

NCERT solution for Winds, Storms and Cyclones

Question 1

Fill the missing word in the blank spaces in the following statements:

- (a) Wind is _____ air.
- (b) Winds are generated due to _____ heating on the earth.
- (c) Near the earth's surface _____ air rises up whereas _____ air comes down.
- (d) Air moves from a region of _____ pressure to a region of _____ pressure.

Answer

- (a) moving
- (b) uneven
- (c) warm, cold
- (d) high, low

Question 2

Suggest two methods to find out wind direction at a given place.

Answer

Two methods to find out wind direction at a given place:

- (i) Take some sand and release it from height. The direction in which the sand starts flowing is the direction of the wind.
- (ii) We can find using kite. Kite flies due to air pressure. So the direction of kite can give the direction

Question 3

State two experiences that made you think that air exerts pressure (other than those given in the text).

Answer

Two experiences which we can say:

(i) When we have wind, the open door, windows start moving. This is due to air pressure

(ii) Take a balloon and blew it. We observe that the balloon which was shrunk earlier got tighten due to air pressure. If we blew it further, it also gets burst as it cannot withstand air pressure

Question 4

You want to buy a house. Would you like to buy a house having windows but no ventilators? Explain your answer.

Answer

No, I would not like to buy a house having windows but no ventilators because the room will not able to cool down properly. We know that Warm air is lighter which rises up and exit from the ventilators. Cool air is heavier and thus move in through window making the room comfortable for living. Ventilators are important for the circulation of air.

Question 5

Explain why holes are made in hanging banners and hoardings.

Answer

Holes are made in hanging banners and hoardings in order to handle the air pressure. The air gets passed through these holes made on the hoardings or banners and thus reduces the pressure of air on them. Therefore, the

hoardings do not get blown away due to air pressure.

Question 6

How will you help your neighbors in case cyclone approaches your village/town?

Answer

Ways to help the neighbors in case cyclone:

- (i) Helping them in moving to the cyclone shelter or safe places
- (ii) Ask them to take necessary steps for Arrangement of food and drinking water.
- (iii) Providing first aid to the injured ones in case required
- (iv) Keeping them informed about the weather forecast, alerts and warnings so that they are prepared
- (v) Informing the rescue operators, agencies, police and forces about the affected area in the locality.

Question 7

What planning is required in advance to deal with the situation created by a cyclone?

Answer

Planning required in advance to deal with the situation created by a cyclone are:

- (i) Cyclone alert or Cyclone watch should be issued 48 hours in advance of any expected storm. The message should be broadcasted every hour or half hour when a cyclone is nearer the coast.
- (ii) Armies, Rescue forces and operator should be kept on high alert at the sign of disaster.
- (iii) Construction of cyclone shelter and arrangement for moving people to the safer place
- (iv) Medical team should be always be prepared for providing the first aid.

- (v) Arrangement of safe drinking water and food should be made in time.
- (vi) Government should ready with rehabilitation plan.

Question 8

Which one of the following place is unlikely to be affected by a cyclone.

- (i) Chennai
- (ii) Mangaluru (Mangalore)
- (iii) Amritsar
- (iv) Puri

Answer

- (iii) Amritsar

Question 9

Which of the statements given below is correct?

- (i) In winter the winds flow from the land to the ocean.
- (ii) In summer the winds flow from the land towards the ocean.
- (iii) A cyclone is formed by a very high-pressure system with very high-speed winds revolving around it.
- (iv) The coastline of India is not vulnerable to cyclones.

Answer

- (i) In winter the winds flow from the land to the ocean.