

S.B. Roll No. _____

Communication System-I
4th Exam/ECE/2361/6167/6127/May'2015

Duration: 3hrs

M.Marks:75

Section –A

Note: Attempt all questions

Q.1 Fill in the blanks:

10x1.5=15

- (a) The electromagnetic signals are also known as _____
- (b) The frequency of the modulated signal is 1MHz then minimum antenna height is _____
- (c) The frequency range for AM broadcasting is from _____ to _____
- (d) _____ is the process of combining the incoming signal with local oscillator signal to produce new signal
- (e) An _____ radiator is a point source antenna which radiate equally in all the direction.
- (f) A typical value of IF for a FM receiver is _____.
- (g) For frequency above 30MHz _____ propagation is used.
- (h) LASER stands for _____.
- (i) The Geostationary satellite placed at a height of about _____ km from the earth's surface.
- (j) The orbit passing over the north and South Pol is called _____

Section –B

Q.2 Attempt any five questions.

5x6=30

- (a) Explain the low level and high level AM Transmitter.
- (b) Explain the following terms:
1S/N ratio 2 Selectivity 3Fidelity 4Image rejection ratio 5Sensitivity
- (c) Discuss Yagi-Uda antenna in detail.
- (d) Explain the Duct Propagation.
- (f) Describe the working of LED.
- (g) Explain the folded dipole antenna. Also draw its Radiation Pattern.
- (h) Explain active and passive satellite.

Section –C

Q.3 Attempt any three questions.

3x10=30

- (a) Draw and explain the block diagram of Super heterodyne of AM receiver.
- (b) Explain the Armstrong method of FM Generation.
- (c) With the help of block diagram explain Optical fiber communication system
- (d) Explain the satellite communication link in detail with its advantages and disadvantages.
- (e) Explain the following terms: 1Virtual Height 2 Critical Frequency 3 Skip Distance 4 Maximum useable Frequency.