



APRIL/MAY 2019

**BEL42 – ELECTRONIC COMMUNICATION
SYSTEMS**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is called effective resistance?
2. Define directive gain.
3. Write down the types of modulation?
4. What is super heterodyne Receiver?
5. Mention the features of varactor diode tube modulator?
6. Write the differences between PWM and PPM.
7. What do you mean by quantization error?
8. What are advantages of fiber optic communication over Microwave communication ?
9. State the features of PSK.
10. Expand: RADAR.

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL the questions.

11. (a) Write short note on bandwidth, Beam width and polarization.

Or

- (b) Explain the dish antenna.

12. (a) Explain the balanced modulator.

Or

- (b) Explain the working of AM Radio transmitter.

13. (a) Describe the reactance tube Modulator.

Or

- (b) Enumerate the balanced slope detector

14. (a) Explain : PPM.

Or

- (b) Elucidate the delta modulation.

15. (a) Describe the frequency shift keying.

Or

- (b). Obtain the RADAR range equation.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Explain the Yagi — Uda antenna.

17. Explain the DSB/SC modulation.

18. Describe the FM receiver.

19. Explain

(a) PAM

(b) PWM.

20. Describe the time division multiplexing.

