

INDIAN SCHOOL SOHAR
II TERM EXAM (2014-15)
INFORMATICS PRACTICES (065)

Class: XII
Date: 29 November, 2014

Marks: 70
Time: 3 Hours

Note: (i) *All questions are compulsory*
(ii) *Answer the questions after carefully reading the text.*

1. a) Define Open Source Software. Give at least two examples of OSS. Justify that free software is not OSS. 2
- b) What is a MAC address? How is it different from an IP address? 2
- c) Expand the terms: ISCII, BOSS, GNU and FLOSS. 2
- d) What is a Domain Name? What is Domain Name Resolution? 2
- e) Write one advantage of Star topology over Bus topology and one advantage of Bus topology over Star topology. 2
2. a) What are container controls? Name any two mid-level container controls. 2
- b) Write any four features of XML. 2
- c) What is implicit and explicit type conversion? 2
- d) Explain the concept of Overriding Methods and Hiding member variables. 2
- e) Explain setCharAt() and delete() methods of a StringBuffer class. 2
3. a) What is the purpose of GROUP BY clause? 2
- b) Define the following terms : i) Redundancy ii) Inconsistency 2
- c) What must exist on the Parent table before creating a FOREIGN KEY constraint on the Child table in MySQL 2
- d) Does MySQL allow to change the primary key in all cases? If there is some special case, please mention. 2
- e) What is the use of IFNULL() function? Give suitable example. 2
4. Read the following case study and answer the questions that follow:



i) When Clear (clear) button is clicked: 1
 Clear the contents of text fields(cname, nod, rate, cof, amt), clear the check boxes(tpkg, gym, laundry) and set 'Single' room type as the default choice.

ii) Write the code for 'billBTN' to display room rent per day and calculating cost of facilities & amount and display them in their respective TextFields. 2

Room Type	Rate per day
Single	1500
Double	2800
Deluxe	5000

Facility	Cost
Tour Package	7000
Gym	2000
Laundry	1000

iii) What should be done to assign Alt+B as the access key for "Bill" button? 1
 5. a) Carefully study the code given below. It is giving an error whenever it is compiled. 2

```
float f=12.5;
double d=123.6543;
int num1=Math.round(f); //Statement 1
float num2=Math.round(d); //Statement 2
int num2=Math.round(d); //Statement 3
```

Identify the statement that will result in an error. Justify.

b) Write the output of following code: 2

```
class Patt{
    void Pattern(char M, int B){
        for(int CNT=0; CNT<B; CNT++)
            System.out.print(""+M);
        System.out.println();
    }
}
```

```

}
public class Hello {
    public static void main(String args[]){
        Patt pt=new Patt();
        pt.Pattern('*',0);
        pt.Pattern('#',4);
        pt.Pattern('@',3);
    }
}

```

c) Rewrite the following code using 'while' loop: 2

```

int i, j=2;
for(i=1; i<=6; )
    i++; j+=2;
System.out.println("i=" + i + "j=" + j);

```

d) Write a method 'rev', in Java, that accepts a string as parameter and returns its reverse. (Use substring method) 2

e) String Message= "Hello! How are you?", Msg1, Msg2; 1
 Msg1=Message.substring(7);
 Msg2=Message.substring(0,5);
 What will be the contents of the variables Msg1 and Msg2 after the above statements are executed?

f) Write HTML code for creating the following table: 2

1	2	3
4		5
6	7	

6. a) Write the SQL command to create the table Doctor including its constraints. 2

Table : **DOCTOR**

Column Name	Data Type	Size	Constraint
ID	Int		Primary Key
Name	Varchar	30	NOT NULL
Dept	Varchar	15	
Exp	Int		
Sex	Char	1	
DOJ	Date		

b) Answer the questions based on the tables given below:

Table : FLIGHTS

FL_NO	STARTING	ENDING	NO_FLIGHTS	NO_STOPS
IC301	MUMBAI	DELHI	8	0
IC799	BANGLORE	DELHI	2	1
MC101	INDORE	MUMBAI	3	0
AM812	KANPUR	BANGALORE	3	1
IC302	DELHI	MUMBAI	8	0
IC899	MUMBAI	KOCHI	1	4
AM501	DELHI	TRIVANDRUM	1	5

Table : FARES

FL_ID	AIRLINES	FARE	TAX_PER
IC302	INDIAN AIRLINES	4300	10
IC899	INDIAN AIRLINES	8300	10
MC101	DECCAN AIRLINES	3500	
AM812	JET AIRWAYS	4500	5

- i. Count the number of flights from each source. 1
 - ii. Show the highest fare of each airline. 1
 - iii. Display details of flights whose destination is same as that of IC899. 1
 - iv. Show the details of nonstop flights. 1
 - v. List details of flights whose tax percentage is not known. 1
 - vi. Show details of flights where fare is in the range 4000-5000 (excluding both values). 1
 - vii. Display the difference between highest and lowest fare of each airline. 1
 - viii. List a report displaying No, Starting, Ending, Airlines and Fare of each flight. 1
 - ix. Show details of flights whose destination is neither Mumbai nor Bangalore. 1
 - x. Reduce the fare of all Deccan flights by 20%. 1
 - xi. Add a new column seats as int into Flights table. 1
 - xii. List details of flights whose source does not start with 'D' or 'K'. 1
 - xiii. Predict the O/P of:
 - I) Select Round(876.79,1), Round(876.79,-2); 1
 - II) Select Truncate(876.79,1), Truncate(876.79,-2); 1
 - III) Select Concat('CO',MID('Student',-7,2)); 1
 - xiv. Find the errors:
 - I) Select POWER(3,2)+TRUNCATE(10.67); 1
 - II) Select TRIM(Trailing and Leading '#' from '##TWITTER##'); 1
 - III) Select MOD(Instr('Loop','o'),3) as REM; 1
7. a) Write any two Social and Economic benefits of ICT. 2
- b) Web address of national portal of India is: 1
- I) India.gov.in
 - II) GOI.gov.in
 - III) India.nic.in
 - IV) None of the above
- c) What is Infomania? 1
- d) What benefits does an e-business offer to the customers? 1

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