S. B. Roll. No.....

COMMUNICATION SYSTEM
4th Exam/ECE/6561/Nov'24
(For 2018 Batch Onwards)

Duration: 3Hrs. **M.Marks:75**

SECTION-A

Q1. Do as directed. **15x1=15**

a. Write the Full Form of LOS.
b. Write the Full Form of VHF.
c. Define orbit of a satellite.
d. Define the sensitivity of the receiver.
e. A device that performs modulation is known as_____
f. Write the Full Form of DSB-SC.
g. Armstrong method is _____method of generating FM.
h. The artificial boosting of higher modulating frequencies is called as_____
i. Antennas are metallic structure designed for _____and _____electromagnetic energy.
j. Ground waves progress in the frequency range of_____
k. The _____is the farthest point that can be seen by transmitting antenna.
l. The _____is the frequency used to transmit a signal from earth to satellite.
m. Velocity of EM wave in free space is given _____m/s.
n. VCO stands for_____
o. Audio frequencies are below_____

SECTION-B

Q2. Attempt any six questions. **6x5=30**

i. Compare Active and Passive Satellites in Communication System.
ii. Define the Electromagnetic Spectrum and discuss its various ranges.
iii. What is the need of de-emphasis in FM reception?
iv. Explain the principle of Armstrong method of FM transmitter.
v. Write short note on a) Duct Propagation b) Fading.
vi. Write short note on a) Directivity b) Voltage Standing Wave Ratio.
vii. Give classification of Antenna on the basis of frequency.
viii. Define ASK, PSK and FSK.

SECTION-C

Q3. Attempt any three questions. **3x10=30**

a. Explain the block diagram and working of super heterodyne AM receiver.
b. Give the comparison between Ground, Sky and Space wave propagation.
c. Explain the block diagram of a Satellite Communication link.
d. Write short note on the following. i) Horn Antenna ii) Dish Antenna