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) What do you mean by scripting languages? How scripting language are different from other programming languages? Explain in brief the salient features of any scripting language of your choice.
b) Explain the difference between JPEG and MPEG.
c) Can you transit audio and video data on the Internet using RTP? Explain.
d) What is FTP? Explain in brief.
e) What is the difference between web server and a web browser?
f) What is Hypertext Transfer Protocol (HTTP)? What is HTTP session?
g) Explain at least four differences between OSI & TCP/IP model?

                                                                                                                                (7x4)

2.
a) What is the difference between IPv4 and IPv6? Explain IP datagram.
b)
   i) What is an IP address?
   ii) What is the use of an IP address?
   iii) How a host determines its IP address?
   iv) What is the difference between a host name and an IP address?
   v) What is the size of an IP address?
   vi) Can a single network interface have more than one IP address associated with it?
   vii) How a host name is resolved to the corresponding IP address?
   viii) What are the components of an IP address?

                                                                                                                                (6+12)

3.
a) 'HTML was designed to display data, with focus on how data looks and XML was designed to transport and store data, with focus on what data'. Is this statement is true or false?
b) What do you mean by the term protocol? Explain the three protocols namely IP, TCP and UDP. Also give examples of applications which use each of these protocols.
c) What is the significance of 'N-Tier architecture'? Explain the 3-Tier Architecture for Web Applications. What are its advantages?

                                                                                                                                (6+6+6)

4.
a) What is MySQL? Discuss its important features. And some disadvantages.
b) Answer the following:
   i) How you will create a database on the MySQL server with Unix shell.
   ii) How to list or view all databases from the MySQL sever.
   iii) How Switch (select or use) to a database.
   iv) How to see all the tables from a database of MySQL server.
   v) How to see table's field formats or description of table.
   vi) How to delete a database from MySQL server.
   vii) How to delete a table.
   viii) How we get Sum of column.

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       ix)   How you will Show all data from a table.
       x)   How to do login in MySQL with Unix shell.
c)   How is JavaScript different from Java?

(6+6+6)

5.
a)   What is the Web service protocol stack? Discuss a real Web service in action?
b)   What is the full form of VOIP? What is the purpose of this technology? What is H.323 protocol? How H.323 protocol is related to VOIP?
c)   Describe the difference between authenticity and non-repudiation?

(6+6+6)

6.
a)   What is the website tracking system?
b)   What do you mean by Open Source Initiatives? What are the principles on which open source software are based? Name some open source softwares. What are the advantages and disadvantages of open source software?
c)   Explain VPN.

(6+4+8)

7.
a)   What is a Servlet? What are the advantages of Servlet over CGI?
b)   What is the difference between multicasting and multicast routing? Explain the role of IGMP in multicasting.
c)   Write a short note of World Wide Web (www).

(6+6+6)