

Student Registration Number

B

**COURSE CODE: DCAP406**

**COURSE TITLE: COMPUTER NETWORKS**

**Time Allowed: 3 hours**

**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 selected question.**
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.*
6. **The student is required to attempt the question paper in English medium only.**

**Part A**

Q1. Explain following:

- |                                      |     |
|--------------------------------------|-----|
| (a) Mesh Topology                    | [2] |
| (b) Single Bit Error vs. Burst Error | [2] |
| (c) Multiplexing                     | [2] |
| (d) ASK                              | [2] |
| (e) TCP vs UDP                       | [2] |
| (f) Flow control                     | [2] |
| (g) Error Control                    | [2] |
| (h) Guided Medium                    | [2] |
| (i) Congestion Control               | [2] |
| (j) Functions of Application Layer   | [2] |

**Part B**

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|--|------|
| Q2. Compare and contrast OSI Model with that of TCP/IP Model.  | [10] |
| Q3. What are the different types of guided transmission medium available for communication? Write a detailed note on same.         | [10] |
| Q4. Write various congestion control and avoidance methods used in computer networks.  | [10] |
| Q5. How is sliding window protocol used to transmit data over channel? Use proper diagrams for same.                               | [10] |
| Q6. What is different design issues related with Network Layer? Write note on same.  | [10] |
| Q7. Write the various application of computer network which make it useful in real life.   | [10] |
| Q8. What is the different error detection techniques used in networks? Write elaborately about any two techniques taking examples. | [10] |
| Q9. Write short note on following:<br>a) E-Mail<br>b) www  | [10] |
| Q10. Write note on Public Switched Telephone Network and Mobile Telephone system.  | [10] |