M.E. Second Semester (Electronics & Tele.) (Full Time) (C.G.S.- New)

13343 : Advanced Computer Networks and Programming : 2 ENTC 3

P. Pages : 2 | **AW - 3907**

Time : Three Hours | Max. Marks : 80

Notes : 1. Answer **three** question from section A and **three** question from section B.
2. Due credit will be given to neatness and adequate Dimensions.
3. Assume suitable date wherever necessary.
4. Illustrate your answer necessary with the help of neat sketches.

SECTION - A

1. a) Draw & explain the layer Architecture of OSI reference model. **7**

b) Explain circuit switched and packet switched Network in detail. **7**

OR

2. a) What is the necessity of flow control and error control. Explain stop and wait ARQ in detail. **7**

b) Explain PPP frame format in detail also explain different transition phases in PPP connection. **7**

3. a) Explain the different type of IGMP message also explain IGMP operation. **8**

b) Explain the ARP operation in detail. **5**

OR

4. a) Give the datagram header format of IPv4 and explain each field. **8**

b) Explain user datagram format. **5**

5. a) Discuss in detail the role of Network management in congestion control. **7**

b) Explain in detail the M|M|1 queuing model. **6**

OR

6. a) What is Traffic shaping mechanism. Explain the two techniques for traffic shaping. **7**

b) Explain the congestion control in TCP. **6**

SECTION - B

7. a) Explain the different service classes in ATM. **6**

b) Explain B-ISDN in detail. **7**

OR

8.	a)	Explain in detail ATM Adaptation Layer.	7
	b)	Explain in detail PNNI routing.	6
9.	a)	Explain the different type of messages in RSVP. Also explain Reservation styles in RSVP.	6
	b)	Explain the differentiated servicers. Also explain role of traffic conditioner in differentiated services.	7

OR

10.	a)	Explain a flow based QoS model such as Integrated services.	7
	b)	Explain MPLs header format.	6
11.	a)	Give the classification of Traditional ciphers. Also explain substitution cipher.	7
	b)	Explain the role of digital watermarking in Network security.	7

OR

12.	a)	Explain in detail DES.	7
	b)	Explain in detail RSA algorithm in detail.	7

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