



SHRI ANGALAMMAN COLLEGE OF ENGINEERING & TECHNOLOGY  
(An ISO 9001:2008 Certified Institution)  
SIRUGANOOR, TRICHY-621105.



## **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

Year/Sem: IV / VII

### **CS1401 INTERNET COMPUTING**

#### **UNIT I – FUNDAMENTALS**

##### **PART-A**

1. List out the devices used to form Internet and specify each one of its purpose.
2. What is an IP address? How it is relevant in Internet?
3. What is the difference between node and host?
4. What is the difference between an absolute pathname and a relative pathname?
5. What is the purpose of MIME?
6. Define protocol.
7. Define port.
8. What do you mean by well-known ports?
9. What is meant by Name Resolution?
10. Define protocol tunneling.
11. Define URI, URL and URN.
12. What are the components of HTTP URL?
13. Define URL encoding.
14. What are the issues of next generation IP?
15. What is the difference between TCP and UDP?
16. What is the need for client side scripting?
17. What is the benefit of using JavaScript code in an HTML document?
18. List out the objects involved in JavaScript with its purpose.
19. List the goals of SGML.

##### **PART –B**

1. Give short notes on the following:
  - a. Internet Standards. (8)
  - b. Internet Address Classes (8)
2. Discuss about the client/server strategies in Internet. (16)
3. Explain in detail the TCP and UDP Protocols. (16)
4. Elaborate on URL, URN, URI and MIME. (16)
5. List the five layers used by internet. For each layer you list, give the general purpose of each layer as well as a current implementation. (16)
6. Write short notes on the scripting languages Java Script and VB Script with examples. (16)
7. Classify the various types of Internet servers and give short notes on the same. (16)
8. Give brief notes on IP Addresses, Domain Names and Ports. (16)

9. Explain the steps involved in making the communication using TCP/IP with neat diagram. (16)
10. Explain in detail about CSS with suitable examples. (16)

## **UNIT II – SERVER SIDE PROGRAMMING**

### **PART-A**

1. What is the role of server?
2. What are the necessities of using HTML forms?
3. What are the sequences of steps for each HTTP request from a client to the server?
4. Define MIME.
5. List the predefined MIME content types.
6. Define HTML.
7. What is meant by loop back address?
8. Define CGI -Common Gateway Interface.
9. Write a note on Internet Information Server (IIS).
10. What are ISAPI (Internet Server API) and NSAPI (Netscape Server API)
11. What is API -Application Program Interface?
12. What are Servlets?
13. What are Applets?
14. What do you mean by Server-side?
15. What is a protocol?
16. What is ActiveX?
17. Write a note on ActiveX controls.
18. Explain about HTTP Connection.
19. What is meant by Stateless Connection?
20. Write a note on Environment variables.
21. What are STDIN and STDOUT?
22. What are the two commonly used Request methods?
23. Explain about URL Encoding.
24. List the advantages of CGI scripting?
25. Explain about Session tracking.
26. Define packet switched networks.
27. Define socket.
28. What are the basic operations of client sockets?
29. What are the basic operations of Server socket?
30. List all the socket classes in java.
31. What is meant by Server Socket?
32. What do you mean by DatagramSocket and DatagramPacket?

### **PART-B**

1. What are servlets? How can you deploy a simple servlet? Explain with example. (16)
2. Give the basic structure of a servlet along with its life cycle. (16)
3. How can you use the servlet session tracking API to keep track of visitors as they move around at your site? (16)

4. Give the advantages of Servlets over CGI. Describe shortly Servlet Containers (16)
5. Explain java networking using Sockets with your own example program. (16)
6. Write short notes on Servlet Containers and Exceptions. (16)
7. Elaborate on the life cycle of Servlet. (16)
8. Give detailed notes on Servlet chaining and communications. (16)
9. Give detailed notes on JSP scripting elements. (16)
10. Describe three main capabilities for including files and applets into a JSP document. (16)

### **UNIT III – XML TECHNOLOGY FAMILY**

#### **PART-A**

1. What are the XML rules for distinguishing between the content of a document and the XML markup element?
2. What is the use of XML?
3. What do you mean by DTD in XML?
4. What is the use of XML Namespace?
5. What are the uses of XML?
6. What is the usage of CSS?
7. State the commands in cascading style sheet used for grouping of elements.
8. Define DHTML Event bubbling.
9. What is meant by data bound control? Give example.
10. What is Electronic Data Interchange(EDI)?
11. What are Xforms?
12. What is VoiceXml?
13. What are the advantage of schema over DTD?
14. What are the element naming rules used in XML?
15. Write any two differences between XSLT and CSS?
16. What is DOM? What are the different levels of DOM?
17. What all are the presentation technologies?
18. What is XML? How it is different from HTML?

#### **PART-B**

1. How is XML useful in extending the Enterprise? Elaborate on the XML Technology Family. (16)
2. Elaborate on the following presentation technologies: (16)
  - i. XSL
  - ii. XFORMS
  - iii. XHTML
  - iv. Voice XML
3. Give short notes on the following Transformation technologies.
  - i. XSLT
  - ii. XLINK
  - iii. XPATH
  - iv. XQuery (16)

4. Explain DTD and XML Schemas in detail. (16)
5. Write short notes on the following processing technologies:
  - i. DOM (8)
  - ii. SAX (8)

**UNIT IV – SOAP**  
**PART-A**

1. What is SOAP?
2. Define scriptlets.
3. Define ASP.
4. What are the ASP objects?
5. What is global.asa file?
6. Define response object and list its methods.
7. Define JSP.
8. What is HTTP and its use?
9. Explain XML-RPC?
10. Define SMIL modularization?
11. Describe SOAP fault?
12. What is XML protocol Working Group?
13. What is SOAP with attachments?
14. Difference between SOAP and IIOP, ORPC & JRME?
15. What are the parts in the SOAP message?

**PART-B**

1. Explain in detail SOAP, its overview and its importance. (16)
2. Describe the following technologies that existed before the emergence of SOAP: (16)
  - i. HTTP
  - ii. XML-RPC
3. Elaborate on XML-RPC. (16)
4. Explain the SOAP Protocol, its message structure with a messaging example. (16)
5. Elaborate on the SOAP Intermediaries, Actors, Design Patterns and Faults. (16)
6. Describe in detail SOAP with Attachments. (16)

**UNIT V – WEB SERVICES**  
**PART-A**

1. Define web services.
2. What qualifies as web services?
3. What is meant by firewall?
4. Write a note on proxy server.
5. What does DHTML refer?
6. Define SSI.
7. What does data binding mean?
8. What is meant by Plug-in?
9. What do you mean by JDBC?
10. Define ODBC.

11. List any two keyboard events?
12. List any two mouse events?
13. Define virtual organization.
14. List the major approaches to form virtual organization?
15. What do mean by search engine?
16. List the features of online shopping.
17. How do search engine work?
18. List out the different type of Adapters?
19. List out the Web Service Pack in J2EE?
20. Steps involved in XML encryption?

### **PART-B**

1. Give a detailed overview of Web Services, its architecture and key technologies. (16)
2. Elaborate on UDDI. (16)
3. Elaborate on WSDL. (16)
4. Write short notes on
  - i. ebXML Technologies. (8)
  - ii. Overview of .NET and J2EE (8)
5. Explain how SOAP and web services have opened up new options for E- Commerce (16)