

INDIAN SCHOOL SOHAR
I TERM EXAM (2015-16)
INFORMATICS PRACTICES (065)

Class: XII
Date: 22 September, 2015

Marks: 70
Time: 3 Hours

Instructions:

- i) All questions are compulsory.*
ii) Answer the questions after carefully reading the text.
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1. a) Explain the following tags: 2
 i) <TD> ii) <HR>
- b) Explain Multilevel inheritance. 2
- c) Write HTML code for: 2
 i) Inserting an image "house.gif" in the center of the browser's window.
 ii) Changing the background color of the page to purple and the text color to white.
- d) Define a method. What is method prototype? 2
- e) What will be the scope of: 2
 i) a protected class ii) a private class
- f) Differentiate between 'String' and 'StringBuffer' objects. 2
- g) Name the methods used for: 2
 i) setting the number of rows displayed by the text area.
 ii) selecting all characters in the text field.
- h) i) _____ and their classes are imported through import statement. 2
 ii) In Java, methods reside in _____.
- i) Write HTML code for creating the following table: 2
- | | | |
|---|---|--|
| A | | |
| B | C | |
| | D | |
| E | | |
2. a) Compare Candidate and Alternate keys. 2
- b) What will happen when ROLLBACK and SAVEPOINT statements are issued? 2
- c) Explain table joins. 2
- d) What are multiple row functions? 2
- e) What is a foreign key constraint? Can you define multiple foreign key constraints for a table? 2
- f) What is the significance of NOT NULL constraint? 2
- g) i) A _____ specifies that the combined value of given columns must either be unique across the table or have NULL values. 2
 ii) The _____ command is used to give permission to one user to access the table of another user or do any other desired operation according to the privileges assigned.

3. a) Find the output: 2
- ```
class Patt{
 int calc(int u){
 if(u%2==0)
 return u+10;
 else
 return u*2;
 }
 void Pattern(char M, int B){
 System.out.println(calc(B)+ "" +M);
 }
 public static void main(String args[]){
 Patt p1=new Patt();
 pt.Pattern('*',0);
 pt.Pattern('&',3);
 }
}
```
- b) Rewrite the following code using 'switch' statement 2
- ```
if(s1=='a')
    num=1;
else if(s1=='b')
    num=2;
else if (s1=='c')
    num=3;
System.out.println(num);
```
- c) Find the errors from the following code segment and rewrite the corrected code underlining the correction made: 2
- ```
int i==2, j;
do{
 j+=I;
 i+2;
}while(j<20)
JOptionPane.showMessageDialog("Thank You");
```
- d) Rewrite the following code using 'do...while' loop: 2
- ```
int i, j;
for(i=1, j=5; ++i<=5; )
    j+=i;
    i++;
System.out.print(j+i);
```
- e) Create a method CI that takes principal, rate and time as its parameter and returns Compound Interest. 2
- f) Create a 'Store' class with following specifications: 2
- i) Variables: Store ID, Proprietor, Location
 - ii) Constructor method(s)

Also write code for creating object of Store class

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

The screenshot shows a Java Swing window titled "Good Health Hospital". It contains the following elements:

- Input fields for "Patient Number", "Doctor Consultancy", "No. of days of stay", and "OT Fee".
- A dropdown menu for "Category of Services" with "Private" selected.
- A checkbox for "BPL Patient".
- Three output/input fields at the bottom: "Sub Total", "Tax 12%", and "Amount to Pay".
- Three buttons on the right: "Sub Total", "Amount", and "Clear".

Write Java code for the following:

- i) To assign Sub Total(subTot) as 0, Tax(tax) as 0 and Amount to Pay(amtPay) as 0. Also set them as un-editable. 1
- ii) When "Sub Total" (subTotBTN) button is clicked: 2
To calculate and display Sub Total charges as per the criterion given below:

Category of Services	Stay Charges
Private	2000 per day
Semi Private	1000 per day
General	100 per day

Sub Total is calculated by adding Stay charges(stay), Doctor Consultancy fee(docFee) & OT Fee(otFee).
Doctor Consultation fee not to be charged if it's a BPL patient(chkBpl).
To enable "Amount" button
- iii) When "Amount" (amtBTN) button is clicked: 2
To calculate Tax as 12% of Sub Total and Amount to Pay as Sub Total+Tax
To display Tax and Amount to Pay in their respective text fields.

4. a) Write a SQL command for creating a table “**Empl**” as per structure given below: 2

Table: **EMPL**

Field Name	Data Type	Size	Constraint
EmpID	Int		Primary Key
EName	Varchar	30	Not Null
Dept	Varchar	10	
City	Varchar	25	

- b) In a database there are two tables “Empl” and “Sal” as shown below:

Table: **EMPL**

EmpID	EName	Dept	City
101	George Smith	Finance	Howard
105	Mary Jones	HR	Paris
152	Sam Tones	Production	Upton
215	Manila Sengupta	IT	New Delhi
244	Henry Willaims	IT	Boston

Table: **SAL**

EmpID	Salary	Benefits	Designation
101	75000	15000	Manager
105	65000	15000	Manager
152	80000	25000	Director
215	75000	12500	Operator

Write the SQL commands for the following:

- i) Show details of all Managers in IT department. 1
- ii) Show ID and Names of employees not located in New Delhi and Paris. 1
- iii) List the details of employees whose city name ends with ‘ton’. 1
- iv) Display the average salary of employees in each department. 1
- v) Show the total number of employees of each designation. 1
- vi) List the name of employees getting highest salary. 1
- vii) List ID, Name, Total Salary(Salary+Benefits+1000) of all employees. 1
- viii) List the salary details of Production and HR department employees. 1
- ix) List ID, Name, Salary and Incremented Salary(10% of Salary) of all the employees. 1
- x) List details of employees getting salary not in the range 70000-80000. 1
- xi) Display details of all employees along with their salary details in increasing order of Designation and decreasing order of Department. 1
- xii) Add a new column Grade as Char(1) into employee table. 1
- xiii) Change designation of Employee ID 215 to Supervisor. 1
- xiv) Predict the output of:
 - i) Select Round(769.76, -1), Round(769.76,-2); 1
 - ii) Select Truncate(769.76, -1), Truncate(769.76,-2); 1
 - iii) Select UCase(Substr("department", -8,4)), LCase("desIgnatIOn"); 1
 - iv) Select Mod(14*9, 90/9); 1
- xv) Write statements for:
 - i) Removing "&" from "&&&IP XII&&&" 1
 - ii) Finding the position of "oo" in "loophole". 1

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