

SALFIA MODEL SCHOOL

ANSWER KEY

SUB : GEOGRAPHY AND GK

CLASS: 7TH

TERM: 1ST

TEACHER : SHAZIA AKHTER

- (a) The horizontal movement of air is called wind. When hot air rises and creates a region of low pressures. Cold air from neighbouring high pressure areas move towards low pressure areas.
- (b) Planetary winds blow throughout the year in a particular direction and over a particular region.
- (c) Air has weight and it exerts weight as pressure on the surface of the earth. This weight of air is called atmospheric pressure. It is measured with the help of an instrument called Barometer.
- (d) Equatorial area is a region of high temperature. The atmosphere heats up in this region, expands and becomes lighter. Hence, the air starts rising up, creating a low pressure belt in this region. This belt is called "Doldrums."
- (e) During winter season, the landmass becomes cooler and the pressure over Central Asia becomes high. From this high pressure area, the winds blow towards the equatorial low pressure area in the north-east direction. These are known as winter monsoons.

QNo:2 (a) Pressure belts :- Equatorial low pressure belt
sub-tropical high pressure belt. sub-polar
low pressure belt, polar high pressure belt.

Sub-tropical high pressure belt :- this belt extends
between 30° and 35° latitudes in both the
hemisphere. Here the winds are comparatively
dry and calm. this is a zone of descending
winds. the descending air starts to pile up
and collects near the tropics creating a high
pressure belt. this belt is also called the
"Horse latitude."

(b) ~~as~~ water takes longer than land to get heated
and cool down. During the day, the land becomes
hotter than the sea. the air above the land
becomes hot and rises. leading to a low
pressure over the land. Since the air above
the sea is cooler, the pressure above the sea
is higher. So the cooler air from the sea
moves towards the land during the day-time.
this is called Sea Breeze which brings down
the temperature in coastal areas during the day.
At night, the land cools down much faster
than the sea. the air above the sea is warmer
and lighter. the warm air above the sea rises.
So the pressure above the sea is lower than
the pressure above the land. therefore, air
from land blows out towards sea. this is known
as Land Breeze.

(c) ~~the~~ The word monsoon is derived from Arabic word 'Mausem' meaning season. They blow from sea towards landmass in one season and then from land towards sea in the other season of the year. The complete reversal of these winds is their characteristic feature.

Anti-trade winds blow from the sub-tropical high pressure belt towards the sub-tropical low pressure belt. Their direction is South-West.

(d) ~~there~~ There are irregular winds of short duration. They are caused by the pressure system called cyclones and Anticyclones.

A cyclone is an intense vortex or a whirl in the atmosphere with wind circulating around it in anti-clockwise direction in the Northern Hemisphere and clockwise direction in the Southern Hemisphere. The centre of cyclone is low pressure area with steep barometric gradient. In cyclone, the wind blows at a speed of 150 to 250 km/hour.

(e) ~~the~~ A severe cyclone hit Odisha on 29 October 1999 with a wind speed of nearly 300 km/hour and incessant rains that lasted for about 48 hours. The region hit by cyclone was inhabited by poor fishermen, who lived in thatched huts. Their homes were destroyed by the strong winds and flowing floods. More than 10,000 people were

Killed and 15 million people were left homeless. vast areas of farmland were flooded causing damage to the standing crops. This was perhaps the most destructive cyclone in India in this century.

QNo.3 1. the temperature increases 2. Foehn
3. Loo 4. Hill breeze.

QNo.4. (a) Low (b) Barometer. (c) 30° & 35°
(d) westerlies (e) wind vane.

QNo.5. (a) chinook
(b) Doldrums
(c) Sea Breeze.

1. (a) Ans When fast rising convectional currents carry water vapours to great heights, the water vapour freezes into hard pellets of ice that fall on the ground. This is called Hail or Hailstone.
- (b) Ans The process of change of one form of water to another is called water cycle.
- (c) Ans The three main types of rainfall are :- convectional rainfall, relief rainfall and cyclonic rainfall.
- (d) Ans Relative humidity is the ratio between the actual amount of water vapour in an air column at a particular temperature and the total amount of water vapour that the air mass can hold at that temperature. It indicates if it is likely to rain or not.
- (e) Ans The Atlantic Ocean is the busiest ocean because it provides the maximum trade and transport facilities between the European and American markets.
- (f) Ans Precipitation is the process in which condensed water vapour falls on the surface of the Earth. It may be in the form of rain, snow, sleet or hail.

9) The mass of water moving along a definite direction are called Ocean currents. They are caused by :-

- i. The temperature of ocean water
- ii The shape of landmasses
- iii The rotation of the Earth
- iv The prevailing winds.

Q.10) Ans Condensation is the process by which a water vapour changes into water. Condensation of water vapour leads to the formation of clouds. When warm, moist air rises upwards it gets cooled and saturated when its temperature falls further some of the water vapour condenses around the dust particles and forms minute droplets of water.

