## VIII Semester B.Tech. Degree (Reg./Sup. – Including Part Time Examination, April 2015 (2007 Admn. Onwards) PT2K6/2K6 EC 803 : COMPUTER COMMUNICATION AND NETWORKING

Time: 3 Hours Max. Marks: 100

Instructions: Answer all questions.

 $PART - A \qquad (8 \times 5 = 40)$ 

- 1. 1) What is Ethernet? Explain the different types of Ethernet.
  - 2) Explain the difference between CBR, VBR and UBR traffic.
  - 3) What is UDP protocol?
  - 4) Suppose a TCP connection is transferring a file of 5000 bytes. The first byte is numbered 10,001. What are the sequence numbers for each segment if data are sent in five segments, each carrying 1000 bytes.
  - 5) Distinguish between M|G|I| and M|M|I queuing model.
  - 6) State and prove title's theorem.
  - 7) Explain it ATM layer supports virtual switching.
  - 8) Explain ATM PNNI routing.

## PART - B

II. A) What is layerisation? Explain the functions and services of each layer of OSI/ISO model.

15

OR

B) Discuss the concept of error control and error detection in communication networks. (8+7)

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| III. | A) | Explain in detail network management and protection architecture of SOWET-SDH.   | 15 |
|------|----|--|----|
|      |    | OR   |    |
|      | B) | Draw the TCP segment and explain in detail by giving functions of each header in the frame format.   | 15 |
| IV.  | A) | Explain M G I queue model.  OR   | 15 |
|      | B) | Explain M M m m queue model.   | 15 |
| V.   | A) | What are the various types of services for data streams provided by ATM?  Explain. Also explain the traffic and error management in ATM. (5+5+  OR | 5) |
|      | B) | Explain the main features and advantages of ATM networks. (10+   | 5) |