

Sl.No. **0131**

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**VI Semester B.Sc. Examination, April/May - 2019**  
**(Semester Scheme) (New) (2013-14 Onwards)**  
**COMPUTER SCIENCE**

**Computer Networks**

Time : 3 Hours

Max. Marks : 80

**Instruction :** Answer any two full questions from Part-A, B, C & Part - D is compulsory.

**PART - A**

- Q1) a)** What is Data Communication? Explain its characteristics. [5]  
**b)** Explain the Data Communication modes. [5]
- Q2) a)** Write a note on co-axial cable. [5]  
**b)** Explain, Synchronous and Asynchronous transmission. [5]
- Q3) a)** Write a note on Radio waves and Micro waves. [6]  
**b)** Compare Unipolar scheme with Polar scheme. [4]

**PART - B**

- Q4) a)** Explain Frequency Division Multiplexing & Time Division Multiplexing. [6]  
**b)** Explain Satellite Communication. [4]
- Q5) a)** Write a note on : [6]  
**i)** SMTP.  
**ii)** ALOHA.  
**b)** Explain , IPV4 protocol. [4]

**P.T.O.**



Q6) Describe, OSI model.

[10]

**PART - C**

Q7) a) Explain, the concept of virtual-circuit network.

[4]

b) Explain, distance vector routing algorithm.

[6]

Q8) Define Congestion. Explain, Open loop and Closed loop Congestion Control Policies.

[10]

Q9) Define :

[10]

a) IP addressing.

b) LAN.

c) Bandwidth.

d) Router.

e) Checksum.

**PART - D**

Answer any 5 questions

[5 x 4 = 20]

Q10) Explain the protocols used in transport layer of TCP/IP model.

Q11) Write a note on e-mail.

Q12) Compare IP address with MAC address.

Q13) Explain, single bit error and burst error.

Q14) Write a note on Routing table.

Q15) Compare ARP with RARP.

