

TS SC STUDY CIRCLE : HYDERABAD

CSAT – 2023 BATCH
GEOGRAPHY

GS Mock Test – 11

Date: 08.03.2023

Max. Marks : 200

Time Allowed: 2hrs.

1) Consider the following statements about Temperature Inversion.

1. It is the increase in temperature with increasing height temporarily or locally.
2. Short winter nights, cloudy sky, cold air and the presence of winds lead to temperature inversion.
3. During a temperature inversion, the temperature may fall below freezing point in the valleys leading even to the occurrence of frost.

Which of the above statements are correct?

- (a) 1 and 2
- (b) 2 and 3
- (c) 1 and 3
- (d) 1, 2 and 3

2) What are the disadvantages of green hydrogen as a fuel?

1. Colorless and Odourless fuel, which is light in weight.
2. Highly flammable fuel.
3. Very high energy density, which is about 3 times of hydrocarbons.
4. Hydrogen embrittlement.

Choose the correct answer from the options below.

- (a) 1 and 2 only
- (b) 2 and 4 only
- (c) 1 and 3 only
- (d) 1,3 and 4

3) With reference to the Coriolis force, consider the following statement:

1. It is responsible for the formation of meandering in the river.
2. It helps sustain the cyclonic circulation in the Doldrum region.
3. It is maximum at the pole as compared to the equator and inversely proportional to the velocity of the wind.

Which of the statement given above is/are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 2 only

4) Which of the following statements about volcanoes are correct?

1. Volcanoes are responsible for creating more than 80 percent of the Earth's surface.
2. A volcano that has remained dormant for decades can never become active again.
3. Over the years, volcanic materials have formed the most fertile Earth soil.

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

5) Which of the following statements about ocean currents are correct?

1. Cold currents are found on the west coast of the continents, both in low and higher latitudes
2. The velocity of an ocean current is higher at the surface than at the depths.
3. Fishing is an important economic activity in regions where warm and cold currents meet.

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

6) Consider the following statements.

1. The climate is characterized by warm, moist summer and cool, dry winter.
2. Well-distributed rainfall throughout the year but maximum in June, July and August.
3. Wet paddy or swamp rice is cultivated majorly in this type of climate.

The above features are distinct characteristics of which among the following climate?

- (a) The Tropical Monsoon Climate
- (b) The Warm temperate eastern margin
- (c) The Cool temperate western margin
- (d) The Temperate continental climate

7) Millets are considered the Future Super Food for India. In this context, consider the following statements about Millets production in India.

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1. Millets are low cost and are rich in iron, calcium, magnesium, and antioxidants.
2. They are drought-resistant crops with a short growing season and lower water requirements.
3. Jowar is known to have the highest calcium content among all the food grains.
4. Currently, India is the largest exporter of Millet in the world.

Which of the statements given above are correct?

- a) 1 and 2
- b) 2 and 3
- c) 3 and 4
- d) 1, 2, 3 and 4

8) Which of the following statement regarding Jet Streams is correct?

- (a) They are high-velocity stratospheric winds present in both hemispheres.
- (b) They shift Southwards during summer and blow in Southern Asia.
- (c) The westerly Jet streams are more extensive and stronger during the summer season.
- (d) Tropical Easterly Jet Stream are established during the summer season and plays an important role in the onset of the Indian monsoon.

9) Consider the following statement regarding soils:

1. Generally, plants grow well in mild alkaline soil.
2. Adding sulfur to the soil reduces the alkalinity of the soil.
3. Black soils are well aerated but poor in the water holding capacity.
4. Maximum humus content is found in the subsoil region due to dead and decaying organisms.

How many of the above statement(s) are correct?

- (a) One statement
- (b) Two statements
- (c) Three statements
- (d) Four statements

10) Which of the following are considered natural mechanisms responsible for climate change?

1. Sunspots causing the difference in solar radiation
2. Variations in distance and tilt of Earth with respect to the Sun
3. Major volcanic eruption

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4. Changes in magnetic field strength of Earth.

Choose the correct answer from the options below:

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

11) Glaciers are melting at a faster rate than ever before. Which of the following is/are the possible consequences of melting glaciers?

- 1. Sea level rise
- 2. Less freshwater availability
- 3. Decline in ocean salinity
- 4. Loss of species
- 5. New Diseases

Select the correct answer using the code given below.