Ans The ocean currents influence rainfall. Winds passing over warm currents pick up moisture and cause heavy rainfall. Western coasts of Europe receive such rainfall. On the other hand, winds passing over cold currents become cool and dry, and hardly bring any rainfall. Hence, deserts are found near the western coasts of continents. The Atacama desert in South America is an example of such desert.

Q.11) Ans Waves are the rise and fall of water on the surface of sea water. When the wind comes in contact with sea water, it pushes the water in the direction in which it blows. Thus, water

particles start moving up and down in the direction of wind forming curls in water. these curls form a wave. Thus, waves are oscillatory movements in water in which water particles move up and down in the direction of oscillation.

(d) Importance of oceans:-

- (a) They are the main sources of humidity in the atmosphere which brings rainfall.
 - (b) They have moderating influence on the climate of the landmasses bordering them.
 - (c) They are storehouse of marine food and minerals.
 - (d) They are used as highways of trade and commerce.
 - (e) They have the enormous potential to generate energy from tidal waves.
 - (f) They are important part of the hydrological cycle.
- (g) Tides are caused by the gravitational pull of the moon. When the sun, the moon and the Earth come in a line, as on a full moon night, the tide becomes higher. These tides are called the spring tides. On a half moon night the sun and moon makes a right angle with the centre of the earth.

f) ~~as~~ It occurs when relief features such as mountains come in the path of moist winds, then the wind is forced to rise up the mountain. The rising wind starts cooling and condensation takes place which results in the formation of clouds. These clouds then bring rainfall, largely on the windward side. But when the wind descends on the leeward side, it gets dry and causes no rainfall. Hence, this area is known as Rain Shadow area. Monsoon rainfall is mainly a relief rainfall.

QNo.3 (a) in cool ocean currents.

- (b) Twice in a day
- (c) 35 gm. per thousand
- (d) convectional rainfall
- (e) Sunda trench
- (f) Total amount of water vapour in an air column.
- (g) Select.

QNo.4 (a) rise and fall of water.

- (b) Europe and America
- (c) Ferrel's
- (d) tides
- (e) humidity
- (f) drifts.

QNo.5 (a) False (b) True (c) True (d) True (e) True.

no. 0612(a), The Arctic Ocean :- is almost frozen and is located near the North Pole. It also has a number of islands, especially in the north of Canada which also remains frozen.

b. Atlantic Ocean :- is S-shaped and covers nearly one-sixth of the Earth's surface. It is the busiest ocean providing maximum trade and transport facilities between the European and American markets. It joins the Arctic Ocean in the north.

ii) Spring Tide :- When the Sun, the Moon and the Earth come in a line, as on a full moon night, the tide becomes higher. These tides are called the spring tides.

Neap Tides :- On a half moon night, the Sun, the Moon make a right angle with the centre of the Earth. The gravitational force thus gets balanced and the tides are not so high. These tides are called the Neap Tides.

iii) Trough and Crest :- Wind pushes water towards land, making water rise and fall. The rise is called the crest and the fall is called the trough.

iv) Snow :- When the condensation takes place at about freezing point, water vapour changes to tiny crystals of ice and falls on the ground in the form of feathery flakes. It is called snow.

Hail:- When fast rising convectional currents carry water vapour to great heights, the water vapour freezes into hard pellets of ice that fall on the ground. This is called hail.

Sub :- Geography

Lesson :- Natural vegetation and wildlife

QNo. 1 (a) Tundra region is treeless land found on higher latitudes and on high mountains. These have low average temperature. Not many plants can grow here because of the cold. Soil cover is thin, therefore, plants cannot take root. So, it is called cold deserts.

(b) Pine, Oak, Eucalyptus, Bamboo and Mulberry trees are some important species of trees in temperate evergreen forests. Inhabitants of these regions rear cattle, pigs and sheep.

(c) The vegetation in Mediterranean forests include trees like, oak, pine, olive and aromatic plants like lavender and Myrtle. Grapes are grown in this region and fruit cultivation is carried out in large scale here. Main fruit trees are Grapes, Plums, Peaches, Apricot, Cherries, Almonds, etc.

(d) The three ill effects of deforestation are global warming, less-rainfall and soil erosion.

(e) The life supporting system in nature in which living beings depend upon one another for their survival on the environment is called ecosystem.

Q.No. 2. (a) The Tropical Evergreen forests are found in regions having hot and humid climate which helps in the thick growth of vegetation. The main regions that have such forests are the Zaire basin in Africa, the Amazon basin in the South America and the islands of South East Asian countries. These forests consist of all trees with broad leaves. The branches of the trees are so intermingled that they form a thick canopy at the top. Different species are all intermixed which make commercial exploitation of these forests ^{are} very difficult.

(b) Tropical grasslands are called Savanna and they occur on both sides of the equator especially in Africa, where rainfall is moderate. These tropical and subtropical regions have rainy season in which grasses grow, followed by a long dry period. Such grasslands are found in the South America, Central Africa, South Asia and Northern Australia.

