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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. Write a short note on each of the following:
 - a. Star Topology.
 - b. Burst Error.
 - c. Modulation.
 - d. Layers of OSI Model.
 - e. TCP.
 - f. Flow control.
 - g. Error Control.
 - h. Unguided Medium.
 - i. SMTP.
 - j. Functions of Application Layer.

 $[10 \times 2 = 20]$

Part B

- Q2. What are the different types of MAC protocols used in Data Link Layer? Write a detailed note on same.
- Q3. Write a detailed note on OSI model. Draw a diagram to explain the model.
- Q4. Write various congestion avoidance methods used in computer networks.
- Q5. How is stop and wait ARQ protocol used to transmit data over channel? Use proper diagrams for same.
- Q6. What is different design issues related with Network Layer? Write note on same.
- Q7. Write the various application of computer network which make it useful in real life.
- Q8. Write details of error detecting techniques VRC, LRC and CRC.
- Q9. Write detailed note on QoS in Network Layer.
- Q10. Write note on Public Switched Telephone Network and Mobile Telephone system. [6x10=60]