- (a) 1, 3 and 4 only
- (b) 1, 3 and 5 only
- (c) 2, 3 and 4 only
- (d) 1, 2, 3, 4 and 5

12) Consider the following statements.

- 1. Both P and S waves travel through the body of the Earth.
- 2. Surface waves or L waves are high-frequency waves that travel through the crust.
- 3. The magnitude of an Earthquake indicates the quantity of energy released by an earthquake at the source point, which is measured using the Mercalli Scale.
- 4. The US Geological Survey is a responsible institution for measuring and assessing Earthquakes across the world.

Which of the following statements are **not** correct?

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

13) Consider the following statements:

1. Jet streams are special types of geostrophic winds that are predominantly westerly winds.
2. Geostrophic winds are caused by Coriolis force, frictional force and pressure gradient forces.

Which of the statements given above is/are **not** correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

14) Which of the following statements regarding Aphelion is **not** correct?

- (a) Aphelion is the position at which the Earth is at its farthest from the Sun.
- (b) The Earth is at Aphelion in the early month of July, which is 152 million km away from the Sun.
- (c) Being farthest from the Sun, the Earth experiences a significant drop in temperature.
- (d) The varying distance between the Sun and the Earth does not cause seasons.

15) Consider the following statements:

1. Mid-oceanic ridges are continuous mountain ranges that occur along convergent plate boundaries.
2. Mid-oceanic ridges are much younger than continental areas.
3. Mid-Atlantic ridges do not create Rift Valley in the Atlantic Ocean because it spreads quickly.

Which of the statements given above is/are correct?

- (a) 1 and 3 only
- (b) 2 only
- (c) 1,2 and 3
- (d) None of the above

16) Consider the following statements

1. The halocline is an ocean layer where salinity changes most rapidly with depth.
2. Pycnocline refers to the rapid change in density with depth.
3. The Arabian Sea experiences less salinity than the Bay of Bengal due to the influence of the southwest monsoon.

Which of the statements above given is/are correct?

- (a) 3 only
- (b) 1 and 3 only
- (c) 2 only
- (d) 1 and 2 only

17) Consider the following statements:

1. Atlantic meridional overturning circulation distributes heat and energy from the equatorial to the polar region.
2. AMOC is driven by thermohaline differences.
3. North Atlantic drift decreases the severity of winter in Western Europe.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

18) Which of the following is used to determine the precise location of a place?

1. The altitude of a place
2. Latitude of a place
3. Longitude of a place
4. Pressure
5. Direction of wind

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 2,3 and 5 only
- (c) 3,4 and 5 only
- (d) 2 and 3 only

19) Which of the following is/are responsible for the occurrence of solar and lunar eclipses?

1. Revolution of the moon around the Earth close to the Earth's ecliptic plane.
2. The proximity between the moon and the Earth.
3. The relative apparent size of the Sun and the moon.

Select the correct answer from the code given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

20) Consider the following statements:

1. Mesopause is the coldest place in Earth's atmosphere.
2. Halogens are less reactive in the ozonosphere.
3. The Karman line is located beyond the Thermosphere, the place where space begins.
4. In the mesosphere, temperature increases with an increase in altitude.

Which of the statements given above is/are correct?

- (a) 2, 3 and 4 only (b) 1 only (c) 1 and 4 only (d) 2 and 3 only

21) Why are cyclones not formed despite high temperature and moisture near the equator?

1. Due to negligible Coriolis force.
2. Convergence of trade winds from subtropical high-pressure belts from both the hemisphere.

Which of the statements given above is/are correct?

- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

22) Consider the following statements with reference to the equatorial type of climate:

1. The annual range of temperature is high due to the direct incidence of sun rays in the equatorial region.
2. Unlike temperate forests, tropical hardwoods are very strong which are widely used in boat-making industries.
3. The equatorial region experiences peak rainfall during the months of April and October
4. The equatorial type of grassland found in Amazon lowlands is referred to as "selvas."

Which of the statements given above is/are correct?

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

23) Consider the following statement with respect to Isotherms:

1. Lines joining places having equal temperature are called isotherms.
2. Isotherms in both hemispheres are always parallel to the latitudes.
3. Isotherms are more closely spaced over sea than over land.

