

B.Tech. 4th Semester (EEE) (F-Scheme) Examination,
May-2018

TRANSMISSION & DISTRIBUTION

Paper-EE-212-F

Time allowed : 3 hours] [Maximum marks : 100

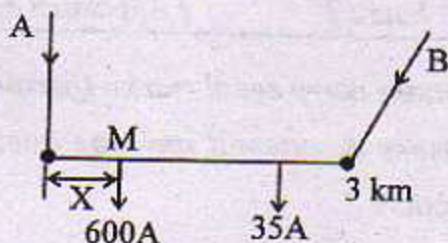
Note : All questions carry equal marks. Question No. 1 is compulsory & attempt any one question from each section.

1. (a) Explain & derive layout and Transmission system.
- (b) Discuss graphical symbols for various types of apparent & circuit elements on substation main connection diagram.
- (c) Explain equalizer ring
- (d) Discuss circle diagram. 20

Section-A

2. (a) Describe advantages & disadvantages of outdoor substations. 20
- (b) Explain types of distribution systems.
3. A train is running from station "A" & is crossing another train standing at 3 km from station B. The loading to running train is 600A, while at standing it takes 60A as shown in fig. What will be the position. of the running

train for having min. potential at a point in the section having distance 8 km between station A & B, if both the ends maintained at equal DC potential. 20



Section-B

4. (a) Discuss Proximity effect in detail. 20
 (b) What is meant by GMD & GMR ?
5. Explain how Transmission lines are classified into short, medium & long lines, explain their characteristics. 20

Section-C

6. (a) What is a Sag-template ? How is it useful for location of towers and stringing of Power conduction ? 20
 (b) Explain how the effect of wind, ice can be included in sag calculation of transmission lines.
7. (a) List the basic tests that are carried out on insulators. 20

- (b) Explain with the neat sketch, the constructional features of pin type insulator.

Section-D

8. (a) Describe in brief with neat sketch one method of laying UG cable. 20
- (b) Show that insulation resistance of a cable is inversely proportional to its length.
9. (a) Application of HVDC Transmission.
- (b) Corona effect.