1. What would be the output of following? **(CO3: 1 Mark)**
   $X = '1';
   echo $Y = &$X;
   echo $Z = "2$Y";

2. Explain the working of the Trigger defined below **(CO4: 1 Mark)**

```
mysql> delimiter //

mysql> CREATE TRIGGER upd_check BEFORE UPDATE ON account

    FOR EACH ROW

    BEGIN

      IF NEW.amount < 0 THEN

        SET NEW.amount = 0;

      ELSEIF NEW.amount > 100 THEN

        SET NEW.amount = 100;

      END IF;

    END;//

mysql> delimiter ;
```

3. Write a statement in MYSQL that allows you to establish a connection to JIIT database.
   (CO3: 1 Mark)

4. Fill the missing statements for finding 2nd largest number in an array (do not use Loops)
   (CO3: 1 Mark)

```php
<?php
$numbers = array(5, 3, 7, 9, 6, 8);
………………..;
………………………..;


?>
```

5. Create a stored procedure that will find the sum of all the multiples of 33 until 200. **(CO4: 2 Marks)**

6. Why do we change the delimiter to $$ while writing a stored procedure? Is it mandatory to use only $S? What will happen if we don't change it?
   (CO4: 1 Mark)

7. Consider a restaurant. How is its system analogous to the working of web server and application server ? Does the separation of web server and application effect the security of the system? Explain. **(CO1: 2 Mark)**

8. What does cursor do in the following code? Explain the output with value. **(CO4: 1 Mark)**

```
DECLARE
  CURSOR teacher_cur IS
    SELECT teacher_id,
        salary
    FROM  teacher_temp
    WHERE  department_id = 50
    FOR UPDATE;
  incr_sal NUMBER;
BEGIN
  FOR teacher_rec IN teacher_cur LOOP
    IF teacher_rec.salary < 15000 THEN
      incr_sal := .15;
    ELSE
      incr_sal := .10;
    END IF;

    UPDATE teacher_temp
    SET   salary = salary + salary * incr_sal
    WHERE  CURRENT OF employee_cur;
  END LOOP;
END;
```

1. There is a film company with more than 20,000 employees. In order to automate their working, they want to purchase a software. The software should be able to categorize movies based on its profitable income. Also, it should keep track of the budget of the movies and their directors.

The schema for the system is as follows:

> *Film* (title, genere, year, director_id, minutes, budget, gross)
> *Director* (director_id, name, birth, city)

a. Create a procedure to display the name and city of all those directors whose films are super-hit (note-A film is considered to be a super-hit if the gross income is more than 2 times the budget.)
b. Create a function to list all the names of directors whose films are produced with a budget below 20 crores. The function should be executed through the procedure created above.

(CO4: 5 Marks)

Q2) a) A web application developer in an e-commerce company needs to develop a Login and a product listing page. If an admin enters correct login username and password, he will be redirected to the product listing page which contains the details of the product. On this page, admin can enter new product details (Product_id int, Product_name varchar(20), Prod_type varchar(20), Prod_price decimal(20,2)). In addition, he can update the price of product by taking Product Id as input. Create a login and product page. Also, write a PHP script to store the above data in the database. **(CO3: 5 Marks)**