

INDIAN SCHOOL SOHAR
INFORMATICS PRACTICES (065)
PRE BOARD EXAM (2015-16)

Class: XII
Date: 20 January, 2016

Marks: 70
Time: 3 Hours

Note:

- *Please check that this question paper contains 4 printed pages.*
- *Please check that this question paper contains 7 questions.*
- *Please write down the Serial Number of the question before attempting it.*
- *All questions are compulsory.*
- *Answer the questions after carefully reading the text.*

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|----|----|--|---|
| 1. | a) | Arun is not clear about the wireless and wired media of communication. Kindly describe it to him with suitable example. | 2 |
| | b) | Give the terms that can be used for:
i) Cable TV network spread over a city
ii) Two cell phones connected through Bluetooth | 2 |
| | c) | Expand the following terms: ISCII, ODF, JPEG, FSF. | 2 |
| | d) | Differentiate between STAR and BUS topology. | 2 |
| | e) | Explain the following terms:
i) Apache Server ii) Linux | 2 |
| 2. | a) | What is Function Overloading? | 2 |
| | b) | Differentiate between <P> and
 tags. | 2 |
| | c) | Differentiate between BGCOLOR and BACKGROUND attributes of <Body> tag. | 2 |
| | d) | Explain Multiple and Multilevel forms of Inheritance. | 2 |
| 3. | a) | What are important transaction properties? | 2 |
| | b) | What do you understand by the terms Cardinality and Degree of a relation in relational database ? | 2 |
| | c) | How is a PRIMARY KEY constraint different from UNIQUE key constraint? | 2 |
| | d) | What is the significance of GROUP BY clause in an SQL query? | 2 |
| | e) | A table 'T1' has a primary key column 'Roll'. Another table 'T2' also has 'Roll' column which refers to the primary key column of table 'T1'. What will be effect on table 'T2', if table 'T1' is dropped from the database? | 2 |

4. Answer the following questions on the basis of screen given below:

The screenshot shows a Java Swing window with a blue title bar. Inside the window, there are five text fields and three buttons. The labels for the text fields are: "Name of customer", "Bill Amount", "Mode of Payment" (with a dropdown arrow), "Discount", and "Net Amount". The "Mode of Payment" dropdown menu is currently set to "Cash". There are two buttons labeled "Discount" and "Net Amount" positioned above their respective output text fields. A "Stop" button is located at the bottom right of the window.

- a) Write code to make the textfields for discount(disc) and net amount(namt) uneditable. 1
- b) Write the code for clearing the contents of all text fields and selecting "Cash" mode of payment 1
- b) Write the code for 'discBTN' to display discount amount. If the bill amount is more than 15000 then give an additional discount of 2% on bill amount. 2

Mode of payment	Discount
Cash	8%
Credit Card	7%
Debit Card	Nil

- c) Write the code for 'netBTN' to display net amount. 1
5. a) Find the output: 2
- ```
int count, ans;
ans=1;
count =2;
do{
 ans = ans + count;
 count *= 3;
} while(count <=12);
JOptionPane.showMessageDialog(null, ans);
```

- b) Find the error(s). Rewrite the corrected code underlining the corrections made. 2
- ```

int k = = 0; sum;           //Declaring k and sum as Integer
{
sum = k;
k += 2;
}
while (k=<20);
jTextField1.append(Integer.toString(sum));

```
- c) What will be the values of 'a' and 'b' after execution of the following code: 2
- ```

int a=1,b=2;
if(++ b <5)
{
a* = b;
}

```
- d) Convert the following segment into an equivalent do...while loop 2
- ```

int x,c;
for(x=10, c=20; c>=10; c=c-2)
x++;

```
- e) Write the HTML code for: 2
- i) producing a Textarea with 10 rows and 30 columns
 - ii) an ordered list starting with 'E'
- f) Write code for creating a method 'sumDigit' that takes an integer as an argument and returns the sum of its digits. 2

6. Answer the questions based on the Coach & Player tables given below:

Table : **COACH**

Column Name	Data Type	Size	Constraint
CID	Integer		Primary Key
CName	Varchar	30	NOT NULL
Age	Integer		
Sports	Varchar	10	
Sex	Char	1	

Coach

CID	CName	Age	Sports	Sex
1	Warun	35	Squash	M
2	Ravina	24	Lawn Tennis	F
3	Karan	30	Table Tennis	M
4	Tarun	22	Football	M
5	Aryan	38		M

Player

CID	PID	DOJ	Fee	Sex
1	T01	2015-02-21	2500	M
1	T02	2016-01-01	1600	M
2	T03	2014-09-30	1800	M
5	T04	2014-04-28	1200	F

- a) Create table Coach including its constraints 2
 - b) List details of female players who joined before Jan 2014. 1
 - c) Display the ID of players who joined in the month of December and are paying a fee more than 2000. 1
 - d) List the details of 'Football' and 'Tennis' players. 1
 - e) Give a discount of 5% to the players of 'Squash'. 1
 - f) Insert a new row into player table: 4, T05, 2016-01-02, F 1
 - g) Count the number of players with each coach. 1
 - h) Display the sum of fee collected for each sport. 1
 - i) Add a new column PName varchar(20) into player table. 1
 - j) List the coaches with 'na' or 'an' as last characters in their names. 1
 - k) List the players who did not join the club this year. 1
 - l) Create a new table mPlayers consisting of PID, CName and Sports of all male players. 1
 - m) Increase size of PName to 35. 1
 - n) Change CID to 4 and fee to 2000 for Player ID 5. 1
 - o) Display a report: <CName> is the coach of <PName>. Arrange the result in increasing order of CName and PName. 1
 - p) List the players whose coach age is more than 25 years. 1
 - q) Give the O/P of:
 - i) Select Round(1001.86), Round(1001.86,-1), Round(1001.86,1);
 - ii) Select Truncate(1001.86,0), Truncate(1001.86,-1), Truncate(1001.86,1);
 - iii) Select Count(Distinct Sports) from coach; 3
- 7.
- a) Define an entity. What is meant by entity type and entity instance ? 2
 - b) List of features of a good programming interface. 1
 - c) Make an ER diagram that shows many players playing one game. 1
 - d) How is e-learning beneficial to students? 1

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