Name: **ID:**   **Sec:**

1. For the following Multi-level ASK, find the bit stream form the signal below: [4]

Bit Pattern	Amplitude
00	3V
01	4V
10	0V
11	1V
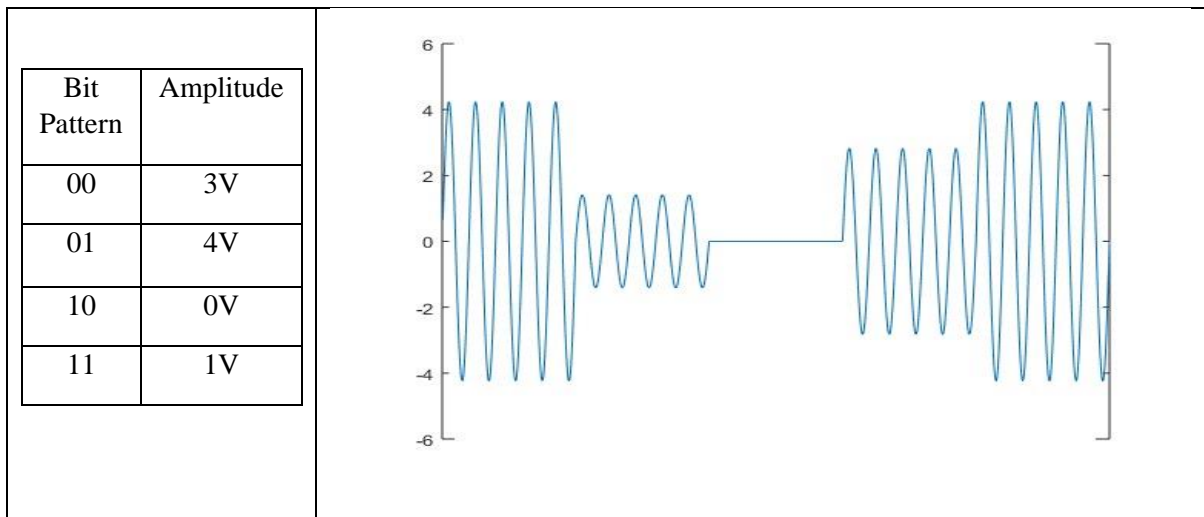
2. Draw the analog signal for the digital bit stream 110100101011 using Multi-level FSK where 2 bits at a time get transmitted. [Amplitude of the Carrier Signal = 2V and phase = 0 rad, Number of Cycles of the signal element for different Bit Patterns: 00- 4, 01- 2, 10- 3, 11- 1]   [4]
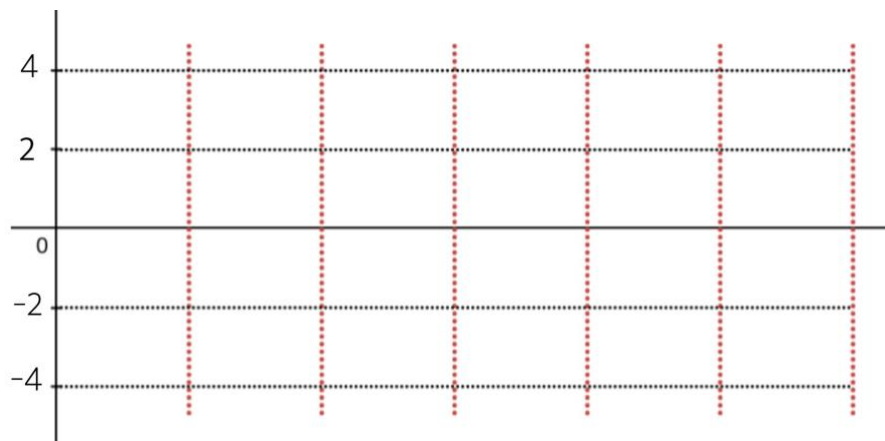
3. Draw the analog signal for the bit stream 1011001011 using the constellation diagram given below [frequency = 2 for each signal element and amplitude = 6V]   [4]

Constellation diagram
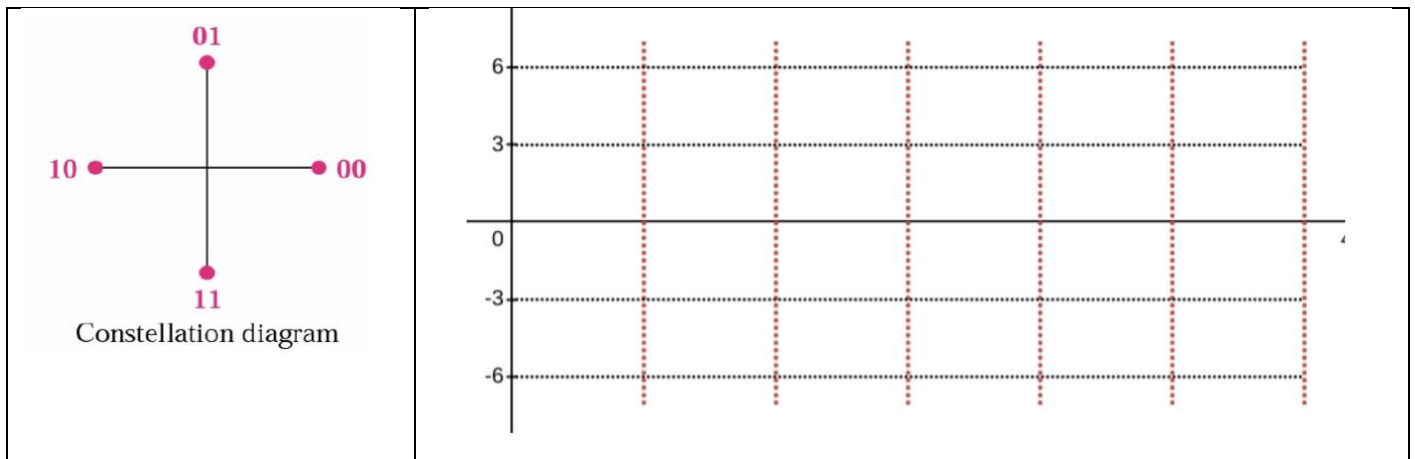
4. Why PSK is superior to FSK?   [4]

5. What is coherent FSK and non-coherent FSK? Explain.   [4]