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Roll No.

221043

4th Sem./ ECE, ECE
(For Speech and Hearing Impaired)
Subject : Communication Systems

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

- Q.1 In communication Systems, AGC stands for (CO1)
a) Asynchronous Gain circuit
b) Asynchronous Gain Control
c) Automatic Gain Circuit
d) Automatic Gain Control
- Q.2 In FM transmitters, the modulating signal modulates the carrier with respect to its (CO2)
a) Amplitude b) Frequency
c) Phase d) None of these
- Q.3 Frequency range of VHF (CO3)
a) 300-3000 KHz b) 3-30 MHz
c) 30-300 MHz d) 300-3000 MHz
- Q.4 Speed of light is (CO4)
a) 3×10^8 m/s b) 3×10^8 m/h
c) 3×10^8 Km/s d) 3×10^8 Km/h

- Q.5 A VSAT comprises of (CO5)
 a) Dish antenna b) Transceiver
 c) Satellite router d) All of these
- Q.6 VSAT is used for (CO5)
 a) Internet service providers
 b) Mobile Phone base actions
 c) Broadband direct to home
 d) All of these

SECTION-B

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

- Q.7 Speed of light = frequency X _____. (CO1)
- Q.8 The selectivity of a receiver is its ability to reject unwanted signals. (True/False) (CO2)
- Q.9 Low frequency (LF) is used for Radar Navigation. (True/False) (CO3)
- Q.10 Perigee is farthest point from earth reached by the satellite orbiting it. (True/False) (CO4)
- Q.11 The skip distance _____ (Decreases/increases) with frequency. (CO4)
- Q.12 Ground wave propagation is also referred to surface wave propagation. (True/False) (CO5)

SECTION-C

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

- Q.13 Write advantages of Armstrong FM transmitter. (CO1)

- Q.14 Explain the working of reactance FM transmitter. (CO1)
- Q.15 Explain the concept of delayed AGC. (CO2)
- Q.16 Define (CO2)
 a) Fidelity b) Sensitivity
- Q.17 Explain Loop antenna. (CO3)
- Q.18 Write a short note on "Electromagnetic Spectrum". (CO3)
- Q.19 Explain Maximum usable frequency. (CO4)
- Q.20 Explain Ionosphere and its layers. (CO4)
- Q.21 Draw block diagram of satellite communication link. (CO5)
- Q.22 Differentiate between active and passive satellites. (CO5)

SECTION-D

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

- Q.23 Draw and Explain block diagram of Amtransmitter. (CO1)
- Q.24 Draw and Explain block diagram of FM receiver. (CO2)
- Q.25 Explain Ground wave propagation. Write any two applications of Ground wave propagation. (CO4)