

2111040103030002
EXAMINATION NOVEMBER 2024
MASTER OF COMPUTER APPLICATIONS
(THIRD SEMESTER)
ADVANCED WEB TECHNOLOGIES- LEVEL 3

[Time: As Per Schedule]

[Max. Marks:70]

Instructions:

1. Fill up strictly the following details on your answer book

- a. Name of the Examination : **MASTER OF COMPUTER APPLICATIONS (THIRD SEMESTER)**
 - b. Name of the Subject : **ADVANCED WEB TECHNOLOGIES-LEVEL 3**
 - c. Subject Code No : **2111040103030002**
2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.

Seat No:

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Student's Signature

Q.1 Answer any 7 questions from the following:

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1. What is the importance of State Management in ASP.NET?
2. Explain the role of Web API in ASP.NET.
3. How does GridView differ from FormView in ASP.NET?
4. What is Entity Framework and how does it help in data access in ASP.NET MVC?
5. Define the concept of ViewState in ASP.NET.
6. What is the difference between Connected and Disconnected Data Access?
7. How do ASP.NET AJAX controls improve user experience?
8. What is the use of Local and Nested Functions in ASP.NET Core?

Q.2 Code-based question:

14

Create an ASP.NET application that uses the AJAX UpdatePanel control to create a user registration form. Include fields for Username, Email, and Password, and validate the fields using Validation Controls. Ensure that the form updates asynchronously without reloading the page.

OR

Answer any 3 logical questions:

14

1. How would you manage session state in a ASP.NET application?
2. Write the logic for connecting to a database and retrieving data using ADO.NET. Explain the steps.
3. Design an algorithm to handle error logging in an ASP.NET application using custom error pages.
4. Explain how to implement partial page updates using AJAX and UpdatePanel in ASP.NET.

Q.3 Write short notes on any 2 of the following:

14

1. ASP.NET MVC Architecture
2. LINQ to SQL in ASP.NET
3. Web Configuration Files in ASP.NET

Q.4 Answer in detail any 2 of the following:

14

1. Explain the ASP.NET Page Life Cycle with an example.
2. What are Website Navigation Controls? Discuss the Menu and TreeView controls with examples.
3. Discuss the role of WCF Services in ASP.NET. How does it differ from Web API?

Q.5 Justify any 4 of the following statements with examples:

14

1. "NuGet packages simplify dependency management in .NET Core projects."
2. "Validation Controls in ASP.NET ensure data integrity and user input correctness."
3. "ADO.NET supports both connected and disconnected environments for data access."
4. "ASP.NET MVC separates business logic, UI, and data access into distinct layers."
5. "AJAX enhances web pages by allowing partial page updates asynchronously."
