

## **Wind and Types of Wind Cyclones, Hurricane and Typhoons, Tornadoes**

1.Odisha was hit by a cyclone in the year

- (a) 1998
- (b) 1999
- (c) 2000
- (d) none of these

2.Cyclone warning is issued

- (a) 20 hrs in advance
- (b) 12 hrs in advance
- (c) 24 hrs in advance
- (d) none of these

3.Cyclones can be

- (a) destructive
- (b) useful
- (c) both (a) and (b)
- (d) none of these

4.Wind currents are generated due to

- (a) uneven heating on the earth
- (b) even heating on the earth
- (c) cooling on the earth
- (d) none of these

5.Hurricane is the name of cyclone in

- (a) American continent
- (b) Japan
- (c) Both (a) and (b)
- (d) None of these

6.Tornado reaches

- (a) from the oceans to the plane
- (b) from the ground to the sky
- (c) from the sky to the ground
- (d) none of these

Question 7.

A violent tornado can travel at a speed of about

- (a) 300 km/h
- (b) 100 km/h
- (c) 50 km/h
- (d) 150 km/h

Question 8.

The west coast of India is

- (a) less vulnerable to cyclonic storms
- (b) more vulnerable to cyclonic storms
- (c) not vulnerable to cyclonic storms
- (d) none of these

9. Which one is odd?

- (a) Hurricane
- (b) Typhoon
- (c) Cyclone
- (d) Monsoon

10. 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

**Answer keys**

1) B    2) C    3) A    4) A    5) A    6) C    7) A    8) A    9) D    10) D

### **Anti Cyclones, Humidity, Fog, Dew Point, Smog**

1. Any type of rainfall has the following aspects:

- (a) ascent and descent of air
- (b) horizontal movement of air
- (c) ascent of air leading to cooling and condensation
- (d) all of above

2. What causes snowfall?

- (a) When condensation takes place below  $0^{\circ}\text{C}$  and precipitation occurs in the form of flakes
- (b) When rain freezes into snow-flakes while passing through the atmosphere
- (c) When condensation takes place in form of fog and precipitation occurs as flakes
- (d) When the air temperature is much lower than surface temperature

3. Heat gain through insolation and heat loss through terrestrial radiation are equal approximately at which latitude?

- (a)  $22^{\circ}$  W North and South
- (b)  $40^{\circ}$  North and South
- (c)  $90^{\circ}$  North and South
- (d)  $66^{\circ}$  W North and South

4. Which of the following places are favourably influenced by the Trade winds?

1. West Indies
  2. Brazil
  3. Mexico
  4. Medagascar
- (a) I and II  
(b) I, II, III and IV  
(c) III and IV  
(d) II and IV

5. Which of the following are true regarding ionosphere?

1. It is the uppermost layer of atmosphere
  2. The molecules and atoms of nitrogen and oxygen in this layer absorb a part of solar radiation and become ionized
  3. This layer is responsible for reflecting back the radio wave~ transmitted from the earth
- (a) I and II  
(b) I and II  
(c) II and III  
(d) I, II and III

6. The type of rainfall shown in figure is:

- (a) orographic  
(b) convectional  
(c) cyclonic  
(d) relief

7. Which of the following is the annual precipitation of an area?

- (a) All forms of precipitation converted to the quantity of liquid water  
(b) The total actual amount of rain, snow, hail and sleet  
(c) The total amount of rain per year, irrespective of snow, hail and sleet  
(d) All forms of precipitation measured after conversion to equal quantity of ice

8. Fogs formed along, the sea-coast are due to:

- (a) advection  
(b) radiaton  
(c) convection  
(d) conduction

9. Which of the following is produced by the rapid ascent of moist air?

- (a) Frost  
(b) Fog  
(c) Hail  
(d) Snow

10. In the atmosphere of the primitive earth there was no :

- (a) oxygen
- (b) carbon dioxide
- (c) nitrogen
- (d) ammonia

11. The January isotherm taken as a basis for dividing India into tropical and subtropical zones is : [IAS 1997]

- (a) 21° C
- (b) 18° C
- (c) 12° C
- (d) 15° C

12. Match the following:

- A. Chi nook winds 1. bring bitterly cold conditions  
B. Polar Easterlies 2. most regular and constant  
C. Trade winds 3. snow eaters  
D. Westerlies 4. stormy and powerful in Southern hemisphere
- A B C D

