

Code No: **R32041**

**R10**

**Set No. 1**

**III B.Tech II Semester Supplementary Examinations, November - 2017**

**COMPUTER NETWORKS**

**(Common to Electronics and Communication Engineering and Electronics and  
Computer Engineering)**

**Time: 3 hours**

**Max. Marks: 75**

**Answer any FIVE Questions**

**All Questions carry equal marks**

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- 1 a) Explain TCP/IP protocol suite. [8M]  
b) Explain different network topologies. [7M]
- 2 a) Explain unguided transmission media in detail. [7M]  
b) What is multiplexing? Explain different types of multiplexing. [8M]
- 3 a) Explain the term sliding window. Also illustrate and explain the operation of selective repeat. [7M]  
b) List and explain the services provided by data link layer. [8M]
- 4 a) Discuss MAC frame structure for IEEE 802.3. [9M]  
b) Explain different types of wireless LANs. [6M]
- 5 a) Explain the Shortest Path Routing Algorithm with an example. [6M]  
b) Explain distance vector routing in-detail and also count to infinity problem to exist in it. [9M]
- 6 a) Give the general principles of various congestion control algorithm. [8M]  
b) Explain the role of Network layer in the internet. [7M]
- 7 a) Compare and Contrast the UDP header and the TCP header. [8M]  
b) What is TCP? Explain TCP connections management. [8M]
- 8 a) Explain the basic principles of cryptography. [8M]  
b) What is e-mail? Briefly discuss about the User Agent. [7M]

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