

Total number of printed pages-4

1 (SEM-4/FYUGP) CIT06/-N

2026

INFORMATION TECHNOLOGY

Paper : CIT0400604-N
(Advanced Web Programming)

Full Marks : 45

Time : 2 hours

*The figures in the margin indicate
full marks for the questions.*

1. Answer the following as directed : 1×5=5

- (a) <a> tag is used to create a hyperlink in HTML.
(State True or False)
- (b) HTML forms are created using the _____ tag.
(Fill in the blank)
- (c) What is CMS?
- (d) What does CRUD stand for?
- (e) Write the full form of AJAX and JSON.

2. Answer the following questions : (any five)
2×5=10

- (a) Differentiate between pseudo-classes and pseudo-elements.
- (b) Explain the purpose of the box-sizing property in CSS.
- (c) What is JavaScript and why is it used in web development?
- (d) What is an anonymous function in JavaScript?
- (e) What is jQuery?
- (f) What is MySQL?
- (g) What is user authentication in PHP?
- (h) Mention two uses of cookies.

- (i) What is web hosting?
- (j) Differentiate between shared hosting and VPS hosting.

3. Answer the following questions : (any four)
5×4=20

- (a) Explain how CSS improves webpage presentation and user experience.
- (b) Explain gradient and transparent backgrounds in CSS with examples.
- (c) Explain the features and advantages of jQuery.
- (d) Explain how JavaScript supports dynamic and interactive web pages.
- (e) Differentiate between GET and POST methods in PHP with examples.
- (f) Differentiate between React.js and Node.js with suitable examples.
- (g) Explain the importance of web security measures in protecting websites.
- (h) Explain the concept of Continuous Integration (CI) and Continuous Deployment (CD).

4. Write short notes on : **(any one)** $10 \times 1 = 10$

- (a) Write a detailed note on advanced CSS features used in modern web design.
- (b) What is a lexical environment in JavaScript? Explain lexical scope and closures.
- (c) Explain PHP as a server-side scripting language. Discuss its features and role in web development.
- (d) Discuss the importance of version control systems in team-based software development.