



B.Sc. V Semester Degree Examination, April/May - 2024

ELECTRONICS

DSC - 5 : Electronic Communication (NEP)

Time : 2 Hours

Maximum Marks : 60

Note : Answer **all** sections.

SECTION - A

1. Answer **all** questions. **10x1=10**
- (a) What is antenna ?
 - (b) Define ionospheric wave propagators.
 - (c) What is lumped parameters ?
 - (d) What is modulation ?
 - (e) Expand AM and FM.
 - (f) What is modulation index ?
 - (g) Define sensitivity of radio receivers.
 - (h) What is AGC ?
 - (i) What is VSWR ?
 - (j) What is gain of antenna ?

SECTION - B

- Answer **any four** questions. **4x5=20**
- 2. Explain the different methods of radio wave propagations.
 - 3. Write a note on Maxwell's equations in vector modes.
 - 4. Explain the importance of communication in electronics.
 - 5. Explain the working of collector modulator.
 - 6. Explain the working of Varactor diode as FM modulator.
 - 7. Write a note on TRF receiver with block diagram.



SECTION - C

Answer **any three** questions.

3x10=30

8. Write antenna parameters and explain in brief.
9. Explain different types of Transmission lines in brief.
10. Derive an expression of Amplitude modulations in communication system.
11. With a neat circuit diagram explain Balanced modulator.
12. With a neat circuit block diagram explain AM Superheterodyne receiver. Mention its advantages.

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