

Roll No. ....

**24339**

**B. Tech. (EEE) 6th Sem.**

**Examination – May, 2015**

**TRANSMISSION LINE AND NETWORK**

**Paper : EE-344-F**

***Time : Three Hours ]***

***[ Maximum Marks : 100***

*Before answering the question, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

**Note :** (i) Attempt *five* questions in total.

(ii) Question No. 1 (Section A) is *compulsory*.

(iii) Attempt *four* more Questions from remaining *four* Sections (B, C, D & E) by selecting at least *one* Question from each Section.

**SECTION – A**

1. (a) Explain reflection loss due to mismatching. 5

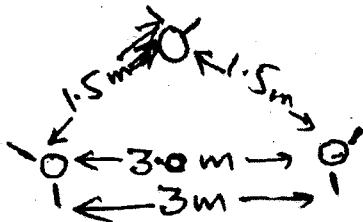
- (b) Explain the characteristics of Low frequency transmission lines. 5
- (c) What do you mean by measurement of Insertion loss? 5
- (d) What do you mean by Equalizers? 5

### SECTION - B

2. What do you mean by Propagation Constant? Explain the methods of computation of Primary and Secondary Constants. 20
3. What do you mean by Reflected and Incident Waves? Explain the phenomenon of standing waves in open and short circuited lines. 20

### SECTION - C

4. Determine the inductance of a 3- $\phi$  line operating at 50 Hz and conductors arranged as follows. The conductor diameter is 0.7 cm. 20



Figure

5. Explain Receiving end and Sending end power diagrams of a transmission line. 20

**SECTION - D**

6. Discuss measurement of standing wave ratio. Also explain the Measurement of Standing waves in wave guides. 20
7. Discuss and explain the Power and Reflection Coefficient. 20

**SECTION - E**

8. Explain classification of Equalizers. Discuss the use of equalizers for the transmission for Digital data. 20
9. Explain : 10 + 10 = 20
- (a) Balanced and Unbalanced Attenuators.
- (b) Minimum loss Attenuators.