

**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 unicast and broadcast.
  - b) Explain HTTP request and HTTP response.
  - c) What is the role of Apache server?
  - d) What is Open Source? What are the main advantages of Open Source products?
  - e) Differentiate between Session and Cookie.
  - f) Explain various types of security attacks.
  - g) What is JSP? Compare JSP with Servlet.

**(7x4)**
2.
  - a) Explain client/server architecture and also list advantages of 3 Tier architecture.
  - b) What are the differences between client side scripting and server side scripting?

**(10+8)**
3.
  - a) Explain IP addressing in details.
  - b) What is VOIP? Explain functionality of it.

**(9+9)**
4.
  - a) What is Web Service? Explain WSDL, SOAP and UDDI in detail.
  - b) List out OSI layers and differentiate between TCP and UDP.

**(9+9)**
5.
  - a) What is Array? What are the different types of array supported by PHP?
  - b) Differentiate between IPv4 and IPv6.
  - c) How does the three-way handshake work for creating a TCP connection?

**(6+6+6)**
6.
  - a) Write a php code which insert employee\_id, employee\_name, department and mobile number into database using HTML form.
  - b) What is encryption? Differentiate between public key cryptography and private key cryptography.
  - c) What is XML? How does XML resolve the resource sharing problem on internet?

**(7+7+4)**
7. Write a Short Note on following:
  - a) Virtual Reality
  - b) VPN
  - c) VB Script

**(6+6+6)**