

N. B. : (1) Question No. 1 is **compulsory**.

(2) Attempt any **four** questions out of remaining **six** questions.

1. (a) Explain OSI model. Give function of each layer. How does the data link layer in OSI model work ? 10
(b) Write a HTML code which include Table, Hyperlink, character formatting ordered and unordered list to display your Resume. 10
2. (a) What is socket programming ? Define with TCP and UDP socket, try opening a socket on a server and communicate with that from a client socket. 10
(b) Explain digital signature and its importance for e-commerce. 10
3. (a) Write ASP program to accept user name and password store it in database. Do necessary validation. 10
(b) Explain following :— 10
 - (i) Cookies
 - (ii) CSS (Cascading Style Sheet).
4. (a) Describe the working of ASP. What are advantages of dynamic web pages ? 10
(b) Explain Three-Tier-architecture with its advantages, disadvantages and applications. 10
5. (a) Explain life cycle of servlet. Differentiate between JSP and servlet. 10
(b) Explain issue involved in e-commerce security and its solution. 10
6. (a) What are the major steps involved in SET ? 10
(b) What is $I_p V_6$? Why is it required ? Describe 3 ports of an I_p address. 10
7. Write short notes on (any **four**) :— 20
 - (a) XML
 - (b) DNS
 - (c) SMTP
 - (d) Fire Wall
 - (e) SSL .