Reg. No. :										
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**Question Paper Code: 31582** 

### B.E. / B.Tech. DEGREE EXAMINATION, MAY 2016

#### Fifth Semester

# **Information Technology**

### 01UIT502 - COMPUTER NETWORKS

(Common to Computer Science and Engineering)

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

## **Answer ALL Questions**

PART A -  $(10 \times 2 = 20 \text{ Marks})$ 

- 1. Define the term computer network.
- 2. What is meant by bit stuffing?
- 3. List out any four IEEE 802 standards with its name.
- 4. Define bridge and switch.
- 5. Differentiate between IPV4 and IPV6.
- 6. What is multicasting?
- 7. What are the advantages of TCP over UDP?
- 8. What is adaptive retransmission?
- 9. Mention the aspects of security.
- 10. What are the basic functions of email system?

		PART - B (5 x $16 = 80 \text{ Marks}$ )	
11.	(a)	Explain in detail about the network architecture with a neat diagram.	(16)
		Or	
	(b)	Discuss in detail about the error detection and error corrections.	(16)
12.	(a)	Explain in details about the types, access method and frame format used in etho	ernet.
		Or	
	(b)	Explain in detail physical properties, timed token algorithm, frame format of F	DDI. (16)
13.	(a)	(i) List the difference between circuit switching and packet switching.	(6)
		(ii) Explain in detail Dynamic Host Configuration Protocol (DHCP).	(10)
		Or	
	(b)	Explain the concept of congestion avoidance in network layer.	(16)
14.	(a)	Draw and explain in detail about TCP state transition diagram.	(16)
		Or	
	(b)	Explain in detail about congestion control algorithms.	(16)
15.	(a)	Discuss in detail about domain name system with neat sketch.	(16)
		Or	
	(b)	(i) Discuss in detail about Pretty Good Privacy (PGP).	(10)

(ii) Illustrate the features of FTP and its operation.

(6)