

**Code No: 5405AB****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****M. Tech I Semester Examinations, July/August - 2021****COMPUTER NETWORKING****(Computer Science)****Time: 3 Hours****Max. Marks: 75****Answer any Five Questions  
All Questions Carry Equal Marks**

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- 1.a) Give the significance of Asynchronous transfer mode.
- b) Explain about delay tolerant Networks. [8+7]
2. Describe IPv4 and IPv6 header fields with neat sketch. Do they have any fields in common? [15]
- 3.a) Discuss the strategies, TCP uses to avoid congestion.
- b) SMTP, FTP and HTTP are protocols to transfer messages from one point to another. Compare and contrast their use. [7+8]
- 4.a) Discuss important concepts of cellular networks.
- b) Write short note on Wireless Mesh Networks. [8+7]
- 5.a) What are the four SONET layers? Explain their functions.
- b) Explain the function of basic optical networking devices. [7+8]
- 6.a) Explain virtual LAN with neat sketch.
- b) Explain MAC and LLC layers in detail. [7+8]
7. Explain Routing Information Protocol (RIP), Interior Gateway Routing Protocol (IGRP) and Spanning Tree Protocol (STP). [15]
8. Write TCP header format. Explain TCP connection establishment and TCP connection termination process. [15]

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