5. Explain file upload process in web applications.

Section C

6. Explain ASP.NET page structure and its separation of logic and design.

Or

7. Describe user controls and their implementation in web applications.

8. Explain client-side and server-side state management techniques.

Or

9. Describe session and application state management.

10. Describe the steps involved in establishing a database connection.

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B.C.A. EXAMINATION, 2026

(Fourth Semester)

(Re-appear Only)

(From 2020-21 Onwards)

INTERNET TECHNOLOGIES

BCA-19-45

Time : 3 *Hours*] [*Maximum Marks :* 80

Before answering the question-paper, candidates must ensure that they have been supplied with correct and complete question-paper. No complaint, in this regard will be entertained after the examination.

Note : All questions are compulsory. Each question in Section A of 1 mark, in Section B of

3 marks, in Section C of 6 marks and in Section D of 8 marks.

Section A

1. (i) Identify the role of CLR in executing managed code within .NET.

(ii) State the significance of page life cycle in request processing.

(iii) State the purpose of reusable web user controls.

(iv) Define state management as a technique to preserve user data across requests.

(v) State the role of hidden fields in storing page data.

(vi) Identify query strings as URL-based data transfer method.

(vii) State the purpose of data binding in web applications.

(viii) Identify the role of SQLClient namespace in database connectivity.

(ix) Define data adapter as a bridge between database and dataset.

(x) Define file handling in ASP.NET applications.

(xi) State the purpose of text file operations.

(xii) Define web services in web applications.

Section B

2. Describe ASP.NET as an event-driven web development framework.

3. Explain the importance of state management in web applications.

4. Explain the SQLClient namespace and its importance.

Or

17. Explain site navigation and its implementation.

18. Explain data binding techniques and their implementation in ASP.NET.

Or

19. Explain connection management and transaction handling.

20. Describe SMTP configuration and e-Mail delivery process.

Or

21. Explain client-server communication with examples.

Or

11. Explain ADO.NET architecture and its role in database-driven applications.

12. Explain file handling techniques in ASP.NET with examples.

Or

13. Explain file stream operations in detail.

Section D

14. Discuss ASP.NET as a robust platform for developing scalable web applications.

Or

15. Discuss advantages and limitations of ASP.NET framework.

16. Analyze all state management techniques in ASP.NET with examples.