

### CBSE GUESS - 2015 Class – XII Subject – Informatics Practices

Pre-Board Paper Informatics Practices (065) Class- XII 2013-14 MM - 70

- Q1 Answer the following questions:
  - a) Which protocol is used to transfer hyper text documents on the internet?

[1]

b) Which of the following software are open source:

[1]

Linux, MS Windows7, Photoshop, MySQL

- c) Which transmission medium should be used to transfer data across two continents at very high speed? [1]
- d) Two neighbourhood schools, at distance of 120 metres from each other, decide to join their LANs using UTP cable so that they can share their e-learning resources. But after joining their LANs they are not able to share the resources due to loss of signal in-between. Which device should they use to establish proper connectivity?

[1]

e) Sumit says that the following number indicate an address:

[2]

208.77.186.176

What is the above address called? To which object / Device is it assigned?

f) Define any two threats to Network security.

**[21** 

g) Distinguish between Open Source Software and Proprietory Software with reference of customizability of the software.

[2]

- Q2 Answer the following questions:
  - a) While working in Netbeans, Ranjita included a listbox in the form. Now She wants her friends name to be displayed in it. Which property of ListBox control should she use to do this?

    [1]
  - b) Mr. Ramnath has developed a Java Application through which the students of his school can view their marks by entering their admission number. The marks are displayed in various text fields. What should he do so that the students are able to view but not change their marks in text fields?

    [1]
  - c) Why we are using default clause in a switch statement?

[1]



d) Which HTML tag and corresponding attributes are used to include an image as the background of an HTML Document ?

[1]

e) What is the difference between ListBox and ComboBox? Write one difference.

[1]

f) What do you understand by Abstract Class?

[1]

g) How many times will each of the following loops execute? Which of these is an entry control loop and which one is an exit control loop?

	[ <del>4</del> ]
LOOP 1	LOOP 2
int sum=0,i=5;	int sum=0,i=5
do	while(i<5)
{	{
sum+=i;	sum+=i;
i++;	i++;
<pre>}while(i&lt;5);</pre>	1

h) Write a program in Java to find the sum of all even and odd digits in a given number and print them separately in two text fields.

(Eg. : 273861 output will be : 2+8+6=16 and 7+3+1=11)

- Q3 Answer the following questions:
  - a) If a database "Employee" exists, which MySQL command help you to start working in the database?
  - b) Sahil created a table with some columns in MySQL Later on he realized that there should have been another column in the table. Which command should he use to add another column to the table?

    [2]
  - c) Ajit, a student of class XI, created a table "BOOK". Price is a column of this table. To find the details of books whose prices have not been entered in the table he wrote the following query:

    [1]

Select \* from Book where Price NULL;

Correct the query as it has some errors.

- d) A table "STOCK" in a database has 5 columns and 17 rows. What are the degree and cardinality of this table ? [1]
- e) The LastName column of a table "Employee" is given below:

LastName
Batra
Sehgal
Bhatia
Sharma



Mehta

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

- i. Select lastname from employee where lastname like "a%";
- ii. Select lastname from employee where lastname not like "%a";
- f) Distinguish between Primary Key and Candidate Key with the help of a suitable example. [2]
- g) How DDL Command is different from DML Command? Give one example of each command. [2]
- Q4 Answer the following questions:
  - a) Define a class with reference to object oriented programming.

[1]

b) A IDNO, consisting of 10 digits, is stored in a string variable strID, Now it is required to store this IDNO in a Long type variable IngID. Write a Java Statement to do this. Which method is used to convert numeric value to string value.

[2]

c) Write the purpose of the following statement:

[1]

jTextField1.setText("Informatics Practices".substring(3));

d) What will be the final value of the variable "p" after executing the code given below:

[2]

int p=4,q=50;

while  $(p \le q)$ 

p\*=2;

e) What will be the content of jTextField1 and jTextField2 after executing the following code: [2]

jTextField1.setText(Math.round(2.3)+ "");

jTextField2.setText(Math.pow(2,3)+"");

f) Read the following case study and answer the questions that follows:

Teach Well Public School, wants to computerize the employee salary section. The school is having two categories of employees. Teaching and Non-Teaching. They have different Basic Salary. The school gives additional pay or Rs. 3000 for employees who are working for more than 10 years.

Employee Type	Basic Salary	DA (% of Basic	HRA (% of Basic	Deductions (% of Basic
Турс	Salary	Salary)	Salary)	Salary)
Non-Teaching	12500	31	30	12
Teaching	14500	30	30	12

i. Make all textfields uneditable

[1+3+2+1]



Basic Salary

Deductions

Calculate

\_ D X

O Non-Teaching

O PGT

O TGT

O PRT

More than 10 Years

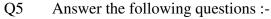
Net Salary

ii. Write the code to calculate the Basic Salary, Deductions, Gross Salary and Net Salary based on the given specifications and print them in respective textfields.

