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)
Re-accredited with 'A++' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment Test II – October 2025
V SEMESTER

Class : III UG(2019 & 2022 Batch Repeater) **Time: 2 hours**
Major : Computer Applications **Maximum Marks: 60**

18BCAC22/21BCAC22 Client/Server Computing

Course Outcomes:

1. Describe and synthesize the client/server concepts and different types of servers.
2. Analyze the operating system services required for client/server architecture.
3. Master the concepts of SQL database server and Data warehouse.
4. Familiarity with the concepts of transaction processing, functions of TP monitor and client/server interaction types.
5. Exposure to the concepts of distributed objects in client/server computing.

Part-A **6x1=6**
Choose the correct answer

1. How can you determine if a transaction, after execution, leaves the system in a correct state or if it needs to be aborted? CO4 K1
   a. Atomicity b. Consistency c.Isolation d. Durability
2. What is responsible for guaranteeing the correct execution of transactions even in the presence of failures? CO4 K2
   a. Database Manager b. Transaction Manager c.Recovery Manager d. Executive Manager
3. The total ordering of operations across groups ensures _____ of transactions. CO4 K3
   a. Serializability b. Synchronizability c. Atomicity d. Durability
4. Which of the following ensures that a transaction becomes permanent in the database? CO5 K2
   a. View b. Commit c. Rollback d. Retain
5. Which component acts as the 'glue' between client applications, server applications and ORB? CO5 K2
   a. ORB and ORB interface b. CORBA IDL stubs and skeletons
   c. Client and SQL d. Client and server
6. In CORBA 3-tier Client/server architecture, what does the middle tier represents CO5 K1
   a. View Objects b. Legacy applications c. Server Objects d. Client Objects

Part- B **3x6=18**
Answer ALL Questions

7. a. Discuss on Data warehousing elements. CO3 K2

(or)

7. b. Demonstrate the various hierarchies of warehouse with suitable diagram. CO3 K1

8. a. List the features of ACID properties and explain how it is applied in TP monitors. CO4 K3

(or)

8. b. Describe the limitations of flat transaction. CO4 K1

9. a. List the types of facilities a Super component need to provide. CO5 K2

(or)

9. b. Write notes on Workflow model. CO5 K2

Part-C **3x12=36**
Answer ALL questions

10. a. Explain the mechanics of data replication in warehousing. CO3 K2

(or)

10. b. Describe in detail about the funnelling act of TP monitors and OS. CO4 K1

11. a. Distinguish between TP-Lite versus TP-Heavy. CO4 K2

(or)

11. b. Write about TP monitors and Transaction management. CO4 K2

12. a. Discuss on the components of Groupware in detail CO5 K1