



Avinashilingam Institute for Home Science and Higher Education for Women
Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD (now MoE)
Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC
Coimbatore - 641043, Tamil Nadu, India

Bachelor's Degree Examination- November 2025
V Semester

Class : III UG 2019 & 2022 Batch (Repeater)
Major : Computer Applications

Time : 3 Hours
Max. Marks : 100

18BCAC22 / 21BCAC22 Client / Server Computing

Course Outcomes:

- CO1:** Describe and synthesize the client/server concepts and different types of servers.
CO2: Analyze the operating system services required for client/server architecture.
CO3: Master the concepts of SQL database server and Data warehouse.
CO4: Familiarity with the concepts of transaction processing, functions of TP monitor and client/server interaction types.
CO5: Exposure to the concepts of distributed objects in client/server computing.

Part A

10 x 1 = 10

Choose the Correct Answer

- Name the Component processes requests and sends responses in a client server model. CO1 K1
a. Client b. Server c. Network d. User
- Identify the key characteristic of a thin client. CO1 K1
a. Performs most of the processing and data storage locally
b. Relies on a central server for computational tasks and data
c. Is a standalone, independent computer
d. Has a powerful local operating system
- Identify what does the server program do? CO2 K1
a. Obtains remote objects from a server
b. Invokes methods on remote objects
c. Creates remote objects and waits for clients to invoke their methods
d. Manages user authentication
- Identify the typical program that obtains a remote reference to one or more remote objects on a server and then invokes methods on them. CO2 K1
a. Server b. Client c. Thread d. Concurrent
- Name the layer which is the binary data protocol layer. CO3 K1
a. stub layer b. skeleton layer c. transport protocol d. remote layer
- Identify the middleware layer between the stub skeleton and transport. CO3 K1
a. remote layer b. instruction layer
c. reference layer d. remote reference layer
- Expand ACID CO4 K2
a. Atomicity Consistency Isolation Durability
b. Atomicity Consistency Independent Durability
c. Atomicity Consistency Isolation Duration
d. Atomic Consistency Isolation Durability
- Name the Stored Procedure which commit transaction resources that are on the resource manager. CO4 K1
a. TP b. TP Heavy c. TP-Lite d. RPC
- Expand ORB CO5 K1
a. Object Request Broker b. Object Request Blob
c. Object Remote Broker d. Object Remote Blob

Part B

5 x 6 = 30

Answer ALL questions

Each answer should not exceed 400 words or two pages

- 11.a. Discuss about the characteristics of the client and server. CO1 K2
(or)
- 11.b. Explain about 2-Tier and 3-Tier. CO1 K2
- 12.a. Explain about operating system services. CO2 K2
(or)
- 12.b. Explain about Remote Procedure Call. CO2 K2
- 13.a. Interpret about triggers and rules. CO3 K3
(or)
- 13.b. Explain about Replication Mechanism. CO3 K2
- 14.a. Infer about ACID Properties in detail. CO4 K4
(or)
- 14.b. Differentiate Between TP Lite and TP Heavy. CO4 K2
- 15.a. Discuss distributed objects and its components. CO5 K2
(or)
- 15.b. Explain about CORBA Components From System Objects to Business Objects. CO5 K2

Part C

5 x 12 = 60

Answer ALL questions

Each answer should not exceed 800 words or four pages

- 16.a. Explain in detail about different servers used in client and server. CO1 K2
(or)
- 16.b. Discuss about client server building blocks. CO1 K2
- 17.a. Infer in detail about client anatomy. CO2 K2
(or)
- 17.b. Explain in detail about peer-to-peer communication. CO2 K2
- 18.a. Infer in detail about SQL Database server architecture. CO3 K3
(or)
- 18.b. Discuss in detail about warehouse elements. CO3 K2
- 19.a. Explain about Transaction Models. CO4 K2
(or)
- 19.b. Explain about TP Monitors and Transaction Types. CO4 K2
- 20.a. Explain the Components of Groupware. CO5 K2
(or)
- 20.b. Discuss in detail about CORBA Business Objects. CO5 K3
