8 Wind, Storm and Cyclone

Multiple Choice Questions

1. A fire alarm usually detects smoke in case of fire. Where should such an alarm be placed in a room?
   (a) Near the door
   (b) On the floor
   (c) On any wall
   (d) On the ceiling

2. Four schematic diagrams are shown in Figure 8.1 to depict the direction of sea breeze. Which of them gives the correct direction?

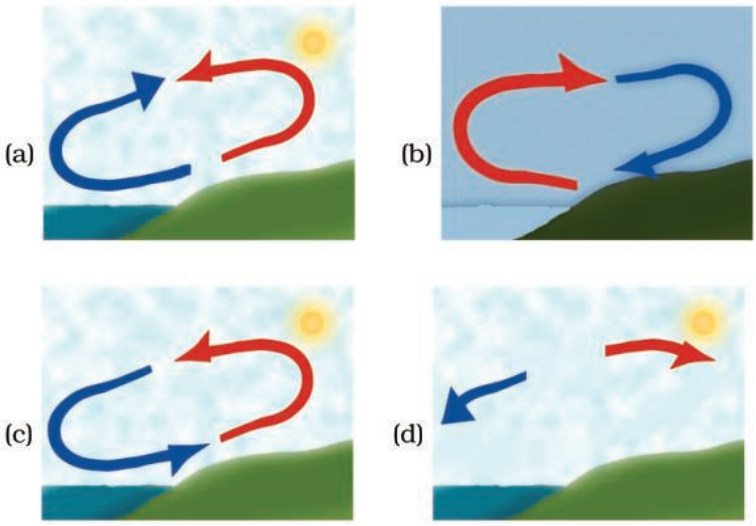


Fig. 8.1

3. Figure 8.2 shows a child blowing air with a straw near the opening of another straw which has its other end in a soft drink bottle. It was observed that the level of the soft drink in

the straw rises up as soon as air is blown over its open end. Which one of the following best explains the reason for rise in level of the drink?

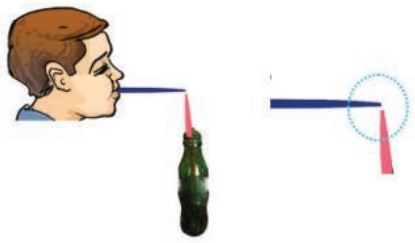


Fig. 8.2

(a) Blowing of air decreases pressure over the opening of the straw.
(b) The straw of the soft drink bottle collapses when air is blown over its open end.
(c) Blowing of air warms up the air inside the straw.
(d) Blowing of air increases the pressure on the surface of soft drink in the bottle.

4. Following are precautions one must take in case a storm is accompanied by lightning.
(i) Do not take shelter under a tree.
(ii) Do not take shelter under an umbrella with a metallic end.
(iii) Do not take shelter in open garages, storage sheds, etc.
(iv) Do not take shelter in a bus in the open.

Which one of these is not correct?
(a) (i) (b) (ii)
(c) (iii) (d) (iv)

5. Which of the following place is most likely to be affected by a cyclone?
(a) Mumbai
(b) Puri
(c) Goa
(d) Porbandar

6. A curtain is hanging at the entrance of a room. A long corridor runs at right angles to the door, that is parallel to the curtain. If a strong wind blows along the corridor, the curtain will
   (a) get pushed inside the room.
   (b) get pushed outside the room.
   (c) get collected towards one end/swirled.
   (d) remain unaffected.

VERY SHORT ANSWER QUESTIONS

7. Why is Chandigarh unlikely to be affected by a cyclone?

8. Name the ocean which is mainly responsible to bring rain bearing monsoon winds to Kerala coast in June every year?

9. Fill in the blanks.
   (i) Air around us exerts _____ .
   (ii) The moving air is called _____ .
   (iii) The main cause of wind movement is uneven _____ on the earth.
   (iv) High speed wind can cause cyclone in regions of _____ pressure.

10. State whether the following statements are True or False:
   (i) If wind flows from land to the ocean, then it is daytime.
   (ii) A very high pressure system, with very high speed wind surrounding it forms a cyclone.
   (iii) The coast line of India is not vulnerable to cyclones.
   (iv) Warm air is lighter than cool air.

11. To expel hot air out of the kitchen, 'A' has an exhaust fan fitted on the window of her kitchen and 'B' has a similar exhaust fan fitted on the wall near the ceiling of her kitchen. Which of the exhaust fan will expel the hot air more effectively? Explain why?

12. Why is it advisable not to shut all the doors and windows during a storm?

13. A flat in Mumbai with a balcony facing the sea has some clothes hung on a clothes line in the balcony. Towards which direction the clothes will be blown in the afternoon? Explain.

14. Figure 8.3 shows a diagrammatic representation of trees in the afternoon along a sea coast. State on which side is the sea; A or B? Give reasons for your choice.



Fig 8.3

15. A flag mounted on a flag post near the sea coast flutters in the direction of sea. At what time of the day does this happen – at midnight or in the afternoon?

SHORT ANSWER QUESTIONS

16. Match **Column I** with **Column II**. There can be more than one match.

Column I	Column II
(a) on heating air	(i) descends
(b) on cooling air	(ii) expands
	(iii) contracts
	(iv) rises

17. Paheli kept an empty bottle made of plastic inside a refrigerator. After few hours, when she opened the refrigerator she found the bottle had collapsed. Explain the possible reason.

18. When strong/high speed wind blows, an umbrella held upright at times gets upturned. Explain the reason.

19. Suggest some precautions to be taken to prevent the roof of a tin sheet from flying away during a fierce wind storm.

LONG ANSWER QUESTIONS

20. Describe an activity to demonstrate that warm air is lighter than cool air.

21. The picture in Figure 8.4 shows tree line along the sea coast on an island near the equator. As shown, the tree tops are permanently bent in one direction. Are the trees bent towards the sea or away from it? Explain.



Fig. 8.4

22. Identify the names of six natural phenomena from the following word diagram given as Figure 8.5.

G	C	H	T	H	T	E	N	M	R
R	C	Y	H	O	O	N	C	Z	P
V	L	O	U	E	R	O	E	R	T
A	N	C	N	A	N	N	L	C	L
H	T	H	D	B	A	D	A	P	I
L	U	N	E	K	D	C	Y	D	G
H	U	R	R	I	C	A	N	E	H
W	C	T	S	L	M	N	O	P	T
M	Y	O	T	Y	P	H	O	O	N
O	C	R	O	H	C	T	P	Q	I
C	L	N	R	U	A	Y	R	S	N
F	O	A	M	R	N	P	T	U	G
P	N	D	X	R	E	H	Y	E	N
Z	E	O	A	I	O	U	N	Y	B

Fig. 8.5