Which of the above statements is/are **not** correct?

- (a) 1 only (b) 2 only (c) 2 and 3 only (d) 1 and 3 only

24) With reference to the Thunderstorm, consider the following statements:

1. Thunderstorms are violent storms that occur for a short time and in a small area.
2. It occurs due to the intense convection on a moist hot day.
3. Thunderstorms are a manifestation of the atmosphere's adjustment to varying energy distribution

Which of the statement given above is/are correct?

- (a) 1 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1,2 and 3

25) How many of the following lakes share an international boundary?

1. Lake Michigan
2. Sea of Galilee
3. Lake Titicaca
4. Lake Nyasa
5. Lake Chad
6. Lake Balkhash

Select the correct answer using the code given below:

- a) Three only
- b) Four only
- c) Five only
- d) Six only

26) Which of the following statements are correct?

1. The tropical marine climate is predominantly found along the eastern coast of continents which lie south of the Tropic of Cancer.
2. According to the erstwhile planning commission, India consists of 10 agro-climatic zones.
3. Teak is extensively grown in the regions of monsoon type of climates.

Select the correct code from below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3 only

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27) Consider the following statements.

1. Tropical evergreen forests are rich in fertile soils, which helps in the luxurious growth of tropical rainforests.
2. Most of the designated world heritage sites are situated along the equatorial region. Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) All the above
- (d) None of the above

28) Consider the following statements.

1. Aravalli is one of the oldest fold mountains in the world.
2. Unlike the Himalayas, the Rocky Mountains are formed by ocean-continent convergence.
3. Mt. Blanc is the highest peak in the Andes.

Which of the statements given above is/are correct?

- (a) 2 only
- (b) 3 only
- (c) 1 and 2 only
- (d) 1,2 and 3

29) With reference to world features, Vesuvius, Mona Loa, and Cotopaxi are the names of

- (a) Saline Lakes
- (b) Glaciers
- (c) Volcanos
- (d) Rift Valleys

30) With reference to the Denotified Tribes(DNTs), consider the following statements.

1. British government categorized DNTs as criminal tribes during colonial rule in India.
2. Renke commission was set up for the welfare of the Denotified tribe in India
3. Recently union ministry of the tribal affair launched the Scheme for Economic Empowerment of DNTs (SEED)

Which of the statement given above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

31) Consider the following fluvial erosional and depositional landforms.

1. Swamps and Marshes
2. V-shaped valleys
3. Waterfalls and rapids
4. Braided channels

Which of the above are **not** usually formed during the old age course of a river?

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

32) Consider the following statements with reference to the Deccan Trap :

1. It is the result of Volcanic eruption.
2. It is largely made of granitic rocks believed to be contributed by the Reunion Hotspot volcano.
3. The lava plateau has a minimum thickness along the coast of Mumbai, from where it increases towards the south and east of the Deccan trap.

Which of the statements given above is/are correct?

- (a) 1 and 3 only
- (b) 2 and 3 only
- (c) 1 only
- (d) 1, 2 and 3

33) Consider the following statements with reference to the Indus river basin in India:

1. The principal tributaries of the Indus, namely the Jhelum, Chenab, Ravi, Beas and Sutlej form the left bank tributary to the river.
2. India has restricted use over the waters of the Indus, Jhelum and Chenab waters.
3. It is bounded on the west by the Karakoram and Haramosh ranges and on the east by the Sulaiman and Kirthar ranges

Which of the statements given above is/are correct?

- (a) 1 and 3 only
- (b) 2 and 3 only
- (c) 1 and 2 only
- (d) 1, 2 and 3

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34) Consider the following statements with reference to cotton production in India:

1. In India, the cotton crop is grown only in the Western and Southern States of India.
2. Cotton seed oil is edible oil and can also be used to produce biodiesel.
3. Similar to other Agro-processing industries, the cotton textile industry is also a weight-loss industry.

Which of the statements given above is/are correct?

- (a) 1 and 2
- (b) 2 only
- (c) 3 only
- (d) 2 and 3

35) Consider the following statements:

1. It is bounded by the Yamuna river in the north and the Vindhyan mountain in the south.
2. Diamond is found in the Vindhyan formations of this region.
3. Recently declared, Ranipur Tiger Reserve is found in this region.

