

RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College under University of Calcutta)

SECOND YEAR

B.A./B.SC. FOURTH SEMESTER (January – June) 2013

Mid-Semester Examination, March 2013

Date : 06/03/2013

ELECTRONICS (General)

Time : 12 noon – 1 pm

Paper : IV

Full Marks : 25

1. a) What is modulation? Why it is needed?
b) Derive the equation of AM wave with proper significance. [2+3+5]
2. a) A transmitter radiates 10KW with the carrier unmodulated and 11.5KW when it is sinusoidally modulated. Calculate modulation index. If another sine wave resulting in 50% modulation is transmitted simultaneously, find the total radiated power.
b) Draw the block diagram of a Typical Communication System and explain each block. [5+5]
3. Write short notes on any one : [5]
 - a) Spectrum of AM wave
 - b) Classification of Modulation
 - c) Advantages of AM over FM



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