

# UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program / Fourth Semester – 2020

Roll No. ....

Paper: Web Engineering  
Course Code: IT-205 / IT-22405 Part – II

Time: 2 Hrs. 45 Min. Marks: 50

**ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED**

[2 x 10 = 20 Marks]

## Question # 2.

Precisely write down the answers of the following questions.

1. Why do we use Form tag in HTML?
2. Write down a life cycle of a JSP page.
3. What is the difference between Client-side scripting language and Server-side scripting language?
4. Why do we use MVC architecture?
5. What is the purpose of the session page directive in JSP?
6. What is the purpose of using AJAX in web programming?
7. What are the components of Java Beans?
8. How can you achieve client-side validation?
9. What are the components of a HTTP Request?
10. Do you see any header status code? If yes, then write the code and its meaning.

[3 x 10 = 30 Marks]

## Question # 3.

Briefly write down the answers of the following questions.

1. Why do we implement state management in web programming? Briefly explain its all techniques. [10]
2. Write a servlet class which will dynamically create a table of all the information stored in the database regarding to CORONA patients. [10]  
Table contains three columns (patient\_name, patient\_cnic, patient\_location).  
DB Name: Database  
Table name: CORONA (patient\_name(varChar(50)), patient\_cnic(varChar(50)), patient\_location(varChar(50)))
3. Write a JSP page, which will dynamically create an unordered list of CORONA hospitals which are stored in the database. [10]  
Table contains three columns (Hospital Name, Hospital Location, CORONA Ward Incharge).  
DB Name: Database  
Table name: CORONA(hospital\_name(varChar(50)), hospital\_location(varChar(50)), ward\_incharge(varChar(50)))