THE AMERICAN COLLEGE, MADURAI

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

Re-accredited (2nd Cycle) by NAAC with Grade "A", CGPA – 3.46 on a 4-point scale

Backlog Arrear Examination, March 2021

COURSE CODE: PHS 3596/3576   **COURSE TITLE: Communication Systems**

Time: 3hr   **Max.Mark:75**

Part - A

Answer any FIVE the following questions.   **5x15=75marks**

1) Obtain an expression for varying of an amplitude modulated wave and the total power of the AM wave.

2) Discuss the concept of single side band suppressed carrier with clear diagram.

3) Draw block diagram of a Superhetrodyne receiver and explain its function.

4) Describe the FM demodulator with clear diagram.

5) Explain the digital communication system with necessary block diagram.

6) Derive an expression for the numerical aperture and acceptance angle of a fiber in terms of refractive indices.

7) Explain the different types of satellite orbits.

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