

Anekant Education Society's
Tuljaram Chaturchand College, Baramati
(Autonomous)

Department of Geography

Question Bank (2019-2020)

Class: MA/MSc. Geography I

Title: Geog4102 Principles of climatology

Objective questions

1. Climate is ----- weather.
a. average b. total c. mode d. none of these
2. Cloud burst is -----.
a. heavy downpour b. light downpour
c. bursting of clouds d. none of these
3. In tropical climates the mean of temperature of the year is -----.
a. above 18°c b. above 10°c
c. above 20°c d. none of these
4. Koppen scheme was based on-----.
a. climatic conditions b. vegetation zone
c. rainfall d. temperature
6. Coriolis force is caused by-----.
a. rotation of the earth b. rotation of moon
c. due to volcanic eruption d. none of these
6. Equatorial climate extends up to -----latitude.
a. 5°to7° b. 5°to 10° c. 10°to 12° d. none of these
7. The wind blowing parallel to isobars generally the height of boom is called----.
a. circular wind b. geostrophic wind

c. perpendicular wind d. none of these

8. How much percentage water vapor contains in the atmosphere-----.

a.0-5 b. 5-10 c.10-15 d.15-20

9. Which of the following is not correct

| Gases | %in the atmosphere |
|-----------------|--------------------|
| Nitrogen | 78% |
| Oxygen | 21% |
| Argon | 0.93% |
| CO ₂ | 1.03% |

10. Troposphere is often called as-----.

a. atmosphere b. tropopause
c. weather sphere d. none of these

11. When the sun is vertically above the equator the situation is called-----.

a. solstice b. equinox c. spring d. none of these

12. When the earth is farthest from the sun is called-----.

a. aphelion b. perihelion c. equinox d. none of these

13.The outer boundary of atmosphere is called-----

a. exosphere b. heterosphere c. magnetosphere d. none of these

14. In troposphere temperature decrease with increasing height is called -----.

a. inversion b. lapse rate c. adiabatic cooling d. none of these

15.Visible light ranges between----- micrometer.

a.0.4 to 0.7 b.0.4 to 0.8 c. 0.3 to 0.7 d. none of these

16. The atmosphere receive very high amount energy from -----.

a. the sun b. long wave terrestrial radiation

- c. by conduction d. none of these
17. The solar energy received by the earth surface is called-----.
- a. insolation b. energy budget c. temperature 4. Sunshine
18. Aneroid barometer measures -----.
- a. temperature b. rainfall c. atmospheric pressure d. none of these
19. Temperature inversion shows -----.
- a. warmer air overlying colder air
- b. colder air overlying warmer air
- c. none of these
20. DALR is-----.
- a. $1^{\circ}\text{C}/100\text{m}$ b. $2^{\circ}\text{C}/200\text{m}$ c. $1^{\circ}\text{C}/1000\text{m}$ d. $10^{\circ}\text{C}/100\text{m}$
21. Who invented the mercury barometer-----.
- a. Torricelli b. Galilio c. Aristotle d. none of these
22. The instrument which determines the wind direction is -----.
- a. wind vane b. cup anemometer c. wind gauge d. none of these
23. Horse latitude extends -----.
- a. $20^{\circ}-30^{\circ}$ b. $30^{\circ}-35^{\circ}$ c. $35^{\circ}-40^{\circ}$ d. none of these
24. Wind blow from the hilltop to valley is called-----.
- a. valley breeze b. mountain breeze c. sea breeze d. land breeze
25. Winds are -----.
- a. horizontal air movement b. vertical movement of air
- c. sluggish air movement d. movement of velocity
26. Air masses are -----.
- a. huge body of air b. transition zone between front

- c. stable air conditions d. occluded front
27. When cold front overtakes warm front is called-----.
- a. dry line b. cold front c. warm front d. occluded front
28. Koppen divided world's climatic zones into -----.
- a. 6 types b. 4 types c. 5 types d. 9 types
29. Trade winds blows -----.
- a. near the equator b. near tropics c. near artic d. none of these
30. Sky appears as blue due to effect of -----.
- a. scattering b. radiation c. sunshine d. none of these

Answer in one sentence

1. Define weather.
2. Define climate.
3. Define climatology.
4. State the atmosphere.
5. What is tropopause?
6. What is magnetosphere?
7. State heat and temperature.
8. What is lapse rate?
9. What is inversion of temperature?
10. What is adiabatic cooling?
11. Define monsoon.
12. State the radiation.

13. State the conduction.
14. State the convection.
15. What is albedo?
16. Give the definition of air pressure.
17. What is humidity?
18. What is cup anemometer?
19. What is jet stream?
20. What is atmospheric stability?
21. State ozone.
22. What is valley breeze?
23. What is sea breeze?
24. What is latent heat?
25. What is dew point temperature?
26. Define air masses.
27. Define front.
28. What is air mass Weather?
29. What is dry line?
30. In Which month and Where VAYU cyclone took place In India?

Short notes

1. Difference between Weather and Climate.
2. Acid precipitation
3. Hydrological cycle.
4. Development of modern climatology
5. Homosphere and Heterosphere.
6. Green house effect.
7. Factor affecting Wind.
8. Jet stream.
9. Atmospheric instability.
10. Mechanism of heat and transfer.
11. Forms of condensation.
12. Intertropical convergence zone.
13. Atmospheric motions.
14. Land breeze and Sea breeze.
15. Thornwaite classification.
16. Koppen classification.
17. Ozone depletion.
18. Indian monsoon.
19. Delay of monsoon in 2019.
20. Climate of Baramati.
21. Need of studying climatology.

Short answer

1. Nature and scope of climatology.
2. Define air masses? Give the details notes about modification of air masses.
3. Define front. Explain occluded types of front with diagram.
4. Give the summary about evolution of atmosphere.
5. What is cyclone? Explain the tropical cyclone.
6. What is humidity? Explain its types.
7. Give the details notes about inversion of temperature?
8. Explain factors affecting solar radiation?
9. Give the details note about effects of atmosphere?
10. Explain how climate affect human health and activities with example.
11. What you can do to control the global warming effect?
12. Which are the reasons behind irregularity in monsoon in recent years?

Long answers

1. Explain the structure of atmosphere.
2. Explain natural and anthropogenic causes of climate change.
3. What is precipitation? Explain its various types.
4. Define air masses? Explain its various types.
5. Define front. Explain its various types.
6. Give the detail note about earth's surface wind system with diagram.
7. Explain the family of clouds.