## INDIAN SCHOOL SOHAR <br> FINAL EXAMINATION (2015-2016) <br> INFORMATICS PRACTICES (065)

- Please check that this question paper contains 5 printed pages.
- Please check that this question paper contains 5 questions.
- Please write down the Serial Number of the question before attempting it.

Class: XI
Maximum Marks: 70
Date: 09 -03-2016
Time Allowed: 3 Hours
Note: (i) All the questions are compulsory.
(ii) Answer the questions after carefully reading the text.
1.
a) What is MICR? Write any two advantages of MICR.
b) Differentiate between Firmware and Liveware.
c) Write short note on :-
i)Assembler ii)Interpreter
d) Define the term:
i) Phishing ii)Adware
e) What is Disk defragmentor?Why is disk fragmentation useful?
2.
a) Which error is harder to locate and why?
b) How can an operator precedence be over ruled in an expression?
c) Write the equivalent java expression: $2-\mathrm{y} e^{2 y}+4 \mathrm{y}$
d) Are values "true" and true the same?
e) Write the code that obtains the selected item of Combobox1(CB1) and adds it to the list of Combobox2(CB2).
f) What is column alias? 1
g) Define Alternate key. 1
h) What is DML? 1
i) What is Default value? How do you define it? What is the default value of column for which no default value is defined?
j) Differentiate between SUBSTR and INSTR function in sql.
3.
a) Predict the output after execution of the following code:

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

ii) int $\mathrm{i}=1$, sum $=0$;
while $(\mathrm{i}<=10)$
\{
sum=sum+i;
i+=3;
\}

System.out.println(sum);
b) Rewrite the following code using 'if...else' statement: switch(choice) \{
case 1: System.out.print("You selected 1");
break;
case 2 :
case 3: System.out.print("You selected 2 or 3");
break;
case 4: System.out.print("You selected 4");
break;
default:System.out.print("Please enter your choice between 1-4");\}
c) Find the errors from the following code segment and rewrite the corrected code:
mess=(Age>=18)"eligible to caste vote":"under age";
JOptionPane.showMessageDialog(mess);
d) Rewrite the following code using 'for' loop:
int num $=0, \mathrm{a}=1, \mathrm{i}=0$;
while (i<10) \{
System.out.println(a);
num++;
if( $(1 \% 2==0)$
a +=num;
else
a -=num;
i++; $\}$
e) Write java code to print the sum of the following series in jTextAreal:
$\frac{1}{2}+\frac{3}{4}+\frac{5}{6}+\ldots \ldots \ldots \ldots+\frac{n}{n+1}$
f) Write a program to check whether a number is prime or not.
g) Design the following application and answer the questions that follow :

i) Write the code for Clear button to clear all the textfields (txtPrinciple \& txtTime) and checkbox. Set the default choice in the radio button as Fixed Deposit(radioFD).
ii) Write the code for Amount button to calculate Amount $\left(\mathrm{P}^{*}(1+\mathrm{R} / 100)^{\wedge} \mathrm{T}\right)$ and display the value in the textfield(txtAmount).
iii) Write the code to calculate Interest (Amount - Principle amount) and display the value in the textfield(txtInterest).
iv) Write codes to exit the application displaying a message "Thank you".

Rate $(\mathrm{R})$ is calculated based on the time according to the following table:

| Account | Time | Rate |
| :--- | :--- | :--- |
| Fixed deposit | $1-5$ <br> $>5$ | $12 \%$ |
| Recurring <br> Deposit | $2-7$ <br> $>7$ | $11 \%$ |

An additional rate of $2 \%$ is given to the senior citizens i.e. if the chkSR checkbox is checked.
4.
a) Write SQL commands for the following :

TableStructure : Coach

| Column name | Data Type | Constraint |
| :--- | :--- | :--- |
| Coach_id | Number(2) | Primary key |
| Coach_name | Varchar(20) |  |
| Age | Int(2) |  |
| Sports | Varchar(20) |  |
| Payment | Int(8) |  |
| Sex | Char(1) |  |

## Table :Coach

| Coach_id | Coach_name | Age | Sports | Payment | Sex |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Karan | 34 | Swimming | 10000 | M |
| 2 | Zubin | 36 | Basketball | 15000 | M |
| 3 | Juana | 34 | Squash | 12000 | F |
| 4 | Ravina | 37 | Swimming | 10000 | F |
| 5 | Zareen | 33 | Karate | 11000 | M |

i) Create table Coach on the table structure given above.
ii) Insert a new row into the table:6,Kishore,34,Cricket,18000,M.iii) Add a not null constraint on Coach_name.
iv) Display a report listing Coach_name,Sports ,Payment and Annual_payment received in a year assuming that the payment is paid on monthly basis.v) Minimize the size of column Sports to 15 .vi) Increase the payment of swimming coaches by 1000.vii) Display the details of coaches who have 6 lettered names.viii) Change the name of column Coach_id to CID.ix) Add a new column Phone as int(10) into the table.1
x) List all unique sports in the table Coach. ..... 1
xi)Change the Coach of basketball to Sanjay. ..... 1
xii) Delete the records of Coaches whoseCoach_id is 5. ..... 1
xiii) Increment the payment of coaches by $20 \%$ if it is less than 12000 . ..... 1
xiv) List Coach_id,Coach_name,Sports and position of character 'a' in names of all coaches.
xv) Remove column Sex.xvi) Create another table 'Coach_1' from existing table Coach with id, coach name, sports andAnnual_payment of all coaches.1
b) Write the output of the following queries:
i) Select Round(678.293,-1),Truncate(678.293,-2); 1
ii) Select Ucase(MID("Practices",3,3)); 1
iii) Select $\operatorname{sign}(-4 / 3 * 5 / 2-2)$; 1
iv) Select $\operatorname{pow}(9,3), 9 \% 3$; 1
c) Remove the errors (if any) from the following queries and rewrite the corrected ones.
i) Select Uppercase("COACH");
ii) Select current_date;
.
a) What do you think E-learning courses have high dropout rate?
b) What are the benefits does E-business offer to an organization?
c) Name two E-Governance sites. 1
d) Define the term Infomania.

