

Exam.Code:0970

Sub. Code: 7056

2054

M.E. (Electronics and Communication Engineering)

Second Semester

ECE-1207: Advanced Computer Networks

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Part.

x-x-x

- 1.(a) What are the differences between routers & gateways? (2)
- (b) What are Digital Signatures ? (2)
- (c) What are differences between Broadcast and Multicast routing? (2)
- (d) What are the differences between TCP and UDP ? (2)
- (e) What is CIDR ? (2)

Part- A

- 2.(a) What are the reasons for using layered protocols? (5)
- (b) List the five key differences between OSI reference model and TCP/IP reference model. (5)
3. (a) What are flow control protocols ? Explain sliding-window flow control. (5)
- (b) What are routing protocols? Explain Distance-vector routing protocol in detail. (5)
4. Write technical notes on the followings:
 - (a) ATM (5)
 - (b) Wireless LAN (802.11) (5)

Part-B

- 5.(a) What is IPv4 Protocol? In IPv4, fragmentation reassembly is done at the endpoints, rather than at intermediary routers. Does IPv4 permit routers to reassemble packets? What is an important reason why reassembly be done at the end points? (5)
- (b) Give features of IPv6 in the context of advanced communication networks. (5)

P.T.O.

(2)

6.(a) Describe the process of TCP oriented reliable byte stream transfer with TCP header, connection establishment/termination and the way flow control has been implemented. (5)

(b) SMTP and FTP and HTTP are protocols to transfer messages from one point to another. Compare and contrast their use. (5)

7. Write technical note on the applications of WSN in the following areas:

(a) Electronic Mail (5)

(b) Network Security (5)

x-x-x