



**LJ-1245**

**BCA (Part-II)**

Term End Examination, 2021

Paper - IV

Computer Networks

*Time* : Three Hours]

[*Maximum Marks* : 80

[*Minimum Pass Marks* : 27

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**Note** : Answer any **two** parts from each question. All questions carry equal marks.

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**Unit-I**

1. (a) What is Computer Network ? Discuss various components of Data communication.

(b) What is Protocol ? Why it is used ?

(c) What is Topology ? Explain various types of Topology.

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**Unit-II**

2. (a) Explain the analog and digital transmission.
- (b) Explain the term DTE-DCE interface.
- (c) What is Modem ? How does it work ?

**Unit-III**

3. (a) Explain the layers in OSI model.
- (b) What are the responsibilities of the transport layer in OSI model ?
- (c) Which protocol are used in transport layer ?

**Unit-IV**

4. (a) Outline the difference between OSI and TCP/IP model.
- (b) Explain the term ARPANET.
- (c) Explain the IP address classes.

**Unit-V**

5. (a) What is Network Security ? Why is network security important today ?

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- (b) Explain the RSA algorithm.
  - (c) What is Digital Signature ? Explain the importance of Digital Signature.
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