



H. Sambath

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

Bachelor's Degree Examination – November 2024
V Semester

Class : III UG
Major : Computer Applications

Time: 3 Hours
Max. Marks: 100

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
Choose the Correct Answer

10 x 1 = 10

- 1) A typical _____ program creates some remote objects, makes references to these objects accessible, and waits for clients to invoke methods on these objects. CO1 K1
a. Server b. Client c. Thread d. Concurrent
- 2) An object acting as a gateway for the client side. CO1 K2
a. skeleton b. stub c. remote d. server
- 3) Machine that places the request to access the data is generally called as _____. CO2 K1
a. Server Machine b. Client Machine c. Request Machine d. Response Machine
- 4) The execution of the functions on a single server or across servers on the network is called _____. CO2 K2
a. TP Monitor b. TP- Lite c. TP-Heavy d. ORB
- 5) In the Client-Server architecture, the component that processes the request and sends the response is _____. CO3 K3
a. Client b. Server c. Protocol d. Network
- 6) RMI stands for? CO3 K2
a. Remote Mail Invocation b. Remote Message Invocation
c. Remaining Method Invocation d. Remote Method Invocation
- 7) TP monitor done its responsibilities with the help of which protocol? CO4 K2
a. TCP/IP b. Two-Phase Commit Protocol
c. IP d. SNA
- 8) In remote procedure call, the client program must be bound with a small library procedure called _____. CO4 K1
a. Server stub b. Marshalling c. Client hub d. Client stub
- 9) _____ provides programmers a familiar programming model by extending the local procedure calls to a distributed environment. CO5 K2
a. Distributed environment b. Permanent procedure call
c. Process and file d. Remote procedure call
- 10) _____ serves as the glue between CORBA object implementations and the ORB itself. CO5 K1
a. The Object Adapter b. Dynamic Skeleton Interface
c. Server Process Activation d. Client Process Activation

Part B
Answer ALL questions
Each answer should not exceed 400 words or two pages

5 x 6 = 30

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| 11.a. Examine the characteristics of client / service model. | CO1 K1 |
| (or) | |
| 11.b. Distinguish between the file servers and database servers. | CO1 K2 |
| 12.a. Illustrate the basic services of operating systems. | CO2 K3 |
| (or) | |
| 12.b. Summarize the need of server scalability. | CO2 K2 |
| 13.a. Explain the functions of SQL database servers. | CO3 K3 |
| (or) | |
| 13.b. Describe the elements of data warehouse. | CO3 K4 |
| 14.a. Evaluate the properties of ACID. | CO4 K5 |
| (or) | |
| 14.b. Point out the salient features of TP monitor and operating system. | CO4 K4 |
| 15.a. Appraise the various components of groupware. | CO5 K5 |
| (or) | |
| 15.b. Express the requirements of distributed objects . | CO5 K6 |

Part C
Answer ALL questions
Each answer should not exceed 800 words or four pages

5 x 12 = 60

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| 16.a. Enumerate the client server building blocks with diagram. | CO1 K1 |
| (or) | |
| 16.b. Compare and construct the Fat servers and Fat clients. | CO1 K2 |
| 17.a. Discover the functional requirements of Remote Procedure calls. | CO2 K3 |
| (or) | |
| 17.b. Estimate the implementation of peer-to-peer communication. | CO2 K2 |
| 18.a. Examine the method of stored procedure with example. | CO3 K3 |
| (or) | |
| 18.b. Demonstrate the triggers and rules used in database. | CO3 K4 |
| 19.a. Assess the process of TP monitor and transaction management. | CO4 K5 |
| (or) | |
| 19.b. Generalize the TP monitor client server interaction types. | CO4 K5 |
| 20.a. Explain the various components of CORBA. | CO5 K4 |
| (or) | |
| 20.b. Evaluate the services of Object Management Architecture with diagram. | CO5 K6 |
