

# Chapter 3 Alternative Communication System

## Question-1

Why should the alternative communication systems be installed?

### Solution:

Normal telecommunication networks usually get disrupted or jammed during a disaster. Earthquakes, cyclones, floods and landslides severely damage the infrastructure of the network.

Cables or the transmitting towers are damaged or the power supply is disrupted during a disaster. When this happens the telephone fails to function. Even the wireless telephones get disrupted as they also depend on the transmitting towers. During a disaster, as many people want to use the telephone line to that particular area, the cables get jammed and the communication system fails to work. As there is a possibility of the existing communication system to fail during a disaster, it is very important to have an alternate system of communication that can be used during disasters, as we know communication is very important during a disaster.

## Question-2

Name two prime communication networks of the government of India and explain their functions.

### Solution:

There are 2 major networks run by the government of India. They are ...

NIC –National Informatics centre

BSNL – Barath Sanchar Nigam limited

NIC –National Informatics centre

NIC is a premier Science and Technology organization of the Government of India. It functions through a nation wide information and communication technology network called NICNET. The Secretariats of all the States and Union Territories and all the District Collectorates are connected through this network

Barath Sanchar Nigam limited

The BSNL is a leading telecommunication company and the largest public sector undertaking of India. It has a network of 45 million telephone lines covering 5000 towns. BSNL provides telecom services.

## Question-3

How is Amateur radio (HAM) different from the common radio communication?

### Solution:

Amateur radio is also known as 'Ham radio'. The Ham radio works on the same principle as the ordinary radio, the only difference being the user of this mode of transmission has to follow certain frequencies as defined by the International Telecommunication Union. In India the 'Ham radio is controlled by the Wireless Planning and Coordination Wing of the Ministry of Telecommunication.

Rules to be followed by Ham radio operator

The frequencies can be used only for research, education and personal use.

The frequencies cannot be used for commercial purposes

HAM radio does not use ground based infrastructure. As it requires limited power supply it runs on batteries. Hence during disasters the HAM radio is used.

**Question-4**

What makes the Satellite based communication system more reliable in case of large scale natural/manmade emergencies?

**Solution:**

Satellite based communication system is reliable during disasters . Communication satellites are in orbit in space and are not vulnerable to natural disasters on earth. Global communication links can be established with very small satellite antennas.

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