Which one of the following regions best applies to the above statements?

- (a) The Malwa Plateau
- (b) The Bundelkhand Plateau
- (c) The Chotanagpur Plateau
- (d) The Meghalaya Plateau

36) Consider the following pairs :

Breeds	Native Regions
a. Sahiwal	- Northeast India
b. Kangayam	- Central India
c. Gir -	- West India
d. Jersey	- South India

How many pairs given above is/are **not** correctly matched ?

- a) Only one pair
- b) Only two pairs
- c) Only three pairs
- d) All four pairs

37) Consider the following statements with reference to the Western Disturbances in India:

1. The inflow of western disturbances moves under the influence of westerly jet streams from the Mediterranean Sea.
2. It influences winter weather conditions over most parts of the Northern Plains.
3. It brings abundant rain in the summer months.

Which of the statements given above is/are correct ?

- (a) 1 and 3 only
- (b) 2 and 3 only
- (c) 1 and 2 only
- (d) 1, 2 and 3

38) Consider the following statements with reference to the Hot weather season in India :

1. The weather conditions are generally hot and dry throughout the country.
2. The hot weather season lasts till the end of June in the northern regions of India.
3. Loo, a hot, dry wind blows during December and January, mainly over the northern plains.
4. Light showers are experienced in Kerala, West Bengal and the Assam.

How many statements given above is/are correct?

- (a) Only one statement
- (b) Only two statements
- (c) Only three statements
- (d) All four statements

39) In comparison to the Himalayan rivers, consider the following statements with respect to Peninsular rivers :

1. These rivers are much younger than the Himalayan rivers
2. These rivers make both deltas and estuaries
3. These are mostly perennial
4. These rivers usually have large basins

How many statements given above are correct?

- (a) Only one statement
- (b) Only two statements
- (c) Only three statements
- (d) All four statements

40) Consider the following statements regarding tropical cyclones:

1. A tropical cyclone is a rapid storm that originates only in warm ocean waters and has low pressure in the centre.
2. 'Eye' is the central part of the tropical cyclone where violent storms and thunderstorm clouds are present.
3. Strong vertical shear increases the intensity of the tropical cyclone.
4. El Nino events inhibit tropical cyclones in the Atlantic Ocean.

Which of the statements given above is/are **not** correct?

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

41) Consider the following statements with reference to the Cold Desert of India (Ladakh):

1. The Karakoram range in the north and the Zaskar mountains in the south enclose it.
2. The rivers do not form deep valleys and gorges in these regions.
3. The air at this altitude is so thin that the heat of the Sun can be felt intensely.

Which of the statements given above is/are correct?

- (a) 1 and 2 only (b) 2 and 3 only (c) 1 and 3 only (d) 1, 2 and 3

42) Which one of the following statements is **not** correct with reference to the Black Soils in India?

- (a) The colouration of the Black soil is due to the presence of Silica and Aluminium compounds
- (b) The parent material of the soils are Deccan lavas, gneisses and granites
- (c) In the upland regions, the soil may be less fertile compared to the soils found in the valleys and lowlands
- (d) Cereals, oilseed vegetables and citrus fruits are grown over the soils.

43) Consider the following statements :

1. Chambal river rises in Vindhyan Range.
2. Ramganga river rises in Kumaun Himalayas.
3. Sharda river originates in Greater Himalayas.
4. Son river originates in Amarkantak Plateau.

How many statements given above is/are correct ?

- (a) Only one statement
- (b) Only two statements
- (c) Only three statements
- (d) All four statements

44) Arrange the following west-flowing rivers of India from south to north direction :

1. Mahadayi
2. Damanganga
3. Savitri
4. Purna

Select the correct answer from the codes given below ?

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

45) Which of the following is **not** a characteristic of Southwest Monsoon Season in India ?

- (a) There may be dry spells in between rainy periods.
- (b) These winds generally strike the Indian coast in the first week of June.
- (c) It gives rainfall to all parts of India except the Coastal regions of Tamil Nadu and Andhra Pradesh.
- (d) The Quantity of rainfall decreases as the monsoonal winds move towards the west over the northern plains.

46) Which of the following best reflects 'Karakoram Anomaly', often talked about in the news recently?

