

SYAMAPRASAD COLLEGE

INTERNAL EXAMINATION

SEMESTER III

PAPER: Communication Electronics

PAPER CODE: ELT-G-CC-3-3-TH

FULL MARKS: 10

TIME: 30 MINUTES

Answer any ten (10) of twelve (12) MCQs. Each carries one (1) mark.

1. The modulation index of an AM wave is changed from 0 to 1. The transmitted power is
 - a. unchanged
 - b. halved
 - c. doubled
 - d. increase by 50%
2. Indicate which one of the following is not an advantage of FM over AM:
 - a. Better noise immunity is provided
 - b. Lower bandwidth is required
 - c. The transmitted power is more useful
 - d. less modulating power is required
3. One of the following is an indirect way of generating FM. This is the
 - a. reactance FET modulator
 - b. varactor diode modulator
 - c. Armstrong modulator
 - d. reactance bipolar transistor modulator
4. The Hartley states that
 - a. the maximum rate of information transmission depends on the channel bandwidth
 - b. the maximum rate of information transmission depends on the depth of modulation
 - c. redundancy is essential
 - d. only binary codes may be used
5. The most common modulation system used for telegraphy is
 - a. frequency-shift keying
 - b. two-tone modulation
 - c. pulse-code modulation
 - d. single-tone modulation

6. Pulse-width modulation system used for telegraphy is

- a. by differentiating pulse-position modulation
- b. with a monostable
- c. by integrating the signal
- d. with a free-running multivibrator

7. Indicate which of the following system is digital.

- a. Pulse-position modulation
- b. Pulse-code modulation
- c. Pulse-width modulation
- d. Pulse-frequency modulation

8. Quantizing noise occurs in

- a. time-division multiplex
- b. frequency division multiplex
- c. pulse-code modulation
- d. pulse-width modulation

9. In order to reduce quantizing noise, one must

- a. increase the number of standard amplitudes
- b. send pulses whose sides are more nearly vertical
- c. use an RF amplifier in the receiver
- d. increase the number of samples per second

10. Indicate which of the following pulse modulation systems is analog

- a. PCM
- b. Differential PCM
- c. PWM
- d. Delta

11. The biggest disadvantage of PCM is

- a. its inability to handle analog signals
- b. the high error rate which its quantizing noise introduces
- c. its incompatibility with TDM
- d. the large bandwidths that are required for it

12. Which of the following is the most reliable measurement for comparing amplifier noise characteristics?

- a. signal-to-noise ratio
- b. noise factor
- c. shot noise
- d. thermal noise agitation