(c) Grasslands are found in the temperate region also. They are found mostly in the interiors of the continent. In most of the continents, they have specific names such as "Prairies" in the North America, "Pampas" in the South America, "Steppes" in Central Europe, "Velds" in South Africa and "Downs" in Australia.

Wheat and grains are grown on large farms in these regions. As these grasslands are colder and drier, the grasses here are shorter and less dense than those of the tropical grasslands. Trees are almost absent. Wild buffaloes and Bisons are common in North America.

d). Deserts which receive very little rainfall and have high average temperature are called hot deserts. Therefore, the vegetation cover is scarce and cacti thrive best. In the oasis, date palms and thorny bushes grow. They have long roots, thorny surface and wax coated leaves. They belong to xerophytic variety of plants. Camel is an important animal which exhibits good adaptation to environment as it can survive without food and water for a long period of time.

Q.No.3 (a) None of these (b) Temperate evergreen forests.
(c) Velds. (d) Deserts (e) South America.

Q.No.4 (a) Tropical (b) Brazil (c) cacti
(d) coniferous.

Q.No.5 (a) False (b) False (c) False (d) True
(e) False.

Q.No.6 (a) coniferous and deciduous forests:

Coniferous forests are found in the regions where winters are very cold and summers are warm and of short duration. The trees are of evergreen type with small needle type ... leaves. The trees are tall and straight with soft wood and light weight.

Deciduous forests are found in the regions having moderate temperature. Trees shed their leaves to conserve water. These forests consist of trees with high commercial value.

(b) Savanna:- Savanna Grassland occurs on both sides of the equator especially in Africa, where rainfall is moderate. The African grasslands support wide variety of animals like Giraffes, leopards, elephants, Rhinoceroses, lions etc.

Steppe grasslands:- Steppe grasslands are the temperate grasslands in central Europe. Wheat and grains are grown on large farms in these regions. As these grasslands are colder and drier, the grasses here are shorter and less dense. Trees are almost absent.

(c) Tropical Deciduous forests:- These forests have moderate temperature and rainfall. The rainfall is less than in evergreen regions but the temperature remains high. To conserve water, the trees shed their leaves. They are found in monsoon regions of Asia, in central

America and Northern Australia.

Temperate Deciduous Forests:- These are the regions having moderate temperature and rainfall. When they get cold in autumn, these trees shed their leaves. In USA, the season when these trees shed their leaves is called Fall. ... the areas covered by such forests are ... North-Eastern USA, North-Eastern China, Japan Southern Chile and New Zealand.

Topic :- Animal Adjectives

- | | |
|--------------------|--------------------|
| 1. C (bovine) | 8. K (avian) |
| 2. D (canine) | 9. I (apiarian) |
| 3. B (feline) | 10. E (simian) |
| 4. G (leonine) | 11. A (ovine) |
| 5. F (elephantine) | 12. L (serpentine) |
| 6. J (equine) | 13. N (passerine) |
| 7. H (vulpine) | 14. M (vermian) |

Topic :- Literature Quiz

1. J (William Wordsworth)
2. K (Selma Lagerlof)
3. G (Gulliver's Travels)
4. B (Arundhati Roy)
5. D (Seeker)
6. E (A White Whale)
7. F (A mongoose)
8. C (Fagin)
9. A (Miranda)
10. H (Hastivansh Rai Bachchan)
11. I (The Pied Piper of Hamelin)

Topic: Outstanding Writers

- | | | |
|--------|--------|--------|
| 1. 2 D | 4. 8 G | 7. 5 F |
| 2. 7 H | 5. 4 B | 8. 1 C |
| 3. 3 E | 6. 6 A | |

Topic: Carbon Footprint

1. ~~Ans~~ Carbon Dioxide has maximum global warming potential.
2. ~~Ans~~ chlorofluorocarbons didn't exist in the atmosphere in the pre-industrial time.
3. ~~Ans~~ The electricity and heat generated by the burning of fuels contributes the most to carbon emissions globally.

Topic: Science Quiz

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|----------------------------|------------------------------|
| 1. Brass | 10. Amorphous carbon |
| 2. Organic chemistry | 11. Ultraviolet |
| 3. electromagnet | 12. Communication Satellites |
| 4. Buoyancy | 13. X-ray crystallography |
| 5. Holograms | 14. Image Scanners. |
| 6. decibel | |
| 7. hydroelectric power | |
| 8. Joules | |
| 9. Antoine-Louis Lavoisier | |

Topic :- Our Universe

1. D (Pulsars)
2. I (rim of Rembrandt)
3. N (Sirius)
4. E (Jupiter)
5. L (Titan)
6. J (Andromeda Galaxy)
7. F (asteroids)
8. M (Proxima Centauri)
9. K (quasars)
10. G1 (black hole)
11. A (Sputnik 1)
12. O (Venus)
13. C (Charon)
14. B (Mercury)
15. H (Ganymede)

Topic :- Women Tech Pioneers

1. Grace Hopper
2. Edith Clarke
3. Ada Lovelace
4. Sister Mary Kenneth Keller