- (a) In recent times, there was an abnormality in the existing Line of Control runs from Manawar in Jammu to Indira Col on the tri-junction in the Karakoram mountain range
- (b) Although it is a cold desert area, the Karakoram Mountain Range is home to some rare and threatened species of flora and fauna
- (c) Recently, both the Indian and Chinese troops completed the process of disengagement from Patrolling Point near Karakoram in the Eastern Ladakh sector
- (d) Few pockets of glaciers in the Karakoram Range are resisting glacial melt due to global warming

47) The latitudinal and longitudinal extent of India is roughly about 29 degrees. However, the actual distance measured from north to south is 3,214 km, and that from east to west is only 2,933 km. Which one of the following is the main reason for this difference?

- (a) The distance between two longitudes decreases towards the poles.
- (b) The distance between two latitudes increases towards the equator.
- (c) The distance between two longitudes remains the same everywhere.
- (d) The distance between two latitudes decreases towards the equator.

48) With reference to the monsoon depressions, consider the following statements:

1. These are low-pressure systems that develop in the Bay of Bengal.
2. Monsoon depression is a warm core system in lower and upper levels of the atmosphere.
3. These intensify into cyclonic storms due to the high vertical wind shear.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3

49) Consider the following statements:

1. The Himalayas were formed due to the divergence of the Indo-Australian plate from the Eurasian plate.
2. The Peninsular Plateau in India was formed due to the tectonic shift of Gondwanaland.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

50) Sikkim and Darjeeling Himalayas are best- suitable for tea plantations. Which of the following factors help in tea cultivation in these regions?

1. Karewa formations
2. Moderate slope
3. Well-distributed rainfall throughout the year
4. Shiwalik formations
5. Mild winters

Select the correct answer using the code given below:

- (a) 1, 2 and 3 only
- (b) 2, 3 and 5 only
- (c) 1, 4 and 5 only
- (d) 1, 2, 3, 4 and 5

51) With reference to the local winds in India, consider the following statements:

1. Chillai Kalan are the winter showers originating in the Bay of Bengal that impact Bangladesh and West Bengal.
2. Mango showers are pre-monsoon showers profound in the region of Kerala and Karnataka.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

52) The 'Malda Fault' separates which of the following landform features?

- (a) Lesser Himalayas and Greater Himalayas
- (b) Eastern Ghats and Western Ghats
- (c) Vindhya Range and Satpura Range
- (d) Chotanagpur Plateau and Meghalaya Plateau

53) Which of the following factors positively affect the monsoon season over the Indian subcontinent?

- 1. Formation of La-Nina
- 2. Absence of Coriolis force
- 3. Strong Somali jet stream
- 4. Positive Indian Ocean Dipole

Select the correct answer using the code given below:

- (a) 1, 2 and 4 only
- (b) 2 and 3 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4

54) In the context of Indian Geography, which of the following is the correct order of the mountain ranges from north to south?

- (a) Cardamom hills, Javadi hills, Nallamala Range, Palkonda range
- (b) Nallamala Range, Palkonda range, Javadi hills, Cardamom hills
- (c) Javadi hills, Nallamala Range, Palkonda range, Cardamom hills
- (d) Nallamala Range, Javadi hills, Palkonda range, Cardamom Hills

55) The three different stages of the river are youth, mature and old stage. In this context, which of the following is/are the characteristic features of a young stage of a river?

- 1. Deep V-shaped Valleys
- 2. Waterfall and rapids
- 3. Oxbow lakes
- 4. Deltas

Select the correct answer using the code given below:

- (a) 1 and 4 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3 only

56) The Snowline is greater in Eastern Himalayas than in Western Himalayas due to which of the following reasons?

- (a) Eastern Himalayas lie at greater latitude than the Western Himalayas
- (b) Western Himalayas have lower precipitation than the Eastern Himalayas and it occurs mostly as snowfall
- (c) The amount of snowfall is more than its loss in Eastern Himalayas than in Western Himalayas
- (d) Stronger Dry and Hot winds blow through the Western Himalayas than in the Eastern Himalayas

57) Consider the following statements:

1. In India, monazite is the principal source of rare earths and thorium.
2. Monazite can be used for the production of atomic energy as per the Atomic Energy Act, 1962.
3. Kerala has the highest reserves of Monazite in India.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

58) With reference to the cloudbursts, consider the following statements:

1. Orographic lift is primarily responsible for cloudbursts in a particular area.
2. It is more prevalent in mountainous regions than in the plains.
3. A doppler-radar system can be used to predict the cloudbursts.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

59) With reference to the Gondwana system, consider the following statements:

1. Gondwana rocks are found in the states of Madhya Pradesh and Andhra Pradesh.
2. More than 90% of India's coal reserves are found in the Gondwana rocks.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

60) With reference to the Koeppen scheme of climatic classification, which of the following regions in India experience a steppe type of climate?

