

Code: **ECMC1T4**

I M.Tech - I Semester-Regular Examinations-February 2016

**MICROSTRIP COMPONENTS & MICROSTRIP
ANTENNAS
(MICROWAVE & COMMUNICATION ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

- 1.a) Explain in detail about the modes of the propagation of practical micro strip line. 7 M
- b) Write about micro strip capacitive evaluation. 7 M
2. a) Explain the design of inductors and capacitors. 7 M
- b) Explain about planar circular spiral inductor. 7 M
3. a) Explain various micro strip antenna configurations and their excitations techniques. 7 M
- b) Write about micro strip terminations. 7 M
4. a) Explain vector potential approach. 7 M

- b) Determine bandwidth, directivity, gain and losses of rectangular micro strip antenna. 7 M
5. a) Explain the procedure to determine radiation pattern of circular disc antenna. 7 M
- b) Write the applications of circular micro strip antenna. 7 M
- 6.a) Explain in detail about circularly polarized antennas. 7 M
- b) Compare the slot antennas with patch antennas. 7 M
- 7.a) Explain the losses of circular disc antenna. 7 M
- b) Explain about probe coupling. 7 M
8. a) Explain series feed for one dimension. 7 M
- b) Explain combined feeds. 7 M