

NTK/KW/15/5901

Bachelor of Science B.Sc. (Semester-V) (C.B.S.)

Examination

ELECTRONIC COMMUNICATION

Paper—1

(Electronics)

Time—3 Hours]

[Maximum Marks—50

N.B. :— (1) All questions are compulsory and carry equal marks.

(2) Draw neat diagrams wherever necessary.

EITHER

1. (A) Draw the block diagram of communications system and explain it.

Explain need of modulation. 6+4

OR

- (B) Explain simplex and duplex system.

Explain Amplitude Modulation in detail. 4+6=10

EITHER

2. (A) Explain ground waves, sky waves and space waves.

Explain various characteristics of Antenna. 4+6

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1

Contd.

OR

- (B) Explain Classification of Antennas on the basis of frequency.

Explain various antennas based on feed mechanism.

5+5

EITHER

3. (A) Explain synchronous and asynchronous data transmission methods.

Explain digital FSK modulator.

5+5

OR

- (B) Explain ASK modulator.

Explain PSK modulator.

5+5

EITHER

4. (A) Explain fiber optic communication system. Also state its advantages (any **TWO**).

Explain features of Cellular Telephone System.

5+1+4

OR

- (B) Draw the block diagram of Fax Machine and explain the functioning of Fax System.

Draw the block diagram of Cellular Telephone Unit and explain it.

6+4

5. (A) State the advantages and disadvantages of digital communication.

(B) Explain repeaters used in communication systems.

(C) State and explain Shannon Theorem.

(D) Explain various types of optical fibers. 4×2½