KENDRIYA VIDYALAYA SANGATHAN, BHOPAL REGION CBT EXAMINATION (NOVEMBER)2023 CLASS - 11 SUBJECT - GEOGRAPHY M.M. 10

Question 1.Which gas is opaque to the outgoing terrestrial radiation?
A)Dust particle.
B)Ozone.
C)Carbon dioxide.
D)Water vapour.
Answer - C)Carbon dioxide.
Explanation - carbon dioxide is metrological a very important gas as it is transparent to the incoming solar radiation but opaque to the outgoing terrestrial radiation.

Question 2.Which one of the following layers of the atmosphere helps in the transmission of radio waves? A)Stratosphere B)Mesosphere C)Thermosphere D)Exosphere Answer- C)Thermosphere Explanation -thermosphere contains electrically charged particles known as ions and hance it is also known as lonosphere. Radio waves transmitted from the Earth are reflected back to the

earth by this layer.

Question 3. The earth radiates energy to the atmosphere in

A)Long wavelength

B)Radiation

C)Insulation

D)Short wavelength

Answer - A)Long wavelength

Explanation - the insolation received by the earth is in short waves forms and heats up it's surface . The earth after being heated itself becomes a radiating body and it radiates energy to the atmosphere in long wave form. This process is known as terrestrial radiation.

Question 4. Differences in pressure on the earth's surface causes:

(a) Winds

(b) Precipitation

(c) Hail

(d) Seasons

Answer - (a) Winds

Explanation - air expands when heated and gets compressed when cooled. this result in variations in the atmospheric pressure . The result is that it causes the movement of air from high pressure to low pressure , setting the air in motion.

Question 5.Wind circulation around a low-pressure center is called

(a) a cyclone

(b) an anticyclone

(c) chinook

(d) trade winds

Answer (a) a cyclone

Explanation -the wind circulation around a low pressure condition is known as cyclonic circulation.

Question 6. The days are longest at

(a) Thiruvananthapuram

(b) Hyderabad

(c) Chandigarh

(d) Nagpur

Answer - (a) Thiruvananthapuram

Explanation - Thiruvananthapuram is situated near the equator.

Q.7. consider the following statements and choose the correct option from the given options:(i) the amount of insolation received by Earth on 3rd January is slightly less than the amount received on 4th July.

(ii) on 3rd January the distance between the sun and earth increases.

(A) only (i) is correct.

(B) only (ii) is correct.

(C) Both the statements are incorrect .

(D) Both the statements are correct and statement (ii) correctly explains the statement (i). Answer -Option (C) is correct

Explanation- The amount of insolation received by Earth on 3rd January is slightly more than the amount received on 4th July as on 3rd January the distance decreases between the sun and the earth.

Q.8. consider the following statements and choose the correct option from the given options:

(i) During the day the land hits up faster and becomes warmer than the sea.

(ii) Thus , pressure gradient from sea to land is created.

(A) only (i) is correct.

(B) only (ii) is correct.

(C) Both the statements are incorrect .

(D) Both the statements are correct and statement (ii) correctly explains the statement (i).

Answer - Option (D) is correct

Explanation- Over the land ,the warm air rises giving rise to a low - pressure area whereas, the sea is cooler and the pressure over sea is higher.

Case study based Questions no.9 and 10

General Atmospheric Circulation and its Effects on Oceans Warming and cooling of the Pacific Ocean is most important in terms of general atmospheric circulation. The warm water of the central Pacific Ocean slowly drifts towards South American coast and replaces the cool Peruvian current. Such appearance of warm water off the coast of Peru is known as the El Nino. The El Nino event is closely associated with the pressure changes in the Central Pacific and Australia. This change in pressure condition over Pacific is known as the southern oscillation. The combined phenomenon of southern oscillation and El Nino is known as ENSO. In the years when the ENSO is strong, large-scale variations in weather occur over the world. The arid west coast of South America receives heavy rainfall, drought occurs in Australia and sometimes in india and floods in China. This phenomenon is closely monitored and is used for long range forecasting in major parts of the world.

Question 9. El nino replaces which type of current

A) Peruvian current

B) somali current

C)western Australian current

D)south indian ocean current

Answer - A) Peruvian current

Explanation - The warm water of the central Pacific Ocean slowly drifts towards South American coast and replaces the cool Peruvian current.

Question 10.What is the outcome of El Nino in the Western side of South America ?

A )extreme cold climate

B) drought

C)heavy rainfall

D) earthquake

Answer - C)heavy rainfall

Explanation -The arid west coast of South America receives heavy rainfall, drought occurs in Australia and sometimes in India and floods in China.