

Code No: 155AN

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**B. Tech III Year I Semester Examinations, September - 2021****COMPUTER NETWORKS**
(Computer Science and Engineering)**Time: 3 Hours****Max. Marks: 75****Answer any five questions**
All questions carry equal marks

- - -

- 1.a) What are the advantages of computer networks?
b) Explain about the functionality of each layer in ISO-OSI reference model with a neat sketch. [5+10]
- 2.a) Write about twisted pair cables and coaxial cables with neat diagram.
b) Draw and explain Internet architecture with a neat sketch. [8+7]
3. What is framing? Explain various framing techniques of Data Link Layer. [15]
- 4.a) Compare and contrast Pure ALOHA and Slotted ALOHA channel allocation Methods.
b) Explain about simplex stop and wait protocol for noisy channel. [8+7]
- 5.a) What are the design issues of Network Layer? Explain in detail.
b) Define congestion. Write about congestion control policies. [7+8]
- 6.a) Explain about hierarchical routing algorithm.
b) Differentiate between broadcasting and multicasting. [7+8]
- 7.a) Discuss about the performance issues in Transport Layer.
b) Explain each field in TCP header with neat diagram. [7+8]
- 8.a) What is DNS? Explain the architecture of DNS Servers in Internet.
b) Write short notes on World Wide Web. [8+7]

---ooOoo---