

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN  
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)  
Chromepet, Chennai - 600 044.

B.C.A. - END SEMESTER EXAMINATIONS - APRIL 2025

SEMESTER - VI

**20UACT6012 - Web Technology**

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

### **Section B**

Answer any **SIX** questions ( $6 \times 5 = 30$  Marks)

1. Explain the various HTML tags and their significance in the structure of an ASP.NET web page.
2. Demonstrate how to use validation controls to ensure proper input in a registration form for a website. Include examples of required field validation and range validation.
3. Evaluate the role of transaction class in ensuring data integrity during an online payment process. Use examples to support your analysis.
4. Design an error-handling mechanism in ASP.NET for managing runtime errors in a web application. Include examples of try-catch blocks and custom error pages.
5. Describe the differences between checkbox list and radio button list web server controls. Provide examples of scenarios where each would be used.
6. Analyze the importance of cookies in maintaining session data. Discuss how cookies can be used effectively for user authentication in web applications.
7. Apply OLEDB connection class to retrieve data from a database for displaying product details on an e-commerce website. Explain the steps involved.
8. Propose a security strategy for an online banking application, incorporating SSL, client certificates, and authentication mechanisms. Justify how these measures ensure data security.

### **Section C**

Answer any **THREE** questions ( $3 \times 10 = 30$  Marks)

9. Apply the structure of ASP.NET language to create a simple webpage that includes HTML server controls like Anchor, Tables, and Forms. Explain the steps involved in implementing these controls.
10. Analyze the functionality of web server controls such as DataGrid and Repeater in displaying dynamic data from a database. Compare their use cases with examples.

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11. Propose a validation mechanism using ASP.NET validation controls for a login form. Include examples of required field validation, regular expression validation, and custom validation logic.
12. Evaluate the role of OLEDB connection class in managing database transactions, ensuring data consistency during operations like adding or deleting records. Provide examples of its usage in an e-commerce application.
13. Design a security strategy for an ASP.NET web application, incorporating authentication methods, SSL encryption, and error handling mechanisms. Justify how these measures protect sensitive user data.

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