



Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

B.Tech Degree S8 (R,S) Exam April 2025 (2019 Scheme)

Course Code: CST426**Course Name: CLIENT SERVER ARCHITECTURE****Max. Marks: 100****Duration: 3 Hours****PART A***Answer all questions, each carries 3 marks.*

Marks

- | | | |
|----|---|-----|
| 1 | Write short notes on single system images and downsizing. | (3) |
| 2 | Differentiate between
a) Fat client and Thin client b) Stateful and Stateless servers. | (3) |
| 3 | Discuss the topologies of Clients/Server systems with suitable examples. | (3) |
| 4 | Explain the role of Middleware in client server Architecture? | (3) |
| 5 | Enumerate the services provided in a client / server system. | (3) |
| 6 | Define RPC mechanism? | (3) |
| 7 | List out the services provided by x-terminals. | (3) |
| 8 | Explain the terms with example i) availability ii) serviceability iii) agility in Client Server architecture. | (3) |
| 9 | What is a Web Socket and how it works? | (3) |
| 10 | How do browser interact with the servers? | (3) |

PART B*Answer any one full question from each module, each carries 14 marks.***Module I**

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|----|---|-----|
| 11 | a) What are the different possible ways to improve the performance of the Client/Server applications? | (7) |
| | b) Explain the Client/Server System development methodology and its various phases. | (7) |

OR

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|----|--|-----|
| 12 | a) Outline the architecture of a Client/Server Computing System with examples. | (7) |
| | b) Explain client/server security threats in detail. | (7) |

Module II

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|----|---|-----|
| 13 | a) Discuss the relevance of Clients/Server system in adopting open system standards. Justify your answer. | (7) |
| | b) What is Mode View Controller (MVC) and how does it work? | (7) |

OR

- 14 a) How two-tier computing and three-tier computing improves the performance of Client/Server system. (7)
b) Explain architecture for Business Information Systems. (7)

Module III

- 15 a) Explain the server functionality in detail, for a client/server computing. (7)
b) With a neat sketch explain the architecture of CORBA. (7)

OR

- 16 a) What is Inter Process Communication (IPC) and what are the major services it offers? (7)
b) In Client/Server computing, explain the following with example in detail (7)
(a) Dynamic Data Exchange (b) Remote Boot Service (c) Object-linking and embedding

Module IV

- 17 a) What do you mean by Availability, Reliability, Serviceability and Security in Client Server architecture? Explain with examples. (7)
b) How Remote Systems Management security is ensured in a Client/Server application. (RDP, TELNET, SSH) (7)

OR

- 18 a) Explain Communication Interface Technology in Client/Server application. (10)
b) Discuss network service acquisition mechanism for the client server model. (4)

Module V

- 19 a) Explain the architecture of Transformational system. (7)
b) Discuss the role of web browser for providing web services in Client/Server environment? (7)

OR

- 20 a) Explain how the Database is being accessed on the Web Page. (7)
b) What are micro services and explain its benefits in detail. (7)
