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4th Sem / Eltx , Power Eltx
Subject:- Communication System./ Comm. Engg

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

Q.1 1 GHz is equal to
a) 10^7 Hz b) 10^8 Hz
c) 10^9 Hz d) None of the above

Q.2 Full form of FET
a) Fine Electron Tube
b) Fine Emitter Tube
c) Field Effect Transistor
d) None of the above

Q.3 AGC stand for
a) Automatic Gate Control
b) Automatic Gain Control
c) Absolute Ground Control
d) None of the above

Q.4 One of the following is an indirect method of generating FM
a) Reactance FET Modulator
b) Varactor diode Modulator
c) Armstrong Modulator
d) Reactance bipolar transistor Modulator

Q.5 The current distribution on a half wave dipole is
a) Uniform b) Sinusoidal
c) Triangular d) Complex

Q.6 Antenna commonly used for microwave links are
a) Yagi Uda Antenna
b) Log periodic Antenna
c) Parabolic dishes
d) rhombic Antenna

Q.7 The troposphere extends from earth surface to a height of
a) 18 km b) 50 km
c) 100 km d) 250 km

Q.8 A satellite that appears to be at a fixed position in the sky from the earth is called as_____
a) Active satellite
b) Passive satellite
c) Geostationary satellite
d) None of the above

Q.9 Which type of antenna is having driven element, directors and reflector
a) Patch antenna b) loop antenna
c) Ferrite rod antenna d) Yagi Uda Antenna

Q.10 In receivers which stage receives incoming signal
a) RF amplifier b) IF amplifier
c) Mixer d) Local oscillator

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 In a radio receiver with a simple AGC an increase in signal strength produce more AGC. (True/False)

Q.12 The ability of a receiver to reject unwanted signals is known as_____.

Q.13 AGC stands for_____.

Q.14 UHF ranges from _____to_____.

Q.15 The electric & magnetic fields are_____ to each other and to the direction of propagation.

Q.16 The radiation pattern of Yagi Antenna is_____ (Unidirectional/ Bidirectional)

Q.17 What is the full form of MUF?

Q.18 VSAT stands for_____.

Q.19 Define perigee.

Q.20 Define line of sight propagation.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Classify the AM transmitters on the basis of modulation.

Q.22 What do you understand by image rejection ratio, explain it.

Q.23 Explain principle and working of Reactance FET transmitter.

Q.24 Give the frequency range of VLF, LF,MF,HF,VHF, UHF and microwave.

Q.25 Define the terms Beam width and radiation resistance related to antenna.

Q.26 Explain multiple Hop propagation.

Q.27 Write a short note on standard atmosphere.

Q.28 Describe the principle and working of Half wave dipole antenna.

Q.29 Explain simple and delayed AGC.

Q.30 Give some idea about signal to noise ratio and fidelity.

Q.31 What is the use of De-emphasis in FM reception.

Q.32 Explain virtual height.

Q.33 What do you understand by skip distance.

Q.34 Draw the block diagram of AM transmitter.

Q.35 Explain Geostationary satellite.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

Q.36 Explain different modes of wave propagation in detail.

Q.37 Describe structure, characteristics working and application of a Dish Antenna.

Q.38 Explain the block diagram of a satellite communication link.