

Annual Examination 2017

Subject- Informatics Practices

Class-XI

Time-3Hours

M.Marks-70

1. (a) What is programming language? What is Java? 2
 (b) Write the full form- (i) GUI (ii) IDE 2
 (c) What is the difference between “/” and “%” operator ?Give example. 2
 (d) What is the purpose of if statement? Mention the different forms of if statement. 2
 (e) Differentiate between while loop and do-while loop with example. 2

2. (a) What is Database? Which command is used to create a database in MySQL? 2
 (b) What is NULL values? Is it equivalent to 0(zero) value? 2
 (c) Write the minimum number of column(s) that must be specified while creating a table using CREATE TABLE statement ? Write the command in MySQL to drop a column from a table. 2
 (d) Define – Primary Key, Candidate Key. 2
 (e) Define a Function in MySQL. Which function is used to display the system date? 2

3. (a) Rewrite the following Java code using a Switch Case statement: 2

```
int option = Integer.parseInt(jTextField1.getText());
if(option==1)
    jTextField2.setText("Regular");
else if(option==2)
    jTextField2.setText("Probation");
else if(option==3)
    jTextField2.setText("Visiting");
else if(option==4)
    jTextField2.setText("Contract");
```


 (b) Write the values of sum and x after execution of the following code: 2

```
int sum, x;
sum = 7;
x = 5;
sum = sum + (x++);
```


 (c) Write the output that will be generated by the code given below: 2

```
int i = 7;
int r = 8;
while ( i <= 10)
{
    System.out.println( r * i );
```

```
i = i + 2;
```

```
}
```

(d) How many times will the following while loop execute? 2

```
int y = 7, sum = 0;
while ( y <= 15% )
{
    sum = sum + y;
    y = y + 2;
}
```

(e) The following code has error(s). Rewrite the correct code underlining all the corrections made: 2

```
Int x = 10;
int y = 50;
do;
{
    x + 5 = x;
    x - 5 = y;
} while ( x <= y);
```

4. (a) Name the SQL command used to :

(i) Physically delete a table from the database .

(ii) Display the structure of a table . 2

(b) What is the use of UPDATE statement in SQL? How is it different from ALTER statement ? 2

(c) Mr. James created a table MASTER with 4 rows and 5 columns. What is the Cardinality of the table MASTER? Again he added 3 columns in it, what is the new cardinality? 2

(d) Consider the following table- Employee

Table-Employee

<i>S/No</i>	<i>City</i>
101	Lucknow
102	Delhi
103	Mumbai
104	Delhi
105	Kanpur
106	Delhi

Reena and Zebi are getting the following two outputs of SELECT statements –

Reena:- _____

<i>City</i>
Lucknow
Delhi
Mumbai
Delhi
Kanpur

Delhi

Zebi :-

City
Lucknow
Delhi
Mumbai
Kanpur

Which keyword has Zebi used with SELECT statement to get the above different output? 2

(f) The NAME column of a table SCHOOL is given below:

NAME
Rashmi
Rumi
Abhilasha
Sonam
Mumtak
Saya

Based on this information , find the output of the following queries : 2

- (i) Select NAME from SCHHOL where NAME Like "%a";
- (ii) Select NAME from SCHHOL where NAME Like "A%" or Length(Name)=4;

5. (a) Write a while loop in Java to display all the numbers between 1 to 30 . 2

(b) Write a while loop in Java to display all the numbers from 20 to 2 (i.e. reverse display) 3

6. (a) Write SQL query to create a table "EVEN" with following structure : 2

Field	Type	Size
EventID	Integer	4
EVentName	Varchar	20
Location	Varchar	50
EventDate	Date	
EventMoney	Decimal	8,2

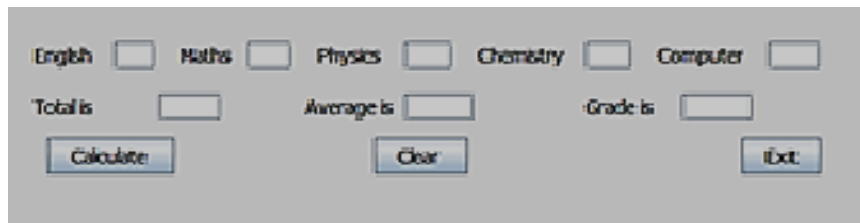
(b) Write the output of the following SQL queries: 3

