S.B. Roll No...

PRINCIPAL OF COMMUNICATION ENGINEERING
3rd Exam/ECE/4461/Jan'2022
(FOR 2018 BATCH ONWARDS)

Duration: 1.15Hrs.   **M.Marks:25**

SECTION-A

Q1. Attempt any three questions.   **3x5=15**

  i. Explain the block diagram of communication system.
  ii. Explain the need of modulation.
  iii. Comparison between AM and FM in communication system.
  iv. A 600 w carrier is modulated to a depth of 60%. Calculate the total power in modulated wave.
  v. Explain the pre emphasis and De emphasis.
  vi. What is the basic concept of TDM?
  vii. Explain the block diagram of stabilization of carrier frequency using AFC.

SECTION-B

Q2. Attempt any one question.   **1x10=10**

  a. Derive the expression of an amplitude modulated wave.
  b. Explain the linear Diode Detector with RC time constant.
  c. Explain the working principle of balance modulator with the help of circuit diagram.
  d. Explain the principal of foster seeley discriminator with the help of a neat diagram.