

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

Class: XII

Date: 26 November, 2015

Marks: 70

Time: 3 Hours

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

1. a) Read the given activities carefully and mention whether the activity is snooping or eavesdropping: 2
I) Getting someone's login information by casually watching what he/she is typing.
II) Setting up unauthorized parallel telephone lines
III) Installing some software/hardware which captures the data while on its way.
IV) Reading the files on someone's computer in an unauthorized manner.
- b) What is a MAC address? How is it different from an IP address? 2
- c) Kristen has typed the following text in the address bar: 2
<http://www.cbse-international.com/help.htm>
Identify and differentiate the URL and Domain name with reference to the example given above.
- d) Define any two threats to Network Security? 2
- e) Which of the following are open source software : 2
GNU, MS-Office, BOSS, Windows OS
2. a) What is a markup language? Compare XML and HTML. 2
- b) Write HTML TAGS to define the following 2
i) A check box ii) A password box
- c) Give the limitations of 'switch' statement. 2
- d) Define Class and Object with reference to Object Oriented Programming. 2
- e) What is Inheritance? What are its benefits? 2

3. a) A numeric data field CNT contains 35675.8765. Write a SQL command to round off CNT to
 I) Whole number II) Upto 3 decimal places 2
- b) Differentiate between SQL commands DROP TABLE and DELETE. 2
- c) What are three transaction control statements in MySQL? Give examples. 2
- d) Explain Table and Column constraints. 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:

The screenshot shows a window titled "Alpha Chemicals PVT Ltd" with a standard Windows-style title bar. Inside the window, there is a form with the following elements:

- Text: "Enter Item Code Quantity, Price and Select Class of city"
- Text: "Item Code" followed by a text input field.
- Text: "Quantity" followed by a text input field.
- Text: "Price per Unit" followed by a text input field.
- Text: "Class of City" followed by three radio buttons labeled "i", "ii", and "iii".
- Text: "Sales Price" followed by a text input field.
- Text: "Service Charges" followed by a text input field.
- Text: "Net Price" followed by a text input field.
- Three buttons at the bottom: "Calculate Service Charge", "Calculate Net Price", and "Exit".

Service Charges Rates are as follows

Class of City	Rate of Service Charges
i	10% of sales price
ii	15% of sales price
iii	20% of sales price

- i) Calculate service charges when 'Calculate Service Charge' button is clicked. Also make 'Calculate Net Price' button un-editable. 2
- ii) Calculate net price when 'Calculate Net price' button will be clicked. Also make 'Calculate Service Charge' button un-editable. 2
- iii) Close the application when 'Exit' button is clicked. 1

5. a) Find errors from the following code segment and rewrite the corrected code underlining the corrections made: 2
- ```

int i = 1; j=5;
do{
 j+=i;
}while(++i<=5)
jTextField2.display(j);

```
- b) Find the output: 2
- ```

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

```
- 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 function in Java that accepts three numbers as parameters and returns the greatest one. 2
- e) Given a String object namely 'subject', having value as "123" stored in it. What will be the result of following? 1
- ```

String subject="123";
JOptionPane.showMessageDialog(this, subject.length()+Integer.parseInt(subject));

```
- f) Predict the output of: 1
- ```

System.out.println(Math.round(21.5)+"\t"+Math.round(21.6));

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

**Table : COACH**

| Column Name | Data Type | Size | Constraint  |
|-------------|-----------|------|-------------|
| ID          | Integer   |      | Primary Key |
| CName       | Varchar   | 20   | Not Null    |
| Age         | Integer   |      |             |
| Sports      | Varchar   | 10   |             |
| DOA         | Date      |      |             |
| Pay         | Integer   |      |             |

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

**Table: Coach**

| ID | CName   | Age | Sports   | DOA        | Pay  |
|----|---------|-----|----------|------------|------|
| 1  | Pankaj  | 24  | Karate   | 2011-10-10 | 4000 |
| 2  | Shalini | 21  | Squash   | 2010-01-01 | 2000 |
| 3  | Sanjay  | 22  | Swimming | 2010-12-12 | 3000 |
| 4  | Manvi   | 25  | Swimming | 2009-01-07 | 1000 |
| 5  | Govind  | 21  | Karate   | 2009-10-05 | 3500 |

**Table: Trainee**

| TNo  | TName    | TAge | ID | Fee  |
|------|----------|------|----|------|
| T001 | Jugal    | 34   | 1  | 500  |
| T002 | Sharmila | 31   | 1  | 200  |
| T003 | Sandeep  | 32   | 2  | NULL |
| T004 | Rakesh   | 42   | 3  | 200  |
| T005 | Shyam    | 50   | 4  | NULL |

- i. Count the number of coaches for each sport. 1
  - ii. List all the trainees getting coaching from Pankaj. 1
  - iii. Show No and Name of Trainees who are not paying any fee. 1
  - iv. Show details of coaches appointed before 2010. 1
  - v. Display details of Karate trainees paying fee more than 200. 1
  - vi. Show details of Squash and Swimming trainees in increasing order of their names. 1
  - vii. Show details of coaches whose name end with 'i' but does not start with 'm'. 1
  - viii. Show the highest pay of each sport. 1
  - ix. Increase pay of all Squash coaches by 25%. 1
  - x. Increase size of sports column to 15. 1
  - xi. Delete records of all Karate coaches whose pay is not in the range 1000-2000. 1
  - xii. Show the average pay of all coaches whose age is not more than 23. 1
  - xiii. Insert a new row into coach: 6, Vijendra, 29, Boxing, 2015-1-1. 1
  - xiv. Show name & sports from coach table, no & fee from trainees table along with their matching IDs. 1
  - xv. Add a Not Null constraint on DOA. 1
  - xvi. Predict the O/P of:
    - I) `Select instr(substr("truncated",-5),'t');` 1
    - II) `Select Round(876.79,-2), Truncate(876.79,-2);` 1
    - III) `SELECT SUBSTR(TRIM(' JAVA PROGRAMMING '),6,7);` 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) Define front end and back end. 1
- d) How has our society benefited from e-commerce? 1

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