

TE-V-CBCGS-ESE-SEPT20 SUB- EEM SAMPLE QUE SET

-----Section-01-----

QUE-SET (1MARKS)

1. Capacitance in equivalent circuit of transmission line is due to
 - a) Current in the line
 - b) Difference in potential of line
 - c) Leakage of current
 - d) Presence of magnetic flux
2. For 11 kV transmission line the inductance per km will be about
 - a) 1 H.
 - b) 0.1 H.
 - c) 1 mH.
 - d) 0.1 mH.
3. For 11 kV transmission line the capacitance per km will be about
 - a) 0.01 F.
 - b) 0.1 F.
 - c) 0.1 μ F.
 - d) 0.01 μ F.
4. Shunt capacitance is neglected in case of
 - a) Medium and long transmission lines
 - b) Long transmission lines
 - c) Medium transmission lines
 - d) Short transmission lines
5. The fact that current density is higher at the surface when compared to centre is known as
 - a) corona
 - b) proximity effect
 - c) skin effect
 - d) all of the above
6. What is the opposition to the transfer of energy which is considered the dominant characteristic of a cable or circuit that emanates from its physical structure?
 - a. Conductance
 - b. Resistance
 - c. Reactance
 - d. Impedance
7. When load impedance equals to Z_o of the line, it means that the load _____ all the power.
 - a. reflects
 - b. absorbs
 - c. attenuates
 - d. radiates
8. Impedance matching ratio of a coax balun.
 - a. 1:4
 - b. 4:1
 - c. 2:1
 - d. 3:
9. When VSWR is equal to zero, this means
 - a. that no power is applied
 - b. that the load is purely resistive
 - c. that the load is a pure reactance
 - d. that the load is opened
10. _____ is the ratio of reflected voltage to the forward travelling voltage.
 - a. SWR
 - b. VSWR
 - c. Reflection coefficient
 - d. ISWR

-----Section -2-----

QUE SET 2 MARKS

1 The following are considered primary line constants except

- a. conductance
- b. resistance
- c. capacitance
- d. complex propagation constant

2 The dielectric constants of materials commonly used in transmission lines range from about

- a. 1.2 to 2.8
- b. 2.8 to 3.5
- c. 3.5 to 5.2
- d. 1.0 to 1.2

3. Typically, the velocity factor (VF) of the materials used in transmission lines range from

- a. 0.6 to 0.9
- b. 0.1 to 0.5
- c. 1.0 to 0.9
- d. 0.6 to 0.8

4. For an air dielectric two-wire line, the minimum characteristic impedance value is

- a. 95 ohms
- b. 85 ohms
- c. 90 ohms
- d. 88 ohms

5. The concept used to make one Smith chart universal is called

- a. ionization
- b. normalization
- c. rationalization
- d. termination

6 The lines having R, L, C distributed along the circuit are called a) Lumped b) Distributed c) Parallel d) Paired

7.. Which primary parameter is uniformly distributed along the length of the conductor? a) G b) C c) L d) R

8.The leakage current in the transmission lines is referred to as the a) Resistance b) Radiation c) Conductance d) Polarisation

9 A non-optimum value for SWR will cause:

- a. standing waves
- b. loss of power to load
- c. higher voltage peaks on cable
- d. all of the above

10 VSWR stands for:

- a. variable SWR
- b. vacuum SWR
- c. voltage SWR
- d. none of the above

11 The impedance "looking into" a matched line:

- a. is infinite
- b. is zero
- c. is the characteristic impedance
- d. 50 ohms

12 A Smith Chart is used to calculate:

- a. transmission line impedances
- b. propagation velocity
- c. optimum length of a transmission line
- d. transmission line losses

13 What is the distance from the far end of the ground wave to the nearest point where the sky wave returns to earth called?

- (a) Angle of radiation
- (b) maximum usable frequency
- (c) Skip distance
- (d) Skip zone



14. Which of the following are electromagnetic

- (a) Radio waves
- (b) Light
- (c) Gamma waves
- (d) All the above

15 The radio waves were demonstrated experimentally by

- (a) Hertz
- (b) Maxwell
- (c) Marconi
- (d) Armstrong

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