



Blue Print (As per PU Board)

Topic	1 mark questions	2 marks questions	3 marks questions	5 marks questions	Total Marks
Communication Systems	1	1	-	1	8

One mark questions

1. **What is modulation?**

Ans: Modulation is a process of super imposing a message signal on a high frequency carrier wave.

2. **How is a modulated wave obtained?**

Ans: A modulated wave is obtained by super imposing a message signal on a high frequency carrier wave.

3. **Define a signal.**

Ans: A signal is an information converted into electrical form which is suitable for transmission.

4. **What is noise?**

Ans: It is unwanted signal that disturbs the transmission and processing of a message signal.

5. **Define attenuation.**

Ans: The loss of strength of a signal during its propagation through the communication channel is called attenuation.

6. **Define amplification.**

Ans: The process of increasing the strength of a transmitted signal by using some suitable circuit is called amplification.

7. **Mention the frequency range of (a) speech signal (b) music signal.**

Ans: Frequency range for (a) speech signal is 300 Hz to 3100 Hz. (b) for music signal 20 Hz to 20KHz.

Two marks questions

8. **Give any two differences between analog signal and a digital signal.**

Ans: Analog Signal:

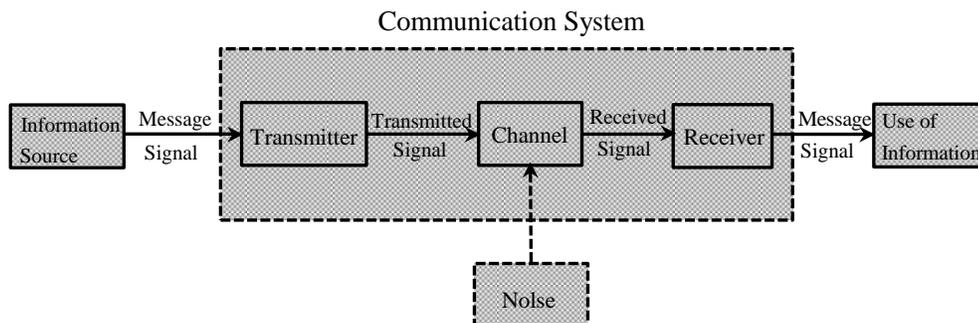
1. Analog signal has continuous variation of voltage or current.
2. It is a single valued function.

Digital Signal:

1. Digital signal can take only discrete stepwise values.
2. It has 2 levels (valued 0 or 1).

9. **Draw the block diagram of a communication system.**

Ans:



10. **What is a repeater? Why is it used?**

Ans: Repeater is a combination of receiver, amplifier and transmitter. It is used to extend the range of communication system.

**11. Mention any two modes of space communication.**

Ans:

1. Ground wave propagation.
2. Sky wave propagation
3. Space wave propagation.

12. Give any 2 uses of space waves.

Ans:

1. Used in television broadcast.
2. Micro wave link
3. In satellite communication.
4. In satellite communication.