

B.TECH SEM – IV (2007 COURSE) (ELECTRONICS) :

SUMMER - 2018

SUBJECT: ANALOG COMMUNICATION

Day: **Tuesday**
Date: **05/06/2018**

S-2018-2621

Time: **10.00 AM TO 01.00 PM**
Max Marks: 80

N.B:

- 1) **Q. No. 1 and Q. No. 5 are COMPULSORY.** Out of remaining attempt **ANY TWO** question from each section.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answer to both the sections should be written in **SEPARATE** answer book.
- 4) Assume suitable data, if necessary.

SECTION-I

- Q.1** a) List out the types of Microphones and explain any one in detail. (05)
b) Define modulation and need of modulation. (05)
c) Compare frequency modulation and amplitude modulation. (04)
- Q.2** a) Explain baffles and enclosures for loudspeakers. (07)
b) Explain public address system with the help of block diagram. (06)
- Q.3** a) Define amplitude modulation and explain over modulation, under modulation and perfect modulation. (07)
b) Explain phase shift method for generation of SSB signal. (06)
- Q.4** a) Compare narrowband FM and wideband FM. (07)
b) Describe the terms pre-emphasis and de-emphasis. (06)

SECTION-II

- Q.5** a) Draw TRF receiver and mention its advantages and disadvantages. (06)
b) Write a note on ground wave propagation. (04)
c) Compare pulse dialing and DTMF dialing. (04)
- Q.6** a) Discuss selectivity, sensitivity and fidelity characteristics of radio receiver. (07)
b) Draw and describe superheterodyne receiver. (06)
- Q.7** a) Compare ground wave propagation, space wave propagation with neat sketch. (07)
b) Explain following terms; (06)
i. Losses in transmission line
ii. Standing waves
- Q.8** a) Explain cross bar exchange system in detail. (07)
b) Discuss the advantages and disadvantages of electronic telephone exchange. (06)

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