



Department of Electrical and Electronics Engineering

EE 8402 – Transmission and Distribution

Unit III - MCQ Bank

1. For high voltage transmission line, conductors are suspended from towers so as to

(A) Increase the clearance from ground

(B) Reduce the clearance form ground

(C) Take care of increased length

(D) Reduce wind and snow effect

Answer:(A)

2. The supports used for transmission lines should have

(A) High mechanical strength and longer life

(B) Good appearance

(C) Cheap in initial and maintenance cost

(D) All of above

Answer:(D)

3. Wooden poles are used as line support for

(A) 11 kV

(B) 22 kV

(C) 66 kV

(D) 400 kV

Answer:(B)

4. Maximum permissible span with wooden pole is

(A) 20 m

(B) 30 m

(C) 50 m

(D) 100 m

Answer:(C)

5. Steel poles for transmission lines need protection against

(A) Borer

(B) Termites

(C) Corrosion

(D) All of above

Answer:(C)

6. In India distribution of electric power is carried out through

- (A) Wooden pole
- (B) Steel pole
- (C) RCC pole
- (D) Both (b) and (c)**

Answer:(D)

7. Which of the property has got higher value for aluminum over copper?

- (A) Electrical resistivity**
- (B) Melting point
- (C) Thermal conductivity
- (D) Specific gravity

Answer:(A)

8. In ACSR conductor, insulation between aluminum and steel conductor is

- (A) Betumin
- (B) Varnish
- (C) Insulin
- (D) No insulation required**

Answer:(D)

9. Galvanized steel wire is usually used as

- (A) Stay wire
- (B) Earth wire
- (C) Structure components
- (D) All of above**

Answer:(D)

10. Sag of transmission line conductor in summer is

- (A) Less than in winter
- (B) More than in winter**
- (C) Same in winter
- (D) Can't say anything

Answer:(B)

11. Sag of transmission line depends on

- (A) Span length
- (B) Tension in conductor
- (C) Weight of conductor
- (D) All of above**

Answer:(D)

12. Between two supports, due to sag the conductor takes form of

(A) Semi-circle

(B) Catenary

(C) Hyperbola

(D) None of above

Answer:(B)

13. Which of the following statement is correct?

(A) Ice on conductor increases the skin effect

(B) Wind pressure reduces the corona effect

(C) Wind pressure is taken to act at perpendicular to that of ice

(D) Ice on conductors reduces sag

Answer:(C)

14. Wind loading in coastal regions is in the range of

(A) 50 kg/m²

(B) 150 kg/m²

(C) 100 kg/m²

(D) 200 kg/m²

Answer:(B)

15. The maximum tension in a section of overhead line conductor between two supports of unequal height occurs at

- (A) **Higher support**
- (B) Lower support
- (C) Midpoint of conductor
- (D) None of above

Answer:(A)

16. Stringing chart is useful for

- (A) **Finding the sag**
- (B) Design of tower
- (C) Design of insulator string
- (D) Finding the distance between tower

Answer:(A)

17. Spacing between two conductors for 400 kV line is

- (A) **8 m**
- (B) 11 m
- (C) 14 m
- (D) 17 m

Answer:(A)

18. Which of the following material is not used for overhead line insulators?

- (A) Porcelain
- (B) Glass
- (C) PVC**
- (D) Steatite

Answer:(C)

19. Pin type insulator are mostly subjected to which type of mechanical stress?

- (A) Compressive stress
- (B) Tensile stress
- (C) Both tensile and compressive stress
- (D) Twisting stress**

Answer:(D)

20. Suspension type insulator are subjected to _____

- (A) tensile stress**
- (B) compressive stress
- (C) tensile and compressive stress
- (D) depends on its use

Answer:(A)

21. Suspension insulator are made up of _____

- (A) glass
- (B) porcelain**
- (C) steatite
- (D) epoxy resin

Answer:(B)

22. Which of the following insulator is similar to pin type insulator?

- (A) Suspension insulator
- (B) Post insulator**
- (C) Strain insulator
- (D) Shackle insulator

Answer:(B)

23. Which type of insulator is used where there is dead end of the line or there is a corner or a sharp curve, for high voltage line?

- (A) Pin type insulator
- (B) Shackle insulator
- (C) Strain insulator**
- (D) Stay insulator

Answer:(C)

24. What is the most common cause of failure of overhead line insulators?

- (A) Flashover**
- (B) Mechanical stress
- (C) Porosity of materials
- (D) Improper verification

Answer:(A)

25. Voltage distribution across disc of strings of suspension insulator assembly is _____

- (A) same for all disks
- (B) maximum for unit nearest to the line**

- (C) maximum for unit nearest to the tower
- (D) equal to transmission line voltage rating

Answer:(B)

26. Safety factor is the ratio of

- (A) Working stress to breaking stress.
- (B) Breaking stress to working stress.**
- (C) 1 / breaking stress.
- (D) 1 / working stress.

Answer:(B)

27. What is the purpose of guard ring?

- (A) Reduce the earth capacitance of the lowest unit.**
- (B) Increase the earth capacitance of the lowest unit.
- (C) Reduce the transmission line losses.
- (D) None of these.

Answer:(A)

28. Sag is directly proportional to the square of span.

- (A) True**
- (B) False

Answer:(A)

29. What is the minimum safety factor in respect of the conductor tension?

(A) 1

(B) 3

(C) 2

(D) 1.5

Answer:(C)

30. The voltage across the various discs of a string of suspension insulators having identical discs is different due to

(A) Surface leakage currents

(B) Series capacitance

(C) Shunt capacitance to ground

(D) Series and shunt capacitance

Answer:(C)