1. Karnataka
2. Western Ghats
3. Jammu & Kashmir
4. Andhra Pradesh

Select the correct answer using the code given below:

- (a) 1 and 4 only
- (b) 1, 2 and 3 only
- (c) 2, 3 and 4 only
- (d) 1, 2, 3 and 4

61) With reference to the Meghalaya plateau, consider the following statements:

1. The Shillong peak is the highest peak in the plateau.
2. It is the most fertile region in north-eastern India.
3. The plateau is devoid of any significant mineral resources.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3.

62) Which one of the following best describes the reason due to which legumes are grown between two crops

in crop rotation method?

- (a) Prevention of soil erosion and increase in water retention
- (b) Elimination of weed growth by alternating the crops
- (c) Pest and insect control by diversifying the crops
- (d) Increase in soil fertility by nitrogen fixation

63) With reference to oilseeds production in India, consider the following statements:

1. Mustard can be cultivated as both rabi and kharif crops.
2. Groundnut accounts for about half of the major oilseeds produced in India.
3. During the last six years, the growth rate of oilseeds production is more than that of the total food grain production.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3

64) Consider the following statements:

1. Intercropping involves cultivation of two or more crops simultaneously with distinct row arrangement on the same land.
2. In mixed cropping, growing of crops and the raising of livestock are done simultaneously.
3. Competition exists between the crops for survival in both mixed cropping and intercropping.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

66) Which of the following are the advantages of Lift Irrigation?

1. Irrigation at higher and elevated fields
 2. Decreased land acquisition problems
 3. Stabilisation of agricultural production in drought years
 4. Reduced cost of water supply to fields
- Select the correct answer using the code given below:

- (a) 1 and 3 only
- (b) 2 and 4 only
- (c) 1, 2 and 3 only
- (d) 1, 2, 3 and 4

67) Which of the following farming techniques can be optimized through vertical farming?

1. Hydroponics
2. Aquaponics
3. Aeroponics

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

68) Which one of the following statements best defines the term "Virtual Water"?

- (a) It is the water consumed during the process of production of a product.
- (b) It is the water that could have been saved if a water-efficient process would have been used in the production processes.
- (c) It is the rain water collected and stored with the support of artificially designed systems.
- (d) It is defined as water that has become unavailable for human consumption due to the effects of climate change.

69) Consider the following statements with reference to the wheat crop:

1. It can be cultivated beyond 60 degrees north latitude.
2. Well drained clay or loamy soil is suitable for wheat cultivation.
3. India accounts for more than fifty percent of wheat exports in the world.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 3 only
- (d) 1, 2 and 3

70) Which of the following can be categorized as 'pull factors of migration'?

1. Availability of regular work
2. Rapid population growth
3. Local conflicts
4. Availability of land

Select the correct answer using the code given below:

- (a) 1 and 4 only
- (b) 1, 2 and 4 only
- (c) 2 and 3 only
- (d) 1, 2, 3 and 4

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71) Aksai Chin is situated to the:

- (a) South of Pangong Tso
- (b) North of Kunlun Mountain range
- (c) East of Galwan Valley
- (d) North-West of Daulat Beg Oldi

72) Which one of the following is the impact of Madden-Julian Oscillation (MJO) on Indian Monsoons?

- (a) It has no impact on the Indian monsoons.
- (b) Its strong active phase over the equatorial Indian Ocean causes increased rainfall activity in India.
- (c) Its strong active phase over the equatorial Indian Ocean causes decreased rainfall activity in India.
- (d) Its suppressed convection phase can advance the onset of the monsoon season in India.

73) Which of the following products can be produced by the refinement of crude oil?

