

Dr. Babasaheb Ambedkar Open University
Term End Examination July – 2026

Course	: BSCIT	Date	: 22/07/2026
Subject Code	: BSCITRMA-402	Time	: 03:00pm to 05:15pm
Subject Name	: Client Server Architecture and Interface	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following. (Attempt any Three) 30

1. Define client/server computing and distinguish it from peer-to-peer computing. Describe the primary characteristics and components of client/server architecture.
2. Explain the methodologies and project management goals involved in client/server system software development. Also state the importance of architecture definition and system development environments.
3. Describe the execution model & features of ASP.NET webpages. Also state usage of built-in directory structure such as App_Data, App_Code, and Bin.
4. Write a detailed note on the architecture and significance of Master Pages and Navigation Controls in ASP.NET. How do they contribute to building secure and structured web applications?
5. Compare 2-Tier, 3-Tier, and N-Tier client/server architectures and explain how state management is handled using View State and Session State in ASP.NET.

Section B

Answer the following (Attempt any four) 20

1. What is an Object Request Broker (ORB)? Explain its core interfaces and protocols like IIOP.
2. Differentiate between User Mode and Kernel Mode operations and explain the significance of Network Interface Cards (NICs) in hardware acquisition.
3. Compare Inline Coding Models and Code-Behind Models in ASP.NET.
4. Explain validation controls in ASP.NET and discuss their role in ensuring data integrity before server submission.
5. Write a short note on Remote Procedure Calls (RPC) and stored procedures within a database-driven client/server environment.
6. Explain the structure of a socket and discuss the roles of TCP socket servers and TCP client sockets.

Section C

Part – A (Multiple Choice Questions) 10

1. Which architecture type includes data, configuration settings, and marketing logic on a single device?
A. 3 Tier Architecture
B. 1 Tier Architecture
C. 2 Tier Architecture
D. N Tier Architecture
2. What does the acronym ORB stand for in client/server distributed environments?
A. Object Response Broker
B. Object Request Broker
C. Objective Requirement Broker
D. Object Reply Breaker
3. Which network protocol is required for ORB-to-ORB communication on TCP/IP-based networks?
A. IIOP
B. FTP
C. SMTP
D. HTTP
4. In which built-in ASP.NET directory should database files (like .mdf or .mdb) be placed?
A. App_Code
B. Bin
C. App_Data
D. App_GlobalResources

5. Which coding model places both the XHTML design and the C#.NET/VB.NET code in a single file?
 - A. Code-Behind Model
 - B. Inline Coding Model
 - C. MVC Model
 - D. Master Page Model
6. Code render blocks in ASP.NET start and end with which symbols?
 - A. <? ?>
 - B. /* */
 - C. <!-- -->
 - D. <% %>
7. Which state management option maintains data at the page level across postbacks using a hidden field?
 - A. Session State
 - B. Application State
 - C. View State
 - D. QueryString
8. Which control is a rich standard control used for file uploading in ASP.NET?
 - A. Label
 - B. FileUpload
 - C. Literal
 - D. AdRotator
9. Which property of the Page object is used to check if a page request is a postback?
 - A. IsValid
 - B. IsPostBack
 - C. RequestType
 - D. IsSubmitted
10. Which navigation control provides a site-map-based path representation of the user's current location on a website?
 - A. TreeView
 - B. Menu
 - C. SiteMapPath
 - D. DropDownList

Part - B (Do as Directed)

10

1. A server is a computer program that handles client requests and provides resources. (True/False)
2. The _____ protocol is a high-level standard protocol used for communication between ORBs.
3. Dynamic Data Exchange (DDE) was completely replaced by the Document Object Model (DOM) family of technologies. (True/False)
4. The full form of IIS is _____.
5. Precompiled class files (DLLs) should be placed in the App directory of an ASP.NET website. (True/False)
6. Which is an example of a stateless protocol?
7. The full form of GUI is _____.
8. Which controls in ASP.NET ensure that user input is verified before data is processed by the server?
9. The process where the server converts ASP.NET server controls into HTML equivalents is called _____.
10. Master Pages allow developers to create a consistent layout and look-and-feel for all pages in an application. (True/False)
