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221043

4th Sem.

Branch : ECE, ECE, (For speech and Hearing Impaired)  
Sub. : Communication System

Time : 3 Hrs.

M.M. : 60

### SECTION-A

**Note: Multiple type Questions. All Questions are compulsory.** (6x1=6)

Q.1 The standard IF value for AM receiver is

- a) 455 MHz
- b) 455 KHz
- c) 12.5 MHz
- d) 10.9 KHz

Q.2 One Gigahertz is equal to

- a)  $10^9$  Hz
- b)  $10^6$  Hz
- c)  $10^3$  Hz
- d)  $10^{12}$  Hz

Q.3 The troposphere extends from earth surface to a height of.

- a) 100 km
- b) 270 km
- c) 70 km
- d) 18km

Q.4 A geostationary satellite completes one orbit in

- a) 8 Hrs.
- b) 16 Hrs.
- c) 24 Hrs.
- d) 4 Hrs.

Q.5 A parabolic antenna is commonly used at

- a) 5000 MHz
- b) 500MHz
- c) 50 MHz
- d) 5 MHz

Q.6 AGC stands for

- a) Automatic Gauge control
- b) None
- c) Access Gain control
- d) Automatic Gain Control

### SECTION-B

**Note: Objective/Completion type questions. All questions are compulsory.** (6x1=6)

Q.7 VSAT stands for \_\_\_\_\_.

Q.8 FET stands for \_\_\_\_\_.

Q.9 UHF stands for \_\_\_\_\_.

Q.10 The ability of receiver to reject unwanted signals is known as \_\_\_\_\_.

Q.11 Armstrong method is \_\_\_\_\_ method of FM Generation.

Q.12 Virtual height is always \_\_\_\_\_ than the actual height.

### SECTION-C

**Note: Short answer type Questions. Attempt any eight questions out of ten Questions. (8x4=32)**

Q.13 Explain block diagram of a transmitter using law level modulation.

Q.14 Explain Reactance FET FM transmitter.

Q.15 Explain sensitivity and Selectivity.

Q.16 Explain AGC and image rejection ratio.

Q.17 Explain polarization of EM waves.

Q.18 What is directivity and radiation pattern.

Q.19 Discuss structure of standard atmosphere?

Q.20 Explain the terms.

a) Critical frequency      b) Skip distance

Q.21 Explain line of sight propagation.

Q.22 Differentiate between active a passive satellite.

### SECTION-D

**Note: Long answer questions. Attempt any two questions out of three Questions. (2x8=16)**

Q.23 Explain with block diagram the working of Super hetero dyne AM receiver.

Q.24 Explain different modes of wave propagation in detail.

Q.25 Explain with block diagram the working of VSAT?