

**B.TECH. SEM -VII BIO MEDICAL 2014 COURSE (CBCS) :**  
**SUMMER - 2018**  
**SUBJECT: COMPUTER NETWORKS**

Day: **Monday**  
Date: **21/05/2018**

**S-2018-2530**

Time: **02.30 PM TO 05.30 PM**  
Max Marks: 60

**N.B. :**

- 1) All questions are **COMPULSARY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labeled diagram **WHEREVER** necessary.
- 4) Assume suitable data, if necessary.

- Q. 1** a) Compare OSI and TCP/IP model. (06)  
b) Write short note on network software issue. (04)

**OR**

- a) Draw OSI model and explain function of all the layers of OSI model (06)  
b) What is the requirement of computer networks? (04)

- Q. 2** Explain i) Twisted pair ii) Co-axial cable iii) Optical fiber (10)

**OR**

- Explain i) Hubs ii) Switches iii) Routers (10)

- Q. 3** Explain IEEE 802 standards in details. (10)

**OR**

- Explain in detail Medium Access Sub layer. (10)

- Q. 4** a) Explain bucket algorithm in detail. (05)  
b) What is congestion and explain prevention policies? (05)

**OR**

- a) Explain RSVP in details. (05)  
b) Describe flow based routing. (05)

- Q. 5** Explain IP protocol and its header format. (10)

**OR**

- Explain i) IGMP ii) DHCP (10)

- Q.6** a) Compare DES and AES. (05)  
b) Comment on Digital Signature. (05)

**OR**

- a) Describe in detail IPsec. (05)  
b) Explain communication security. (05)

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