

Student Regd. No

C

**COURSE CODE:** DCAP406  
**COURSE TITLE:** Computer Networks

Date of Exam:-4 Sept

Time Allowed: **3 hours**

Session:- 9:30-12:30

Max. Marks: **80**

1. *This paper contains 10 questions divided in two parts on 1 page.*

**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.*

- Q1. a) Explain LAN, WAN and MAN?  
b) What do you mean by layered protocol?  
c) Explain the unshielded twisted pair?  
d) Write down any two advantages and disadvantages of using satellite communication?  
e) What is the main purpose of using router in a network?  
f) Discuss the uses of computer networks?  
g) How is bridge different from hub?  
h) When a channel is called a circuit?  
i) What is the data link protocol?  
j) What are the technologies available for Wireless LAN? (10 X 2 = 20)

Q2. Discuss different technologies involved in defining the network hardware?

Q3. Explain what are the reference models for computer networks and how they are related with the OSI reference model?

Q4. Analyze the general properties of each type of bounded transmission media?

Q5. Describe Satellite communication with its general properties and applications?

Q6. Discuss concept of routers and their classification?

Q7. Explain different types of switching techniques such as circuit switching, message switching and packet switching?

Q8. Discuss data link layer design issues including services provided to the network layer, framing, error control and flow control?

Q9. Discuss Network layer design issues along with connection oriented and connectionless services?

Q10. Describe the concepts behind the transport layer services like multiplexing/demultiplexing.

(6 X 10 = 60)