

B.E. Seventh Semester (Computer Science & Engineering) (CGS)

10341 : Computer Networks : 7 KS / 7 KE 02

P. Pages : 2

Time : Three Hours



AU - 2891

Max. Marks : 80

- Notes :
1. All question carry equal marks.
 2. Answer **three** question from Section A and **three** question from Section B.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Assume suitable data wherever necessary.
 5. Diagrams and chemical equations should be given wherever necessary.
 6. Illustrate your answer necessary with the help of neat sketches.

1. a) Compare the behaviour of SMTP and HTTP protocol. 7
- b) Explain the different types of HTTP connections. 7

OR

2. a) What are roles of local name server, authoritative name server and root name server? 7
- b) Explain various mail access protocols. 7
3. a) Explain rdt 1.0 protocol in detail. 6
- b) When does the application developer use UDP and when does he prefer TCP? Explain. 7

OR

4. a) Explain rdt 2.0 protocol in detail. 6
- b) Explain GBN. 7
5. a) Explain IP data fragmentation. 6
- b) Explain NAT protocol. What is the need and advantage of it. 7

OR

6. a) Explain OSPF Routing algorithm in detail. 6
- b) Explain how a host can obtain a Host address. 7
7. a) What is the possible services offered by Data link layer? 7
- b) Explain how CDMA is implemented. 7

OR

8. a) How does ARP resolves IP addresses to a LAN addresses? 7
- b) Explain the slotted ALOHA protocol. 7

9. a) Explain the properties of secure communication. 7
b) What is purpose of nonce in an authentication protocol? 6

OR

10. What are the different types of cryptography? Using RSA, choose $p=3$ and $q=11$ and encode the phrase "hello". Apply the decryption algorithm, to the encrypted version to recover the original plaintext message. 13
11. a) Explain the various network management tools? 6
b) What is the role of SMI in network management and its data types? 7

OR

12. a) Explain the following terms in details, 6
a) Managing entity.
b) Managing device.
- b) What is firewall? List out various types of firewall and explain each in brief. 7
