

(Time: 3 Hours)

Total Marks: 80

- N.B: (1) Question No. 1 is compulsory  
(2) Attempt any three questions out of remaining five questions

- Q1 a) Explain how communication is being done between Web client and Web server [5]  
b) What are the different types of web services? What are the essential features of Web services? [5]  
c) Write a PHP program to find the factorial of a given number. [5]  
d) Differentiate between GET and POST method in Java Servlet [5]
- Q2 a) What is Bootstrap? Explain following terms related to bootstrap: [10]  
1. Typography  
2. Breadcrumbs  
3. Pagination  
4. Container  
b) What is CSS? Differentiate between inline, embedded and external style sheets with example [10]
- Q3 a) What is Session Tracking? Explain various ways of session tracking in servlet? [10]  
b) What is AJAX? Explain the working of AJAX with diagram [10]
- Q4 a) Explain different web services communication models [10]  
b) Explain three tier web architecture with proper diagram [10]
- Q5 a) What is Servlet? Demonstrate the Servlet architecture and explain its working principle [10]  
b) Explain Model View Controller architecture with diagram. [10]
- Q6 a) List and explain various properties for CSS Animation with example [10]  
b) What are different types of arrays created in PHP? Explain with examples [10]