



**Muzaffarpur Institute of Technology (MIT), Muzaffarpur**

*(Under the Department of Science & Technology Govt. of Bihar, Patna)*

**Department of Electronics and Communication**

**B.Tech 5<sup>th</sup> Semester Weekly Exam - 2, 2018**

**INTRODUCTION TO COMMUNICATION SYSTEM**

**SET: 1**

**TIME: 20 min**

**FULL MARKS: 2 + 2 + 2 + 4 = 10**

**NAME:** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

(1) An unmodulated AM transmitted power is given by 1000 watts. Find AM transmitted power with 100% of modulation?

(2) For an AM, total sideband power is 100W with  $\mu = 0.5$ . Find carrier power?

(3) The peak amplitudes of AM signals are varying between 2V and 10V. Find  $\mu$ ?

(4) An AM signal is given by  $s(t) = 4 \cos(3200\pi t) + 10 \cos(4\pi \times 10^3 t) + 4 \cos(4800\pi t)$   
Find all the possible parameters of AM

NUMBER OF ATTEMPTS: \_\_\_\_\_ MARKS SCORED: \_\_\_\_\_ SIGNATURE OF FACULTY \_\_\_\_\_



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**INTRODUCTION TO COMMUNICATION SYSTEM**

**SET: 2**

**TIME: 20 min**

**FULL MARKS: 2 + 2 + 2 + 4 = 10**

**NAME:** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

(1) An unmodulated AM transmitted power is given by 100 watts. Find AM transmitted power with 10% of modulation?

(2) For an AM, total sideband power is 100W with  $\mu = 0.5$ . Find total power?

(3) The peak amplitudes of AM signals are varying between 2V and 10V. Find total power?

(4) An AM signal is given by  $s(t) = 14 \cos(5200\pi x t) + 20 \cos(6 \times \pi \times 10^3 t) + 14 \cos(6800\pi x t)$   
Find all the possible parameters of AM

NUMBER OF ATTEMPTS: \_\_\_\_\_ MARKS SCORED: \_\_\_\_\_ SIGNATURE OF FACULTY \_\_\_\_\_



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**INTRODUCTION TO COMMUNICATION SYSTEM**

**SET: 3**

**TIME: 20 min**

**FULL MARKS: 2 + 2 + 2 + 4 = 10**

**NAME:** \_\_\_\_\_

**ROLL NO.** \_\_\_\_\_

(1) An unmodulated AM transmitted power is given by 500 watts. Find AM transmitted power with 50% of modulation?

(2) For an AM, total sideband power is 100W with  $\mu = 0.5$ . Find sideband power?

(3) The peak amplitudes of AM signals are varying between 2V and 10V. Find  $\eta$ ?

(4) An AM signal is given by  $s(t) = 2 \cos(3000\pi x t) + 5 \cos(4 \times \pi \times 10^3 t) + 2 \cos(5000\pi x t)$   
Find all the possible parameters of AM

NUMBER OF ATTEMPTS: \_\_\_\_\_ MARKS SCORED: \_\_\_\_\_ SIGNATURE OF FACULTY \_\_\_\_\_