

Code: 17ECMC2T6C

I M.Tech - II Semester – Regular Examinations – AUGUST 2018

PHASED ARRAYS
(MICROWAVE & COMMUNICATION ENGINEERING)

Duration: 3 hours

Max. Marks: 60

Answer the following questions.

1. a) Describe directive properties of arrays. 7 M
b) Compare the Linear arrays and planar arrays. 8 M

OR
2. Explain about beam steering and quantization lobes. 15 M

3. What is meant by thinning of arrays and describe different space distributions by which thinning is possible? 15 M

OR
4. Discuss the importance of shaped beam synthesis and explain about Elliott Synthesis. 15 M

5. Explain Circular Bayliss Difference Pattern. 15 M

OR
6. a) Explain Two dimensional Optimization. 7 M

- b) Discuss about Ring side lobe synthesis. 8 M
7. a) Explain TW slot array design. 7 M
- b) Explain Resonant Slot Array Design. 8 M
- OR
8. Explain about shunt feeds. 15 M