- 1. Paraffin wax
- 2. Bitumen
- 3. Lubricating oil
- 4. Kerosene
- 5. Shale oil

Select the correct answer using the code given below:

- (a) 1, 2, 3 and 4 only
- (b) 2, 3 and 5 only
- (c) 1, 4 and 5 only
- (d) 1, 2, 3, 4 and 5

74) With reference to the "Big Bang Theory", consider the following statements:

- 1. All matter which forms the universe existed in one place as a singular atom in the beginning.
- 2. The planets were formed out of a cloud of material associated with a youthful sun.
- 3. The universe is roughly of the same size at any point in time.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 3 only

75) Which of the following events contributed to the evolution of the present atmosphere of the earth?

- 1. Development of primordial atmosphere
- 2. Volcanic eruptions
- 3. Photosynthesis process

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

76) Consider the following statements:

Statement 1: The gravitation force is the same at different latitudes on the surface of the earth.

Statement 2: The distance from the earth's centre is the same for all places on earth.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement 1 and Statement 2 are correct and Statement 2 is the correct explanation for statement 1
- (b) Both statement 1 and Statement 2 are correct but Statement 2 is not the correct explanation for Statement 1
- (c) Statement 1 is correct but Statement 2 is not correct
- (d) Both Statement 1 and Statement 2 are not correct

77) Consider the following statements with reference to the structure of the earth:

1. The oceanic crust is thinner compared to the continental crust.
2. The inner core is in a liquid state due to high heat and pressure.
3. The density at the centre of the earth is higher than the density at the core-mantle boundary.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

78) These volcanoes are characterised by the eruption of cooler and more viscous lava. The accumulated material generally results in the formation of layers. The volcanoes most often result in explosive eruptions. In this, pyroclastic material and ashes find their way to the ground along with lava.

Which one of the following types of volcanoes best reflects the above paragraph?

- (a) Shield volcano
- (b) Caldera
- (c) Composite Volcano
- (d) Flood Basalt

79) Which of the following evidence supports the 'Continental Drift Theory'?

1. Matching boundaries of Africa and South America
2. Deposits along the coasts of Brazil and Western Africa are from different ages
3. Gondwana rocks from India are also found in Africa, Antarctica and Australia
4. Presence of source rock for placer deposits of gold in the Ghana region
5. Different polar-wandering paths for different continents

Select the correct answer using the code given below:

- (a) 1, 3, and 4 only
- (b) 2, 4 and 5 only
- (c) 1, 3 and 5 only
- (d) 1, 2, 3 and 4 only

80) Consider the following statements with reference to the Indian tectonic plate:

1. It includes Peninsular India and the Australian continental portions.
2. It has a subduction zone due to continent-continent convergence along the Himalayas.
3. It extends through Rakinyoma Mountains of Myanmar towards the island arc along the Java Trench.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

81) Consider the following statements:

1. Convection currents within the mantle provide the potential driving force for plate movement.
2. Convection currents in the outer core result from the energy generated by decaying radioactive elements.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

82) With reference to petrology, "lithification" is the process of

- (a) forcing the rocks to lower levels by tectonic processes
- (b) hot magma getting converted into solid rock
- (c) reorganisation of the original minerals within rocks due to crushing
- (d) conversion of unconsolidated sediments into sedimentary rocks

83) It is a geomorphic process that includes the gradual downslope flow of fine-grained rock debris lubricated with water. It is most common in high-latitude or high-elevation tundra regions and can be initiated by repeated freeze-thaw cycles and the gravitational pull of Earth. The phenomenon results in the creation of rounded tongue-like slumps of soil appearing like terraces. Which one of the following mass movements' best reflects the description given above?

- (a) Earthflow
- (b) Solifluction
- (c) Lahars
- (d) Soil creep

84) During earth's revolution around the sun, the "Aphelion" position denotes that

- (a) the earth is farthest from the sun
- (b) earth's axis not tilting towards the sun
- (c) the earth is nearest to the sun
- (d) earth experiences the longest day of the year

85) Consider the following statements:

1. Block Mountains as well as fold mountains are formed due to faulting of the earth.
2. Unlike Fold Mountains, Block Mountains are characterised by steep slopes and flat tops.
3. Meghalaya Plateau is a Block Mountain while the Himalayas are Fold Mountains.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 2 and 3 only

86) With reference to 'Savanna Climate', consider the following statements:

1. It is characterised by tall grass and short deciduous trees.
2. It has laterite soils that are unable to support major crops.
3. There is an extreme diurnal temperature range in the region.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

87) Consider the following statements:

1. The air in contact with the earth's surface gets heated due to conduction.
2. The convective transfer of energy is confined only to the troposphere.
3. In northern India, local winds called 'loo' is the outcome of the advection process.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

88) Which of the following is/are the reasons for the location of major deserts on the western coasts of continents between latitudes 15° and 30° North and South?