- (i) select MID("Final Examination",6,5);
- (ii) select ROUND(67.908,2);
- (iii) Select INSTR("Button to Clicked","o");
- (iv) Select DAYOFYEAR("2017-03-09");
- (v) Select TRUNCATE(2.3456,2);
- (vi) Select RIGHT("Informatics",6);

6. (a) Abraham is a programmer at South School. He created the following GUI in Netbeans. The grade is calculated on the basis of average of five subjects (English, Mathematics, Physics, Chemistry, Computers) . The Grade is calculated using the following condition:

(Each subject marks is out of 100)

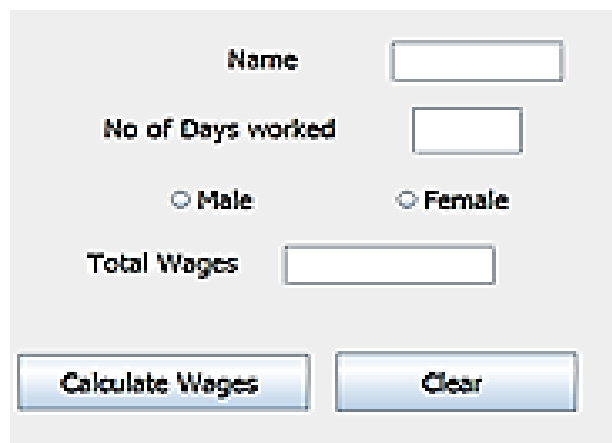
Average	Grade
≥ 90	A
≥ 80	B
≥ 70	C
≥ 60	D
≥ 33	E
< 33	F



Help him to write code for the following :

- (i) Write Java code to calculate and display Total ,average and Grade on the basis of Average of marks and the given criteria on the click on command button “Calculate”. 4
- (ii) Write Java code to clear all Textboxes on the click of “Clear” button. 1
- (iii) Write Java code to close the application on the click of “Exit” button. 1

(b) Goriyoshi is a programmer at Trabani Builders. To calculate wages to be paid to workers she has developed the following GUI in NetBeans.



Male and Female workers are respectively paid at the rate of Rs. 350/- per day and Rs. 300 /- per day. Write Java code to do the following :

- (i) Calculate and display the Total wages in the corresponding jTextField when “Calculate Wages” button is pressed. 3
- (ii) Clear all jRadio Buttons . 1

7. Consider the following table –Teacher and write SQL commands for the questions (a) to (g) and outputs for (h) to (j). 10×1=10

TID	TName	Qualification	Sex	Salary	Subject	DateOfJoin
101	Deepali	MSc	F	35000.00	Maths	1999-03-31
102	Rajat	MSc	M	34500.00	Physics	2000-01-01
103	Hari	MA	M	42000.00	NULL	1997-08-20
104	Hiya	MA	F	32000.00	English	2005-12-22
105	Sumit	MSc	M	47000.00	Chemistry	1998-12-11
106	Rekha	MSc	F	35600.00	Biology	2000-12-21

- (a) To display the records who are females.
- (b) To display the names and qualifications whose subject is NULL.
- (c) To display the details of all teachers whose salary is in between Rs.30000.00 to Rs.35000.00.
- (d) To display all the records in order of DateOfJoin.
- (e) To change the subject NULL to Hindi.
- (f) To display all the teachers names starting with “H” and salary above Rs. 40000.00.
- (g) To delete the records all teachers whose DateOfJoin is between 1999-01-10 and 2000-12-31.
- (h) Select TName,Qualification,Salary from Teacher where Subject=“English”;
- (i) Select * from Teacher where Qualification=“MSc” and Salary<35000;
- (j) Select TName, Subject from Teacher where Sex=“M” and DateOfJoin>“2000-06-30”;

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