

## **Chapter 7**

### **Wireless Communications**

#### **One mark questions (knowledge)**

1. What is wireless communication?
2. What is noise?
3. What is troposphere?
4. What are ground waves?
5. What are sky waves?
6. What are space waves?
7. What is the function of transmitter in a communication system?
8. What is the function of receiver in a communication system?
9. What is optical horizon?
10. What is radio horizon?
11. What is ionosphere?
12. Define skip distance.
13. Define skip zone.
14. Define critical angle.
15. Define critical frequency.
16. Define single hop distance.
17. What is multiple hop transmission?
18. What is fading?

#### **One mark questions (understanding)**

1. Define signal to noise ratio.
2. Define noise figure.
3. Mention the frequency of radio waves.
4. Name the mode of propagation of radio waves which travel in a straight line from the transmitting antenna to the receiving antenna.
5. Which layers of ionosphere disappear during night?

#### **Two mark questions (knowledge)**

1. Name the different layers of ionosphere.
2. Define signal to noise ratio. What is the significance of signal to noise ratio?

#### **Two mark questions (understanding)**

1. Mention the four types of radio wave propagation.
2. Which layers of ionosphere disappear during night? What is signal fading?
3. Distinguish between skip distance and skip zone.
4. Distinguish between sky waves and ground waves.
5. Distinguish between sky wave and space wave propagation.

6. Distinguish between single hop and multi hop transmissions.

**Two mark questions (skill)**

1. Draw the block diagram of a basic electronic communication system.

**Three marks questions (knowledge)**

1. Name the different modes of propagation of electromagnetic waves.

**THREE marks questions (understanding)**

1. Describe briefly the layers of the ionosphere and their effect on sky wave propagation.
2. Explain the importance of ionosphere in the radio communication.

**Three marks questions (skill)**

1. Draw a schematic diagram showing the (a) Ground wave (b) Sky wave (c) Space wave propagation modes for electromagnetic waves.