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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?