



23104816

QP CODE: 23104816

Reg No :

Name :

**B.Sc DEGREE (CBCS) REGULAR/IMPROVEMENT/REAPPEARANCE
EXAMINATIONS, FEBRUARY 2023**

First Semester

B.Sc Physics Model III Electronic Equipment Maintenance

Core Course - PH1CRT22 - COMMUNICATION ENGINEERING

2017 Admission Onwards

76FFD8B1

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Over modulation is occurred when signal amplitude is -----carrier amplitude
a)equal to b)greater than c)less than d)none
2. What is modulation index?
3. What are the characteristics of loudspeaker?
4. What is the application of zener voltage regulator?
5. What is the difference between dual polarity and single polarity PAM?
6. In what situation multiplexing is used?
7. What are the disadvantages of delta modulation?
8. What is quantization error?
9. List the functions of TV tuner.
10. What is the main function of the blanking pulses?
11. State the main function of UHF tuners.
12. What are the advantages of AGC?

(10×1=10)





Part B

Answer any **six** questions.

Each question carries **5** marks.

13. With block diagram explain the general principles of radio broadcasting ,transmitting and receiving.
14. The load current in the transmitting antenna of an unmodulated AM transmitter is 8A. What will be the antenna current when modulation is 40%?
15. What are the functions of RF amplifier?
16. Explain analog pulse modulation and digital pulse modulation.
17. Write notes on companding law.
18. Explain ASK modulator and demodulator and their features.
19. What do you understand by active and blanking periods in horizontal and vertical scanning?
20. Write the function of VIF amplifier,video amplifier,IF amplifier.
21. Explain about SMPS.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **10** marks.

22. Draw and explain the block diagram of super heterodyne receiver.
23. Explain the generation and demodulation methods of PPM.
24. With block diagram explain the working of Monochrome TV transmitter.
25. Explain the function of AFC circuit in TV system.

(2×10=20)

