SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act, 1956)

Course & Branch: B.E - EEE
Title of the paper: Transmission & Distribution
Semester: V Max. Marks: 80
Sub.Code: 414506 Time: 3 Hours
Date: 02-05-2008 Session: AN

PART – A (10 x 2 = 20)

Answer All the Questions

1. What are feeders?

2. What is the function of distribution system?

3. What do you mean by “symmetrical spacing”?

4. Define resistance of transmission lines.

5. Define short transmission line.

6. Define surge impedance loading of the line

7. How cables are classified based on operating voltage?

8. List the properties of insulating materials used for cables.

9. What are the different methods employed for lightning protection of overhead lines?

10. What are the basic requirements of surge diverters?

PART – B (5 x 12 = 60)

Answer All the Questions

11. With a neat sketch, explain the structure of a general transmission and distribution system.

(or)

12. (a) Compare radial and ring main distribution system.
(b) With a neat sketch, explain about ring main distribution system.

13. Derive an expression for the inductance of a three phase symmetrical transmission line.

(or)

14. Derive the expression for the capacitance of a single phase transmission line.

15. Derive the expression for A,B,C,D constants using nominal T method for medium transmission line.

(or)

16. Explain the various steps involved in drawing receiving end power circle diagram with neat sketches.

17. (a) Explain the constructional features of a High tension cable.
(b) Write short notes on:
    (i) Pin type Insulator.
    (ii) Suspension type Insulator.

(or)

18. Explain the concept of Intersheath Grading. Prove that electic stress with intersheath is less than that of without intersheath.

19. Write short notes on:
(a) Location of lightning arresters
(b) Grounds wires. (5+7)

(or)

20. Write detailed notes on the various causes for over voltage.