

S.No. 94

17PEL05

(For the candidates admitted from 2017-2018 onwards)

M.Sc. DEGREE EXAMINATION, APRIL/MAY 2018.

Second Semester

Electronics and Communication

ANALOG AND DIGITAL COMMUNICATION SYSTEM

Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Explain the basic fundamentals of electromagnetic waves.

Or

- (b) With a neat diagram, explain the radiation patterns of resonant antenna.

2. (a) Write a short note on amplitude modulation theory.

Or

- (b) Discuss about the effect of noise on carrier.

3. (a) With a neat diagram, explain the working principle of PAM.

Or

- (b) Describe the operation of PWM with a neat diagram.

4. (a) Explain with a neat diagram, the concept of asynchronous transmission.

Or

- (b) Discuss about the concept of error control coding.

5. (a) Enumerate the standards of television systems.

Or

- (b) Explain the concept and function of colour transmission.

PART B — (5 × 10 = 50 marks)

Answer ALL questions.

6. (a) With a neat diagram, explain in detail the concept of sky wave propagation.

Or

- (b) Explain with a neat diagram, the function of folded dipole antenna and non-resonant antennas.

7. (a) With a neat block diagram, explain in detail the function of each block of AM generation.

Or

- (b) Explain in detail the generation of FM using indirect method with a neat block diagram.

8. (a) Explain with a neat diagram, the working of pulse code modulation.

Or

- (b) Explain in detail the working of pulse time modulation and pulse position modulation.

9. (a) With a neat diagram, explain in detail the working of frequency shift keying.

Or

- (b) Briefly explain the working principle of differential phase shift keying.

10. (a) With a neat block diagram, explain in detail the function of each block of basic monochrome television system.

Or

- (b) Explain with a neat diagram, the working of vertical deflection circuits.