

MODULE 4

1. Give the classification for signals with an example for each.
2. Discuss the growth of Digital Communications.
3. Illustrate the process of analog to digital conversion with the help of block diagram.
4. With neat block diagram, explain the basic signal processing operations in digital communication.
5. Discuss the channels for digital communication.
6. Explain the sampling process.
7. Derive the interpolation formula for reconstructing the original signal $g(t)$.
8. Discuss the signal space interpretation
Or Prove that: Sinc functions belonging to a family of shifted sinc functions are mutually orthogonal.
9. State and prove sampling theorem.
10. Discuss the practical aspects of sampling and signal recovery.
11. With the help of circuit diagram and spectrum, explain Natural sampling.
12. Explain flat top sampling, with relevant waveforms and equations.
13. What is Aperture effect? How do you overcome it?
14. Explain sample and hold circuit, with a neat circuit diagram and waveforms?
15. With relevant circuit diagram and waveforms explain
 - a. PAM
 - b. PPM
 - c. PWM

**** Quadrature sampling of band pass signals is not for your syllabus**

**** Study all the numerical solved in notes**