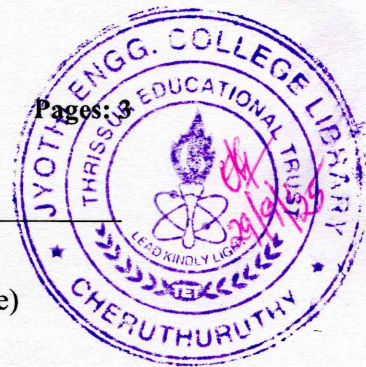Reg No.:_____   Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

B.Tech Degree S8 (S) Examination September 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	Differentiate between Transaction server and Data server system with example?	(3)
2	How client/server computing environment is different from mainframe-based computing environment?	(3)
3	Explain the role of middleware in Client Server Architecture.	(3)
4	State the topologies of Client /Server system with suitable examples.	(3)
5	What is the role of client in Client/Server computing	(3)
6	Explain the difference between the terms service and server.	(3)
7	Enumerate the services provided by x-server.	(3)
8	State the need of Inter process Communication Mechanism?	(3)
9	Explain the benefits of thin client Computing?	(3)
10	What is meant by Socket-based client server systems in java?	(3)

PART B

Answer any one full question from each module, each carries 14 marks.

Module I

11	a)	Explain Client/Server System development phases and their activities involved in System Integration Life Cycle?	(10)
	b)	Write short notes on the following.	(4)
		(i) Single system image.	
		(ii) Downsizing and Client/Server computing.	

OR

12 a) Explain the driving forces behind the development of client/server system from different perspectives? (10)

    b) What are the different ways to improve performance of Client/Server developed Applications? (4)

Module II

13 a) Explain three-Layer Architecture for Business Information System. Outline the distribution pattern styles available for Business Information systems. (8)

    b) How communications take place in middleware components? (6)

OR

14 a) How two-tier and three-tier computing improves the performance of Client/server System. (8)

    b) Discuss different types of existing client-server architecture-based environments. (6)

Module III

15 a) Explain how CORBA handles the cross-network platform for data transfer. (8)

    b) State the role of server in Client/Server computing and mention the various services provided by server. (6)

OR

16 a) What is the primary motivation behind the development of the RPC facility? How does an RPC facility make the job of distributed applications programmers simpler? (8)

    b) With an example explain features of Network Operating system. (6)

Module IV

17 a) Explain the terms availability, reliability, scalability, serviceability and agility in client/server computing with examples. (8)

    b) What is Communication Interface Technology in Client/Server application. (6)

OR

18 a) How Remote systems management security is ensured in client/server   (8)
        application?

    b) Discuss the various network management issues?   (6)

Module V

19 a) What is the future of Client/Server computing in the following technologies: -   (8)

        (i) Geographic Information System (GIS).

        (ii) Point of Service Technology (POS).

        (iii) Electronic Data Interface Technology (EDI).

        (iv) Multimedia

    b) Briefly explain how the database is being accessed on the Web.   (6)

OR

20 a) Explain the architecture of Transformational system.   (8)

    b) Discuss the changing role of Server's to provide the balance computing in   (6)
        Client/Server environment.

****