

B4.5-R4: INTERNET TECHNOLOGY AND WEB SERVICES

NOTE:

1. Answer question 1 and any FOUR from questions 2 to 7.
2. Parts of the same question should be answered together and in the same sequence.

Time: 3 Hours

Total Marks: 100

1.
 - a) Explain the concept of 'e-mail gateway'.
 - b) Briefly explain that how can you use TELNET for remote terminal emulation?
 - c) Write any three features of Intranet that differentiate it largely from Internet.
 - d) What is a packet filter that is often used to protect an organisation's computer from unwanted Internet traffic called? Describe the concept.
 - e) What media can be used for Noise resistance? Briefly state its other advantages.
 - f) Write down 4 main features of mobile IP?
 - g) Explain briefly 3-tier Web Architecture?

(7x4)

2.
 - a) Comment on the following statement making special reference to differences between JPEG and MPEG Standards. "There is a perceptible need for data compression as per certain standards, as the amount and type of data to be transferred over a network increases".
 - b) Explain the difference of functioning between Bridges and Routers.
 - c) Using HTML design a web page of student profile form having fields such as Enrollment No., Name, Age, Address, Course etc. Perform appropriate JAVASCRIPT validations for Web Page.

(6+6+6)

3. Differentiate between **any three** of the following:
 - a) Multicasting and Broadcasting
 - b) Ipv.4 and Ipv.6
 - c) Digital Signature and Digital Certificate
 - d) File-Server architecture and Client/Server Architecture

(3x6)

4. Expand and explain in details **any three** of the following acronyms:
 - a) VPN
 - b) ISDN
 - c) TCP/IP protocol
 - d) OSPF protocol

(3x6)

5.
 - a) Giving suitable examples, explain three different Classes of an Internet addressing, with special emphasis on the range spanned by each Class?
 - b) Compare and Contrast between different multimedia compression techniques.
 - c) Using XML, design a program for a book in library. Assume appropriate elements like: Book No., Book Name, Price, No. of Pages. Apply appropriate validation using DTD.

(6+6+6)

6.

- a) Explain briefly the Objects of Web Services Description Language (WSDL).
- b) What is the role of the Web Server Gateway Interface?
- c) Explain lucidly what is a 'Web Service Protocol Stack'?

(6+6+6)

7.

- a) What is SOAP? Write a program to exchange sharing of object using SOAP Protocol.
- b) Explain the philosophy over usage of LAMP (Linux, Apache, MySQL and PHP)?
- c) Create a ASP Page to illustrate the use of QUERY STRING collection of request object.

(6+6+6)