Add 3000 to net salary if employee is working for more than 10 years.

Gross Salary = Basic Salary + DA+HRA Net Salary = Gross Salary – Deductions

- iii. Write the code to uncheck checkbox and set non-teaching as the default category also clear all the textfields.
- iv. Write the code to exit the application. Also display a message "Thanks You" before exiting the application.



- a) What is the purpose of DROP Table command in SQL? How is it different from Delete command? [2]
- b) "PrincipalName" is a column in a table "School". The SQL Queries

[2]

Select count(\*) from schools;

And

Select count(PrincipalName) from schools;

Give the result 28 and 27 respectively. What may be the possible reason for this? How many records are present in the table: 27 or 28?

c) Consider the table Projects given below. Write commands in SQL for (i) to (iv) and output for (v) to (viii)

#### **PRODUCTS**

ID	ProjName	ProjSize	StartDate	EndDate	Cost
1	Payroll-	Medium	2006-03-	2006-09-	60000
	MMS		17	16	
2	Payroll-ITC	Large	2008-02-	2008-01-	500000
			12	11	
3	IDMgnt-	Large	2008-06-	2009-05-	300000
	LITL		13	21	
4	Recruit-	Medium	2008-03-	2008-06-	50000
	LITL		18	13	
5	IDMgnt-	Small	2007-01-	2007-01-	20000
	MTC		15	29	
6	Recruit-ITC	Medium	2007-03-	2007-06-	50000
			01	28	

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i) To display all information about projects of "Medium" ProjSize [1]

ii) To list the projsize of projects whose projname ends with LITL

[1]

- iii) To list ID, Name, Size and Cost of all the projects in descending order of startdate [1]
- iv) To count the number of projects of cost less than 100000

[1]

v) Select sum(cost) from projects;

 $[\frac{1}{4}]$ 

vi) Select Distinct projsize from projects;

[3/4]

vii) select ID from projects where startdate > enddate;

 $[\frac{1}{4}]$ 

viii) select projsize, count(\*) from projects group by projsize;

### Q6 Answer the following questions:-

a) Write the SQL Query to create the table "TEAMS" with the following structure:

[2]

Field	Type	Constraint
TeamCode	Varchar (5)	Primary
		Key
TeamName	Varchar	
	(20)	
TeamLeader	Varchar	
	(20)	
NoOfMembers	Integer	
TeamSymbol	Char (1)	Not Null

b) In the database there are two tables "Company" and "Model" as show below :-

	Company				
CompID	CompName	CompHo	ContPerson		
1	Titan	Okhla	C.B.Ajit		
2	Maxima	Shahdara	V.P.Kohli		
3	Ajanta	Najafgarh	R.Mehta		



Model			
Modello	Comps	MACATOS	
T020	1	2000	
M032	4	2500	
M059	2	7000	
A167	3	800	
T024	1	1200	

- i) Identify the foreign key column in table Model
- ii) Check every value in CompID column of both the tables. Do you find any discrepancy? [2]

c) In a Database there are two tables:

#### **ITEM**

BRAND		
Item_code	Brand_Name	
111	LG	
222	SONY	
333	HCL	
444	IFB	

Item_code	Item_name	Price
111	Refrigerator	90000
222	Television	75000
333	Computer	42000
444	Washing	27000
	Machine	

Write MYSQL Queries for the following:

i) To display item\_code, item\_name and corresponding Brand\_name of those items, whose price is between 20000 and 40000 (both values inclusive)

[2]

- ii) To display item\_code and brand\_name of the item, which has item\_name as "computer" [2]
- iii) To increase the price of all the items by 10%

[2]

- Q7 a) What is the advantage of using IT application over the manual operations?
- b) Give one example each of input values, where RadioButton and CheckBox should be used for efficiency in IT Application.

[2]

c) Mr. Anurag Das working as Manager in Vivian Enterprise wants to create a form in Netbeans to take [2] various inputs from user choose appropriate controls from Label, TextBox, RadioButton, CheckBox, ListBox, ComboBox and CommandButton. Write the most appropriate controls in the third column:

S.No.	Control used to	
1	Enter Name, Address, salary	
2	Select Gender (M/F)	

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3	Select Department from available list	
4	Choose Hobbies (Singing / Dancing / Painting /	
	Sculpture)	

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