1. Development of Anticyclonic conditions
2. Formation of Rain-shadow Zone
3. Presence of Inter-tropical Convergence Zone
4. Cold Ocean currents along the western coast of continents

Select the correct answer using the code given below:

- (a) 1 and 3 only
- (b) 2 only
- (c) 1, 2 and 4 only
- (d) 2, 3 and 4 only

89) Consider the following statements:

1. Coriolis force is maximum at the poles and is absent at the equator.
 2. Higher pressure gradient force leads to larger deflection in the wind's direction.
 3. Coriolis force is responsible for the presence of Tropical cyclones near the equator.
- Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

90) With reference to the asthenosphere, consider the following statements:

1. It includes the area of the crust and the uppermost part of the mantle.
2. It is the weak zone from which magma finds its way to the surface.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

91) Consider the following:

1. Iron
2. Oxygen
3. Aluminium
4. Silicon

Which of the following is the correct order of the above elements in order of their increasing composition in Earth's Crust?

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

92) With reference to metamorphic rocks, consider the following statements:

1. They are formed due to the recrystallisation of materials within an already existing rock.
2. In dynamic metamorphism, rocks undergo chemical changes caused by high temperature.
3. Chalk, limestone and sandstone are metamorphic rocks.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1 and 3 only

93) Consider the following statements with reference to geomorphic processes on the Earth:

1. The energy required for endogenic processes is generated mainly by the gravitational force.
2. Mountain-destroying exogenic processes act much faster than mountain-building endogenic processes.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

94) With reference to atmospheric circulation, the "Geostrophic winds" are

- (a) seasonal winds that shift direction on a regular basis

- (b) winds that blow only during a particular period of the day or year in a small area
- (c) winds that are parallel to isobars when Coriolis force equals pressure gradient force
- (d) variable winds which lead to the formation of cyclones and anticyclones

95) The temperature of the air at any place is influenced by which of the following factors?

- 1. The latitude of the place
- 2. The altitude of the place
- 3. The location of the place from the sea
- 4. The presence of ocean currents

Select the correct answer using the code given below:

- (a) 1, 3 and 4 only
- (b) 2 and 4 only
- (c) 1 and 3 only
- (d) 1, 2, 3 and 4

96) During nights, the slopes get cooled and dense air descends into the valley as mountain wind. This cool air

of the high mountains draining into the valley is called as

- (a) Gradient wind
- (b) Katabatic wind
- (c) Monsoon wind
- (d) Anabatic wind

97) The condensation of air is most likely to occur if there is

- (a) an increase in the air temperature
- (b) an increase in the volume of air but a reduction in temperature
- (c) a fall in air temperature to dew point with its volume remaining constant
- (d) a reduction of moisture from the air

98) They are very low clouds that have a horizontal sheet-like appearance lying in layers and covering large portions of the sky. They are formed mainly during winters due to loss of heat and are uniformly grey. The clouds bring dull weather and may cause light drizzle. They reduce the visibility of an aircraft and are thus a danger. Which one of the following clouds best reflects the description given above?

- (a) Cumulus clouds
- (b) Stratus clouds
- (c) Cirrus clouds
- (d) Alto cumulus clouds

99) The average annual temperature for the northern hemisphere is greater than the southern hemisphere because of

- (a) lesser area of tropical land in the Northern Hemisphere
- (b) northward salinity transfer by the ocean circulation
- (c) unequal distribution of land and water
- (d) dominance of convection process in Northern Hemisphere

100) Which of the following conditions have helped temperate grasslands become the 'granaries of the world'?

1. Moderate temperatures due to oceans
2. Surplus of wheat production
3. Influence of local winds like Chinook
4. Scientific methods of cultivation

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2, 3 and 4 only
- (d) 1, 2, 3 and 4
