Roll No ....

EC - 505

B.E. V Semester

Examination, December 2012

Communication Network And Transmission Lines

Time : Three Hours

Maximum Marks : 70/100

Note : 1. *Attempt one question from each unit.*

  2. *All questions carry equal marks.*

Unit - I

1. a) Determine the image impedance, iterative impedance and characteristic impedance of symmetrical two port network.

   b) Discuss the design of symmetrical attenuators. Also discuss their working principle.

OR

2. a) Differentiate between image transfer coefficient and iterative transfer coefficient.

   b) Discuss the different matching techniques.

Unit - II

3. Discuss the designing of following filters:

   a) m-derived filters.

   b) Chebyshev approximation.

OR

4. Discuss the designing of the following filters:

   a) Composite filter.

   b) Butterworth approximation.

Unit - III

5. a) Explain briefly about Foster and cancer network.

   b) What is Bott Duffin method? Explain.

   OR

6. a) What do you understand by minimum positive real function?

   b) Explain Brune's method.

Unit - IV

7. a) Explain briefly about attenuation and phase equalizers.

   b) Discuss briefly about the T and Z equivalents of a line.

   OR

8. a) Explain briefly about open circuit and short circuit line.

   b) Discuss about the different losses in transmission lines.

Unit - V

9. Write short notes on the following:

   a) SWR

   b) Double stub matching

   OR

10. Write short notes on the following:

    a) Quarter wave line.

    b) Microstrip lines.

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