

Code: 17ECMC2T4

**I M.Tech - II Semester – Regular/Supplementary Examinations
July 2019**

**OPTICAL NETWORKS
(MICROWAVE & COMMUNICATION ENGINEERING)**

Duration: 3 hours

Max. Marks: 60

Answer the following questions.

1. Draw the Block diagram of Elements of a SONET infrastructure and explain in detail. 15 M

(OR)

2. Write short notes on:
- a) Storage area network. 8 M
 - b) Fiber channel. 7 M

3. With a neat schematic diagram, explain the following
- a) Optical Line Terminal. 10 M
 - b) Optical Line Amplifier. 5 M

(OR)

4. How optical crossconnect used in the network and explain its operation. 15 M

5. How network management functions are implemented on a typical network. 15 M

(OR)

6. Write short note on:

a) Layer with in Optical Network 8 M

b) Open fiber control protocol 7 M

7. Briefly explain different types of protection in SONET/SDH. 15 M

(OR)

8. Explain FTTC with neat diagrams. 15 M