



K. Sambal

Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD (now MoE)

Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC

Coimbatore - 641 043, Tamil Nadu, India

Bachelor's Degree Examination – November 2025

V Semester

Class : III UG

Major : Computer Science

Time: 3 Hours

Max. Marks: 100

23BCSC10 Internet Technologies

Course Outcomes :

- CO1: Obtain the knowledge related to the Internet and how the Internet is changing the World.
- CO2: Gain knowledge on how computers are connected to the Internet and demonstrate the ability to use the World Wide Web.
- CO3: Demonstrate an understanding of and the ability to use electronic mail and other internet based services
- CO4: Apply the design principles of Web pages and how they are created
- CO5: Develop an ability to create basic Web pages with HTML.

Part A

10 x 1 = 10

Choose the Correct Answer

- Which of the following is not an Internet protocol ? CO1K1
a. TCP b. IP
c. HTML d. UDP
- The <a> tag in HTML is used for : CO1K2
a. Linking pages b. Displaying images
c. Formatting text d. Adding tables
- XML stands for : CO2K1
a. Extended Markup Language b. Extra Modern Language
c. Extensible Markup Language d. None of the above
- Which symbol is used for variables in Perl ? CO2K2
a. # b. \$
c. @ d. %
- In Java socket programming, the class used for a client to connect to a server is : CO3K1
a. ServerSocket b. DatagramSocket
c. Socket d. Connection
- The DOCTYPE declaration in HTML is used to : CO3K2
a. Define the document type and version b. Add comments
c. Insert an image d. Define metadata
- In XML, which of the following is true? CO4K1
a. Tags are case-sensitive b. Attributes are optional
c. Every tag must be closed d. All of the above
- Which of the following is an example of Internet Telephony ? CO4K2
a. Skype b. HTTP
c. FTP d. DNS
- In Perl, print function is used to : CO5K1
a. Define variables b. Display output
c. Loop execution d. Handle exceptions
- Which Java package is used for network programming ? CO5K2

Part B

5 x 6 = 30

Answer all questions

Each answer should not exceed 400 words or two pages

11. a. Explicate the architecture of the Internet. CO1K2
(or)
11. b. Deliberate the role of IP addressing in Internet communication. CO1K1
12. a. Transcribe HTML code to create a webpage with a table and an image. CO2K1
(or)
12. b. Breakdown the difference between HTML and XML with suitable examples. CO2K2
13. a. Formulate a Perl script to calculate the factorial of a given number. CO3K1
(or)
13. b. Explain the use of arrays and hashes in Perl with examples. CO3K2
14. a. Outline a Java client-server program where the client sends a message and the server replies. CO4K2
(or)
14. b. Differentiate between TCP and UDP sockets in Java networking. CO4K2
15. a. Devise the working of Internet Telephony and its applications. CO5K1
(or)
15. b. Enumerate advantages and limitations of VoIP over traditional telephony. CO5K2

Part C

5 x 12 = 60

Answer all questions

Each answer should not exceed 800 words or four pages

16. a. Intervene the evolution of the Internet. Explain layered protocols with a neat diagram. CO1K2
(or)
16. b. Critically analyze the client-server and peer-to-peer architectures used in the Internet. CO1K1
17. a. Collaborate a complete HTML + CSS webpage for a student registration form with validation. CO2K1
(or)
17. b. Describe the Document Object Model (DOM) and its role in HTML/XML processing with examples. CO2K2
18. a. Compose a Perl program that reads a text file and counts the frequency of each word. CO3K2
(or)
18. b. Prioritize and contrast Perl and Java for Internet programming with case studies. CO3K1
19. a. How will you implement a Java client-server chat application. Explain its working. CO4K1
(or)
19. b. Express the challenges of synchronization and concurrency in Java client-server systems. CO4K2
20. a. Explain the protocols and technologies behind Internet Telephony. Illustrate with Skype/VoIP case study. CO5K1
(or)
20. b. Formulate an Internet Telephony system for online education. Justify architecture, scalability, and QoS issues. CO5K5