

- N.B. :** (1) Question No. 1 is **compulsory**.
(2) Attempt any **four** questions out of remaining **six** questions.

1. Answer the following questions in short : (any **four**) 20
 - (a) Explain the concept of Public Key Infrastructure (PKI).
 - (b) Discuss Voice Over IP (VOIP).
 - (c) What are the desirable features of web service and explain its architecture ?
 - (d) What is Resource Syndication ? Give its uses.
 - (e) Explain the role of AJAX in web applications with example.

2. (a) Discuss various client side and server side vulnerabilities. 10
(b) Explain the concept of cloud computing and discuss the categories of cloud services. 10

3. (a) Explain REST architecture and give its design constraints. 10
(b) Describe Virtual Private Network (VPN) and state its usefulness in various industries. 10

4. (a) How does DHCP (Dynamic Host Configuration Protocol) work ? Explain its packet format. 10
(b) Describe "Virtualization" in cloud computing technology. 10

5. (a) Explain the working principle of Search Engine. 10
(b) Explain Service Oriented Architecture (SOA) with its Life Cycle. 10

6. (a) What are the two port numbers used for an FTP client and server communication ? Explain with suitable diagram. 10
(b) Write short notes on the following :— 10
 - (i) Amazon s3
 - (ii) Security issues in cloud.

7. (a) What is Resource Oriented Architecture (ROA) ? Explain its different features / Properties. 10
(b) Explain IPv6. (Internet Protocol version 6) 10