



Brilliant Public School

Seepat Road Bahatarai, Bilaspur (C.G.)

Pre-Board - I, 2017-18

Class – XII

Subject – Informatics Practices (065)

Time: 3:00 Hours

Date: 14.12.2017

M.M. – 70

Thursday

- I. All Questions are compulsory
II. Marks are given in front of each question

Q1.

- Define the following: Repeater and a Gateway 1
- Give two advantages and two disadvantages of tree topology? 1
- Which protocol is used for transferring the files to and from a remote host? 1
- Which transmission medium should be used to transfer data across two countries at very high speed? 1
- What is the difference between Bridge and Router? 1
- What is snooping? 1
- Write one point of difference between a freeware and free software? 1
- Write any two uses of GNU. 1
- What are the dangers associated with proprietary standards? 1
- Compare Static and dynamic fonts? 1

Q2.

- Which command is used in Mysql to discard the changes in database? 1
- Manish created a table student in Mysql. He does not require the email_id column available in the student table. Which command will he issue to remove the email_id from the student table? 1
- What is the significance of Group by Clause in Mysql? 1
- What is Equi Join? 1
- Define Primary key constraint? How will you add primary key constraint later in a Table? 1
- The CoachName column of a table "Club" is given below: 3

CoachName
Raghav
Sumit
Anurag
null
Lucky

Based on this information, find the output of the following queries:

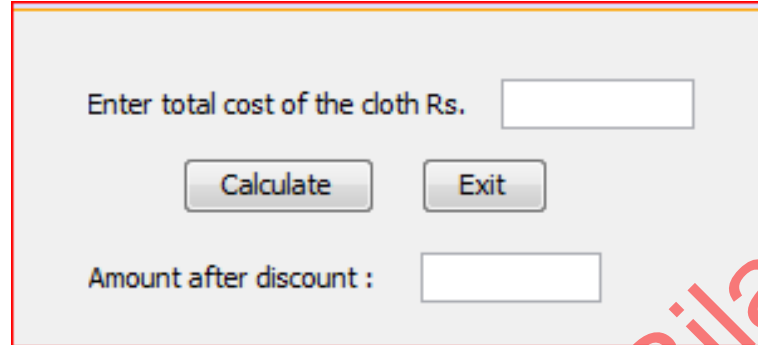
- SELECT CoachName FROM CLUB WHERE CoachName LIKE "%a%";
 - SELECT CoachName FROM CLUB WHERE CoachName LIKE "_u%";
 - SELECT count(Coachname) from CLUB;
- g) A table book in a database has 5 columns and no rows init. What is its degree?
What will be its degree if 3 rows are added in the table? 2

- Q3. (a) Bharathi has taken a list control on her form display the list of all items available in her shop. But she wants to allow the user to select multiple items from his list Control. Which property of jList should she use to do the same? 1
- (b) Which method of j Frame is used to close the frame without closing the application. 1
- (c) Identify the error(s) in the following HTML code. Also write the correct code: 1
- ```
<Body colour= "Yellow" Text = "Green">
```
- (d) State some advantages of XML 1
- (e) What will be the value of sum after executing the following code: 1
- ```
int sum= 0, x;
for ( x =1; x <=5; ++ x)
{
    sum+=x;
}
```
- (f) Write the method in java that accepts two numbers as parameters and returns the smaller one. 2
- (g) Differentiate between tag and tag. 1
- Q.4 (a) Define Base Class and Derived Class. 1
- (b) What is the difference between instance and static variable? 1
- (c) What will be contents of jTextArea1 after executing the following statement? 1
- ```
jTextArea1. setText(" Hello\n this is your pre board exam \t Sumit");
```
- (d) Rewrite the following program code using a Switch statement: 2
- ```
if (code ==1)
    Month = "January";
else if (code ==2)
    Month = "February";
else if (code==3)
    Month = "March";
else if (code==4)
    Month = "April";
else
    Month = "No Match";
```
- (e) The following code has some error(s). Rewrite the correct code underlining all the corrections made: 2
- ```
int Sum=0, Step=5 ;
int l;
for (i = 0, i <=5, i++)
{
 Step+=5,
 Sum+=Step ;
}
jTextArea1.showText{" "+Sum);
```
- (f) What will be the contents of jTextField1 and jTextField2 after executing the following code: 2
- ```
jTextFiled1.setText(Math.pow(3,4)+"");
jTextFiled2.setText(Math.round(23.172)+"");
```
- (g) A cloth show room has announced the following festival discount on the purchase of items based on the total cost of the item purchased.

