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**Question Paper Code: 45401**

B.E. / B.Tech. DEGREE EXAMINATION, AUGUST 2021

Fifth Semester

Electronics and Communication Engineering

14UEC501 - DIGITAL COMMUNICATION

(Regulation 2014)

Duration: 1:45 hour

Maximum: 50 Marks

PART A - (10 x 2 = 20 Marks)

**(Answer any ten of the following questions)**

1. Write short notes on channel classification. Give examples.
2. What is a sampling unit?
3. What is Inter Symbol Interference (ISI)?
4. Define QAM and draw its constellation diagram.
5. What is meant by frequency hop and types of hopping systems?
6. Define sampling theorem.
7. List down the advantages and disadvantages of digital communication.
8. What do you mean by the term Eye pattern?
9. Define QAM and draw its constellation diagram.
10. What is meant by frequency hop and types of hopping systems?
11. Write short notes on channel classification. Give examples.
12. What is a sampling unit?
13. What is Inter Symbol Interference (ISI)?
14. Define QAM and draw its constellation diagram.

15. What is meant by frequency hop and types of hopping systems?

PART – B (3 x 10= 30 Marks)

**(Answer any three of the following questions)**

16. Draw the block diagram of digital communication systems and explain each block in detail. (10)
17. Explain any two encoding methods for analog sources. (10)
18. Define Inter-symbol interference? Obtain the nyquist criteria for Distortion less Base-band binary transmission system. (10)
19. Explain the generation and detection of binary PSK. Also derive the probability of error for PSK. (10)
20. Briefly explain the generation of PN sequence with the properties of maximum length sequence. (10)