



- (e) Name some tools along with their applications that may be used for developing Web sites.
- (f) Why is it very important to identify the target users of your Web site? How do you select contents for your Web site?

2 Attempt any four parts of the following :  $4 \times 5 = 20$

- (a) Differentiate between the following :
  - (i) HTML and DHTML
  - (ii) ROWSPAN and COLSPAN
- (b) How will you create hyperlinks in Web documents? Discuss on different attributes of creating a hyperlink.
- (c) Justify the need for client side scripting languages. How do you perform client side validation using JavaScript?
- (d) What are cascading style sheets and how are they coded? Explain them with an example.
- (e) What is XML? Explain the parsing in XML. Also mention the applications of XML.
- (f) Write a short note on DOM.

3 Attempt any four parts of the following :  $4 \times 5 = 20$

- (a) What is Java Bean? What are its major services?
- (b) Explain the applications of EJB. How it differs with Java Beans?
- (c) Explain the advantages of using servlets for server side programming. What are the packages that support servlets?
- (d) Explain the life cycle of a servlet.
- (e) What do you mean by cookie? Create a cookie that counts the number of accesses to a Web page?
- (f) Name the methods of ServletRequest class and explain their usage.

4 Attempt any four parts of the following :  $4 \times 5 = 20$

- (a) What is the functionality of JSP? What are the advantages of JSP over various server side programming techniques?
- (b) Explain the various components of JSP in detail.
- (c) How does JSP handle runtime exceptions?
- (d) What are implicit objects available to JSP page? - Explain.