No. of printed pages: 4

INDIAN SCHOOL SOHAR
TERM I EXAMINATION (2018-19)
INFORMATICS PRACTICES

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

DATE: 20/09/2018 **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 is the purpose of using MySQL? 1

b) Define Candidate key. 1

c) Compare Char and Varchar datatypes. 2

d) Which function is used for displaying ,

i) Current date and time ii) the name of weekday 2

e) Explain INSTR function. 2

f) Differentiate between SYSDATE and NOW. 2

2.

a) What is coercion? 1

b) What is the purpose of default in switch statement? 1

c) Compare variables and constants. 2

d) What are unary and ternary operators? 2

e) Differentiate between if and switch statements. 2

3.

a) Write equivalent Java expressions for the following:

i) $2e^{3x} - e^{x}$ ii) $S = \frac{1}{2}(v+u)t$ 3

iii) $|x^2+3x+2|$

b) Predict the output after execution of the following code:

i) 2

```
int a=2,b=1;
System.out.print((a++ - b)+"\t"+(--b+ --a));
System.out.print("\n"+(++a - b--)+"\t"+(++a + ++b));
```

ii) 2

```
int i, a=2;
for(i=3;i>1;i--) {
  if(i%2==0)
  a*=i;
System.out.print(a); }
```

c) Rewrite the following code using 'switch' statement: 2

```
if(code==0 || code==1)
System.out.print("100% Tax Exemption");
else if(code==2) {
System.out.print("50% Tax Exemption");
System.out.print("30% Tax Exemption"); }
else if(code==3)
System.out.print("30% Tax Exemption");
else
System.out.print("Invalid Entry");
```

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

i)
```
int n=Integer.ParseInt(item.getText);
int f=1;
if(++n<5)
f=f*N;
jtextfield1.setText(f);
```

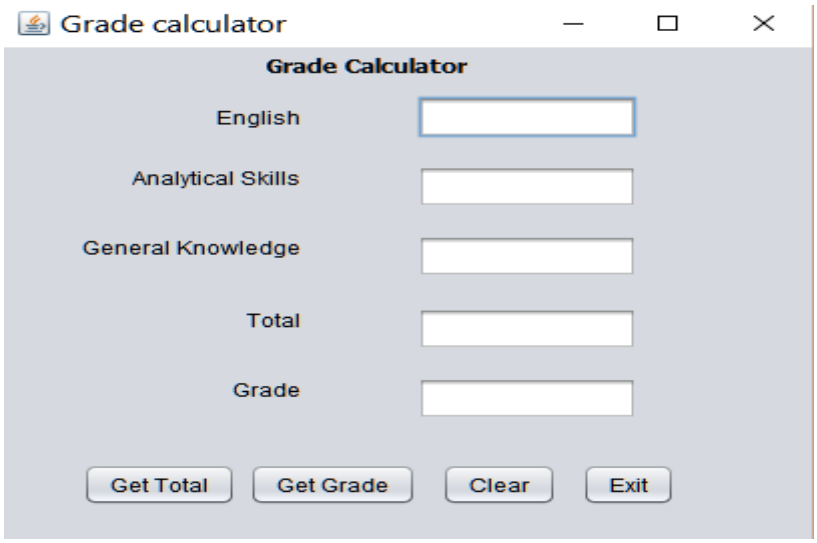
ii) 2
```
int j=5;
for(int i==2;j<=8)
j+=2;
i++;
System.out.printLn(i+j);}
```

e) Rewrite the following code without using 'if' statement: 2

```
int R,n=5;
if(n%2==0)
R=n/2;
else
R=3*n+1;
```

f) Write java code that reads the radius of a circle from jTextfield1 and display its area in a message box. (Area of circle$= \pi r^2$) 2

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



i) When "Get Total" is clicked: To calculate the total marks obtained and display in jTextField4. 1

ii) When "Get Grade" is clicked: To calculate the grade obtained and display in jTextField5 based on the given criteria, 2

Marks	Grade
Above 80	A
Above 65 and <=80	B
Above 50 and <=65	C
<=50	D

iii) When Clear (ClearBtn) is clicked ,clear the contents of text fields. 1

iv) When Exit (ExitBtn) is clicked, exit the application. 1

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

Bank: Table structure

Column name	Data Type	Constraint
Acno	Char(4)	
Cname	Varchar(20)	Not null
Bname	Varchar(20)	
Amt	Integer(10)	
Transaction	Integer(3)	

Bank :Table

Acno	Cname	Bname	Amt	Transaction
A001	Zuhail	HSBC	25000	3
A002	Amar	Oman Arab Bank	10000	
A003	Roshan	Bank Muscut	15000	5
A004	Jubi	HSBC	20000	4
A005	Ravi	Bank Muscut	35000	11
A006	Suman		18000	2

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

ii) Insert a new row with values: A007,Kushal, HSBC. 1

iii) Change the datatype of cname to char(20). 1

iv) Show the customers doing transaction with HSBC or are having amount less than 15000. 1

v) Increase the size of Bname column to 25. 1

vi) Change the bank of Account no 'A003' to HSBC and transaction to 5. 1

vii) List the various banks in the table in decreasing order of Amount. 1

viii) List the details of customers whose name contains atleast 6 characters. 1

ix) Add a new column Nationality as varchar(10) into the table. 1

x) Delete the details of customers with less than 5 transactions. 1

xi) Increment the amount by 15% if transaction is more than 10. 1

xii) Change the name of column 'Amt' to Amount. 1

xiii) Show details of HSBC and Oman Arab bank in increasing order of their transactions. 1

xiv) Add a primary key constraint on Account no. 1

xv) List the Accountno, amount,transaction and banks of all customers whose amount is in range 15000 to 25000 in descending order of amount and ascending order of transaction. 1

xvi) Display the name,length and position of 'a' in names of all customers whose bank is known. 1

xvii) Show the Accountno, bank and transactions all banks (if bank is not known display "not mentioned"). 1

xviii) Display the customer name joined with first 4 characters of bank name for all banks. 1

xix) Display a Report as:<bank>is charging RO <2% of Amount>as commission for every transaction. 1

5. Write the output of the following queries:

i) Select upper(substr('compromise',-7,4)); 1

ii) Select concat(concat('Cname'," "),Bname) from Bank where Amt=10000; 1

iii) Select char(66,'97.7',110.3,106.7); 1

iv) Select sqrt(pow(length('program'),2)); 1

v) Select round(7341.56,1)+truncate(1523.14,-2); 1

6. Remove the errors (if any) from the following queries and rewrite the corrected ones.

i) Select right('Cname',-3,3); 1

ii) Select 9*7+5%3 as final result; 1

iii) Select round(123),mod(2,3); 1

iv) Select Bname,Amt from bank where transaction between 2 && 5; 1

v) Select Acno,Cname from bank where Bname=null; 1

****The End****