:121. The reverse of 121 is 121 itself, so it is a palindrome number)
i) Read the following case study and answer the questions that follow:


The company accepts the payments in 3modes -cash,cheque and credit cards. The discount given as per mode of payment is as follows:

| Mode of Payment | Discount |
| :--- | :--- |
| Cash | $8 \%$ |
| Cheque | $7 \%$ |
| Credit Card | Nil |

i) Write the code to make the textfields for discount and net amount uneditable.
ii)When "Calculate Discount" button is clicked the discount should be calculated as per the given criteria and it should be displayed in the Discount textfield.
iii)When "Calculate Net amount" button is clicked the net amount should be calculate and it should be displayed in the Net Amount textfield.(Net Amount=Bill Amount-Discount)
iv)When next button is clicked,write code to clear all textfields and set credit card as the default selection.
4. Write SQL Commands for the following on the basis of information given below:

Garment : Table structure

| Column name | Data Type | Constraint |
| :---: | :---: | :---: |
| Gcode | Integer (5) | Primary Key |
| Description | Varchar(20) |  |
| Fabric | $\operatorname{Varchar(10)~}$ |  |
| Qty | Integer(3) |  |
| Price | Integer(3) |  |


| Gcode | Description | Fabric | Qty | Price |
| :---: | :---: | :---: | :---: | :---: |
| 1001 | Pencil Skirt | Polyster | 30 | 1150 |
| 1002 | Formal Shirt | Terelene | 18 | 1250 |
| 1003 | Casual Shirt | Cotton | Null | 1550 |
| 1004 | Formal Pants | Terelene | 20 | 1350 |
| 1005 | Frock | Silk | 35 | 850 |
| 1006 | Slacks | Silk | 15 | 700 |
| 1007 | Baby Top | Silk | 10 | 750 |

i) Create table Garment based on the structure given above.
ii) Insert a new row with values: 1008,Gowns,Silk.
iii) Add a not null constraint on Fabric.
iv) List the different types of fabrics used in ascending order of price.
v) Increase the price of all items by 50 Rs whose quantity is 15 and price less than 1000.
vi) Change the datatype of description to char.
vii) List the Gcode,Description and TotalPrice of each item.(Price column contains cost of one item) 1 viii) Create a new table "Order" consisting the details of all Silk fabrics.
ix) List the fabrics with 'r' as the second last character in description in descending order of Price. 1
x) List a report showing< Gcode>"of fabric" <Fabric>"costs"<Price> of all items whose quantity is in range 10-20.(exclude both values)
xi) Change the quantity to 25 and fabric to cotton for Gcode 1004.
xii) List the details of cotton and silk fabrics whose quantity is known.
xiii) Remove the column quantity from the table.
xiv) Delete records of cotton garments whose price is less than 750 .
5. Write the output of the following queries:
i) Select round(982.322,-2),truncate(987.652,2);
ii) Select mid("garments",pow(4,sign(56)));
iii) Select dayofweek(curdate())+length("fabrics"); 1
iv) Select concat(right("POLYSTER",1),substr("cotton",-5)); 1
v) Select ucase(trim(both 's' from 'skirts')) as output; 1
6. Remove the errors (if any) from the following queries and rewrite the corrected ones.
i) Select null(qty,"0") from garment; 1
ii) Select truncate(345.8)+power(2,1); 1
iii) Select length(concat("Description",lower("Fabric")) from garment; 1
iv) Select year(Current_date())+dayofmonth(now); 1
v) Select all description from garment; 1

