

**R18/R16**

Code No: 155AU/135AE

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

B. Tech III Year I Semester Examinations, March - 2021

**DATA COMMUNICATION AND COMPUTER NETWORKS**

(R18-Information Technology; R16-Common to CSE, IT)

Max. Marks: 75

Time: 3 Hours

Answer any five questions  
All questions carry equal marks

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1. Explain the following:  
a) ATM  
b) Frame relay  
c) ISDN. [5+5+5]
  
  - 2.a) Describe ALOHA. Differentiate between pure Aloha and slotted Aloha. [8+7]  
b) Illustrate IEEE 802.11 frame format.
  
  3. Illustrate any two unicast routing protocols and two multicast routing protocols. [15]
  
  - 4.a) Differentiate TCP and UDP protocols header formats. [8+7]  
b) Explain QoS in Switched Networks.
  
  5. Illustrate DNS. How it is useful for mapping IP address? Explain. [15]
  
  6. Describe following:  
a) Tunneling [7+8]  
b) Internetworking.
  
  7. Illustrate ISO/OSI model with neat diagram and explain functionality of each layer. [15]
  
  - 8.a) Explain guided transmission media in brief. [7+8]  
b) Differentiate noiseless channels and noisy channels.

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