# Chap . 2 Voltage gradient of conductors and losses

## Multiple Choice Questions

1. Operating 750 KV line gives AN at a level of
   A. 50 dB
   B. 55.4 dB
   C. 52 dB
   D. 58.5 dB

ANS: B

2. Which type of corona discharge gives interference to radio broadcast
   A. Pulse type
   B. Pulse less type
   C. Glow corona
   D. None of the above

ANS: A

3. The measurement of electrostatic field of an e.h.v. line is done by
   A. Dipole
   B. Spherical Dipole
   C. Parallel plate
   D. All of the above

ANS: D

4. A sphere-sphere gap is used in HV laboratories for
   A. Measurement of EHV
   B. Calibrating other measuring apparatus
   C. Both a and b
   D. None of these

ANS: C

5. The allowable noise level at one MHz is
   A. 22 dB
   B. 26 dB
   C. 30 dB
   D. 32 dB

ANS: B

6. The radio interference level is governed by
   A. Amplitude of single phase
   B. Wave shape of single pulse
   C. Repetitive nature of pulse
   D. All of these

ANS: D

7. The effect of high voltage gradient on bundled conductors are evaluated all over the world by
   A. Drums
   B. Solid cylinders
   C. Cages
   D. None of the above

ANS: C

8. The inductive interference between power and communication line can be minimized by
   A. Increasing the distance between the conductors
   B. Transposition of the power line
   C. Transposition of the communication line
   D. (B) and (C) both

ANS: D

9. The power loss due to corona effect depends on
   A. The surface condition of the conductor
   B. The material density of the conductor
   C. Both A & B
   D. None of the above

ANS: C

10. Charging current in a transmission line increases due to corona effect because corona increases
    A. Line current
    B. Effective line voltage
    C. Power loss in lines
    D. The effective conductor diameter

ANS: D

11. Corona loss can be reduced by using
    A. Solid conductor of diameter ‘d’
    B. Hollow conductor of diameter ‘d + δd’
    C. Bundled conductor
    D. Both B & C

ANS: D

12. Which one of the following statement is not correct for the use of bundled conductors in transmission lines?
    A. Control of voltage gradient
    B. Reduction in corona loss
    C. Reduction in radio interference
    D. Increase in interference with communication lines

ANS: D

13. Transmission lines are transposed to
    A. Reduce corona loss
    B. Reduce skin effect
    C. Prevent interference with neighbouring telephone lines
    D. Prevent short circuit between any two lines

ANS: C

14. Voltage gradient on a transmission line conductor is highest
    A. At the surface of the conductor
    B. At the centre of the conductor
    C. At the distance equal to one radius from the surface
    D. None of these

ANS: A

15. By increasing potential of a conductor
    A. Its potential gradient increase
    B. Insulation required is less
    C. Corona loss is reduced
    D. Potential between conductor and ground decreases

ANS: A