S.B. Roll No...

COMMUNICATION SYSTEM-I
4th Exam/ECE/ETV/ECEII/6127/2361/May'17

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

SECTION - A

Q1. Fill in the blanks: **10x1.5= 15**

a) A_____ satellite acts merely as a reflector of signal.
b) IF in AM receivers is_____.
c) A joint between two fibers is called_____.
d) Armstrong method uses _____ to generate FM signal.
e) AGC stands for_____.
f) Crystal oscillator is used for increasing the _____.
g) Velocity of EM wave in free space is given by _____m/s.
h) The _____ is the farthest point that can be seen by transmitting antenna.
i) _____ is the point in the orbit of a satellite closet to the earth.
j) Attenuation is caused by_____.

SECTION – B

Q2. Attempt any Six Questions: **6x 5=30**

i.   Explain with suitable diagram the working principle of super heterodyne AM receiver.
ii. Explain Pre-emphasis and De- emphasis in FM
iii. Define antenna array. Briefly explain Broadside array and End fire array.
iv. Discuss in detail multiple hop sky wave propagation.
v.   Draw and explain the block diagram of Optical fiber communication system.
vi. What do you mean by bending losses? Explain in brief
vii. What do you understand by splicing? Why it is required in optical fiber communication? Explain various types of splicing
viii. What are the advantages and disadvantages of fiber optic communication?

SECTION- C

Attempt any three Questions.   **3x10=30**

Q3. Explain the block diagram of communication system and also write application of communication system.

Q4. Give the comparison between ground, sky and space wave propagation.

Q5. Draw the block diagram and explain the working of AM transmitter.

Q6. Write a short note on:
   a) *Duct propagation*
   b) Yagi- uda antenna