Sl. No.

B45-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

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1. (a) Why does IPV6 use separate extension headers? Explain.

(b) When web pages containing emails are sent out they are prefixed by MIME (Multipurpose Internet Mail Extension) Header. Why?

(c) How do you make an image clickable in HTML? Give an example.

(d) Define VOIP and NFS.

(e) Differentiate between applets and servlet with a suitable example.

(f) Explain the difference between 2 Tier and 3 Tier Client Server Architecture.

(g) What are the main differences between OSI and TCP/ IP reference models? Explain briefly.   **(7x4)**

2. (a) What is Lamp Server? What are the reasons for selecting Lamp instead of combination of other software programs, servers and operating system?

(b) What is AVI? What is its relation with QuickTime?

(c) What do you understand by Active Server Pages (ASP)? Which editor will you use for developing ASP applications?   **(6+6+6)**

3. (a) What are the three basic types of web documents? Also explain the advantages and disadvantages of each type.

(b) What is virtual reality? What are the types of Virtual Reality Systems?

(c) What are web services? Discuss the role and importance of UDDI (Universal Description, Discovery and Integration), WSDL (Web Services Description Language) and SOAP (Simple Object Access Protocol) in Web Services.   **(6+6+6)**

4. (a) What is difference between DELETE and TRUNCATE commands?

(b) Answer the following:

(i) What is the difference between SQL and PL/SQL?

(ii) Write a SQL query to find the 10th highest employee salary from an Employee table.

(iii) Which operator is used in query for pattern matching?

(iv) How to fetch alternate records from a table?

(v) How to select unique records from a table?

(vi) What is the difference between the WHERE and HAVING clauses?

(c) Assume the table named as customer in SQL database with the following fields: Product id, Product name, Product type. Write a java program to insert and then display the records of this table using JDBC.   **(3+9+6)**

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5. (a) Describe the advantages of JAVA servlets over CGI inter face.

(b) What is SOAP? What would be the message format of SOAP protocol?

(c) Describe the difference between authenticity and non-repudiation? **(6+6+6)**

6. (a) What is the website tracking system?

(b) Why Gateways are used during mail transfer?

(c) Explain VPN (Virtual Private Network). **(7+4+7)**

7. Write short notes on **any three** of the following:

(a) CGI standard

(b) UDP

(c) Cookies

(d) RPC

(6+6+6)

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