- (a) 4 1 2 3
- (b) 3 1 4 2
- (c) 1 3 2 4
- (d) 3 1 2 4

13. A temperature inversion is most likely to occur under which of the following conditions?

[IAS 2004]

- (a) Mountain top in late evening
- (b) Windy but cloudy night
- (c) Calm, cloudy and humid night
- (d) Calm, clear and cool winter night

14. Which of the following are the ideal conditions for the phenomenon of temperature inversion to occur? [IAS 2001]

- 1. Long nights
  - 2. Cloudy sky
  - 3. Calm and stable air
  - 4. Dry air
- (a) I and II
  - (b) I, II and III
  - (c) II, III and IV
  - (d) I, III and IV

### 15 - Question

15. Agents of fog formation do not include:

- (a) high relative humidity
- (b) diurnal temperatures of short ranges
- (c) winter season
- (d) rapid radiation

### Answer keys

- 1) C    2) A    3) B    4) B    5) C    6) B    7) A    8) A    9) C    10) A  
11) B    12) D    13) D    14) D    15) B

## Cloud, Monsoon

**1. These are high clouds that are composed of ice crystals:**

- a. Cumulus
- b. Nimbostratus
- c. Altocumulus
- d. Cirrus

**2. A wall cloud is an example of a(n):**

- a. Accessory cloud
- b. Upper level cloud
- c. Cirrus
- d. Lenticular

**3. Clouds that develop due to convective uplift are termed:**

- a. Stratiform clouds
- b. Noctilucent clouds
- c. Cumulus clouds
- d. Fair weather

**4. Which of the following is a cloud on the ground?:**

- a. Funnel cloud
- b. Fog
- c. Wall cloud
- d. Shelf cloud

**e. All of the above**

**5. All the following are cirrus type clouds except:**

- a. Mackerel sky**
- b. Mare's tails**
- c. Anvil**
- d. Fractus**

**6. Precipitation generated from dynamic lifting and not convective lifting will fall from a \_\_\_\_\_ clouds.**

- a. Nimbostratus**
- b. Cumulonimbus**

**7. The prefix "alto" means:**

- a. Upper**
- b. Middle**
- c. Lower**

**8. The two ingredients needed to form clouds aloft are:**

- a. Instability and lifting**
- b. Lifting and saturated air**
- c. Wind shear and Lifting**
- d. Air with a high dewpoint and instability**

**9. Which clouds occurs at the highest altitude:**

- a. Altostratus**
- b. Cirrostratus**
- c. Stratocumulus**
- d. Noctilucent**
- e. Lenticular**

**10. The term stratus means:**

- a. Vertically developed**
- b. Upper level**
- c. Horizontally layered**
- d. Low level**

- 11. Cloud droplets can remain liquid even when they have a temperature of below freezing.**
- a. True**
  - b. False**
- 12. A mid-latitude cyclone will often have a \_\_\_\_\_ shape on satellite imagery.**
- a. Rectangular**
  - b. Dumbbell**
  - c. Comma**
  - d. Pentagon**
- 13. These are cirrocumulus that look like fish scales.**
- a. Lenticular**
  - b. Mackerel Sky**
  - c. Mare's tails**
  - d. Uncinus**
- 14. A ring around the sun or moon will show when they shine through this cloud:**
- a. Nimbostratus**
  - b. Altocumulus**
  - c. Fair weather cumulus**
  - d. Cirrostratus**
- 15. The most fair weathered and smallest of the cumulus clouds is the:**
- a. Cumulus congestus**
  - b. Cumulonimbus**
  - c. Cumulus humilis**
- 16. Fog formed by cooling of the earth's surface at night is:**
- a. Radiation fog**
  - b. Advection fog**
  - c. Steam fog**
  - d. Frontal fog**

**17. Precipitation that vaporizes before making it to the earth's surface is:**

- a. Fog**
- b. Virga**
- c. Cloud droplets**
- d. Haze**

**18. The clouds produced behind aircraft exhaust that is often visible high aloft are called contrails.**

- a. True**
- b. False**

**19. The height of stratus cloud bases tends to lower as a warm front approaches.**

- a. True**
- b. False**

**20. This is the visible portion of a tornadic circulation produced by condensation of rapidly rotating rising air.**

- a. Hook echo**
- b. Mammatus**
- c. Funnel cloud**
- d. Wall cloud**

**Answer keys**

- 1) D    2) A    3) C    4) B    5) D    6) A    7) B    8) B    9) D    10) C  
11) A    12) C    13) B    14) D    15) C    16) A    17) B    18) A    19) A    20) C