

Student Registration No

B

COURSE CODE: DCAP406
COURSE TITLE: Computer Networks

Date of Exam:- 16 Oct
Time Allowed : 3 hours

Session:- 1:30-4:30
Max. Marks: 80

1. *This paper contains 10 questions divided in two parts on two pages.*
2. **Part A is compulsory.**
3. **In Part B (Questions 2 to 10), attempt any 6 questions out of 9. Attempt all parts of the questions chosen.**
4. *The marks assigned to each question are shown at the end of each question in square brackets.*
5. *Answer all questions in serial order.*

PART- A

- Q1.a) What do you mean by LAN? [2]
- b) What is the function of Physical Layer? [2]
- c) What is a protocol? [2]
- d) Which layer is responsible for the routing? [2]
- e) Explain the difference between TCP and UDP? [2]
- f) What do you mean by network Security? [2]
- g) What do you mean by data communication? [2]
- h) What is the function of ARP? [2]
- i) Define QoS (Quality of Service) in Networks. [2]
- j) What is the general purpose of Public Switched Telephone Network? [2]

PART- B

- Q2. Explain the difference between token bus and Token Ring? [10]
- Q3. Explain the difference between network security and information security? How these two terms are related to each other? [10]
- Q4. Draw the layer diagram of TCP/IP protocol Suite and explain it briefly? [10]
- Q5. How does DNS perform name resolution and also write different types of name servers? [10]

Q6. Explain in detail about: [10]

a) Bridge

b) Router

c) Switch

Q7. Explain the following Random Access Protocols [10]

a) CSMA

b) CSMA/CD

Q8. Explain Selective Repeat ARQ. Justify how Selective Repeat ARQ outperforms Go-back-N and Stop-and-Wait ARQ. [10]

Q9. Describe the Physical and Transmission Characteristics of the following.

a) Twisted Pair Cable

b) Coaxial Cable [10]

Q10. What is Checksum? With an Example list the steps undertaken by Sender and Receiver for Error Detection? [10]