Total Cost	Discount (in percentage)
Less than 2000	5%
2001 to 5000	25%
5001-10000	35%
Above 10000	50%

Design a GUI application to input the total cost and the compute and display the amount to be paid by the customer after availing the discount .

1. Write a method called `festival_discount ()` which calculate net amount after discount The method should total cost as a double type parameter. 2
2. Write the code for calculate button click event procedure to call the `festival_discount ()` method 2
3. Write the code for Exit button. 1



- Q.5 (a) Explain the purpose of DDL and DML commands used in SQL. Also give two examples of each. 2
- (b) Write the output of the following sql commands. 2
- (i) `SELECT ROUND(34.56,4);`
 - (ii) `SELECT MONTH('2014-04-12');`
 - (iii) `SELECT INSTR('RAJEEV GANDHI',4,2);`
 - (iv) `SELECT LCASE('INFORMATIC Practices');`

- (a) Write MySQL commands for (a) to (d) and write the output of (e) on the basis of table Employee: 7

Table: Employee

No.	Name	Salary	Area	Age	Grade	Dept
1	Keshar	40,000	West	45	C	Civil
2	Kirti	35,000	South	38	A	Elec
3	Kripple	60,000	North	52	B	Civil
4	Aryan	38,000	North	29	B	Civil
5	Samsons	42,000	East	35	A	Comp
6	Biswal	29,000	South	34	A	Mech

- a) To display the name of all employees who are in the area south.
- b) To display name and age of all employees having age >40.
- c) To display list of all employees whose salary >= 30,000 and <= 40,000.
- d) To display the employee name whose name start with K
- e) Write the output of the following commands based on the given table "Employee".
 - i. `Select min(age) from employee;`
 - ii. `Select sum(Salary)from employee where Grade= "A";`
 - iii. `Select avg (Salary)from employee where DEPT= "Civil";`
 - iv. `Select count(Distinct DEPT)from employee;`
 - v. `Select max(Salary) from Employee where Area="North";`
 - vi. `Select name, grade from employee where salary>40000;`

- Q6. (a) Write the SQL command to create a table Sports with the following structure: 2

TABLE: SPORTS

FIELD	TYPE	CONSTRAINTS
Sno	Integer(3)	Primary key
Name	Varchar(20)	NotNull
Age	Integer(2)	
Address	Varchar(30)	
City	Varchar(10)	

(b) In a database there are two tables “Employee” and “Dept” as shown below:

2

DEPT

Dept code	Dept Name
MKT	Marketing
FIN	Finance
IT	Information Techonolgy

EMPLOYEE

Emp no	Emp Name	Sex	Dept Code
1	NEHA	F	FIN
2	MUKUL	M	MKT
3	PUNEET	M	IT
4	SUDHA	F	IT
5	DIVYAM	M	MKT

I) Identify the foreign key column in the table Employee.

II) How many rows and columns will be there in the Cartesian product of these two tables?

(c) In a database there are two tables “ITEM”, and “Customer” as shown below:

6

ITEM

P ID	ProductName	Manufacturer	Price
1001	Moisturizer	XYZ	40
1002	Sanitizer	LAC	35
1003	Bath Soap	COP	25
1004	Shampoo	TAP	95
1005`	Leans Salution	COP	350

CUSTOMER

C ID	ClientName	City	P ID
01	Samridh Ltd	New Delhi	1002
05	Big Line	Mumbai	1005
12	97.8	New Delhi	1001
15	Tom n Jerry	Bangalore	1003

Write the commands in SQL for the following:

i. To display the details of items whose price is in the range of 40 and 95?

ii. To display the Clientname, City from Customer and Item name and price from table Item, with their corresponding matching ID

iii. To Increase the price of all the products by 50

Q7. (a) What is Backend and Frontend?

1

(b) Write two positive social impact of E-governance?

2

(c)What control will you suggest for the following:

2

S. No	Control used to	Control
1	A mouse click	
2	Typed text(Multiple line)	
3	Choose gender(M/F)	
4	Submit the form	

(d) How many types of Entity-Relationships are there?

1

(e) How do Computer networks reduce hardware costs of an organization? Explain with the help of example.

1