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IRP Geography Final Compilation

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Q.1) Consider the following statements regarding Earthquake body waves

1. Body waves can travel through the interior of the Earth.
2. Body waves are generated due to the energy released at the Epicenter.

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

Q.1) Solution (b)

Body waves can travel through the interior of the Earth.
Hence Statement 1 is correct.
Body waves are generated due to the release of energy at the focus and moves in all directions traveling through the body of the Earth. Hence, the name – body waves.
Hence Statement 2 is incorrect.

Q.2) Which of the following pairs is/are correctly matched:

Lake :: Feature

1. Vembanad lake in Kerala :: Largest saline water lake in India
2. Lonar lake in Maharashtra :: Notified Nation-Geo Heritage monument
3. Wular lake in Kashmir :: Formed as a result of tectonic activity

Select the correct answer using the code given below

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

Q.2) Solution (b)

Lake :: Feature

- Vembanad lake :: Longest lake in India
- Lonar lake :: It is a notified National Geo-heritage Monument
- Wular lake :: It was formed as a result of Tectonic activity

Q.3) Consider the following statements

1. Mohorovic (Moho) discontinuity forms the boundary between crust and asthenosphere.
2. Oceanic crust is thinner as compared to the continental crust
3. The Asthenosphere is the main source of magma that finds its way to the surface during volcanic eruptions

Which of the statements given above is/are correct?

a) 1 and 2 only
b) 2 and 3 only
c) 1, 2 and 3

d) 1 and 3 only

Q.3) Solution (c)

The Mohorovic (Moho) discontinuity forms the boundary between crust and asthenosphere [asthenosphere is a part of mantle].

Hence Statement 1 is correct.

Oceanic crust is thinner (5-30 KM thick) as compared to the continental crust (50-70 KM thick).

Hence Statement 2 is correct.

The upper portion of the mantle is called asthenosphere. It is the main source of magma that finds its way to the surface during volcanic eruptions. It has a density higher than the crust's.

Hence Statement 3 is correct.

Q.4) Consider the following statements:

1. Igneous Rocks are the most abundant Rocks in the Earth's crust.
2. Sedimentary Rocks are called primary Rocks as all other Rocks are derived from them.

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

Q.4) Solution (a)

Igneous rocks are formed by the cooling of highly heated molten fluid material called as Magma. They are the most abundant rocks in the Earth's crust.

Hence Statement 1 is correct.

As the igneous Rocks comprise the Earth's crust and all other rocks are derived from them, they are also called as the parents of all rocks or the Primary Rocks.

Hence Statement 2 is incorrect.

Q.5) Consider the following statements:

1. Large volcanic eruptions along the shorelines can cause Tsunami
2. Submarine Landslides can cause Tsunami
3. The fall off extra-terrestrial objects such as Meteorites also can cause Tsunami when then fall on the oceans

Which of the statements given above is/are correct?

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

Q.5) Solution (c)

Large volcanic eruptions along shorelines, such as Krakatoa (1883 CE), have also produced notable tsunamis. This is in Sunda Strait that links Java Sea and Indian Ocean between Sumatra and Java.

Hence Statement 1 is correct.

During a submarine Landslide, the equilibrium sea-level is altered by sediment moving along the floor of the sea. Gravitational forces then propagate a tsunami.

Hence Statement 2 is correct.

Most destructive tsunamis can be caused due to the fall of extra-terrestrial objects on to the Earth.

Hence Statement 3 is correct.

Q.6) Consider the following statements with reference to the different seismic waves:

1. Earth quake are the zone of seismicity where surface waves are the most destructive.
2. P and S waves both forms shadow zones, however, shadow zone of S wave is larger than that of P wave.
3. P-waves move faster and are the first to arrive at the surface.

Which of the above statements is/are correct?

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

Q.6) Solution (d)

Surface Waves also called as long period waves. They are low frequency, long wavelength, and transverse vibration. These waves are responsible for most the destructive force of earthquake.

Hence Statement 1 is correct

P and S waves both forms shadow zones, however, shadow zone of S wave is larger than that of P wave.

Hence Statement 2 is correct

P-waves move faster and are the first to arrive at the surface. These waves are of high frequency. They can travel in all mediums.

Hence Statement 3 is correct

Q.7) With reference to plates and plate tectonics, Consider the following statements:

1. Lithosphere consists of only upper crust.
2. Pacific plate is the only major plate which is completely oceanic.
3. Theory of Plate tectonics propounded that there was a supercontinent called Pangaea and a super ocean called Panthalasa.

Which of the above statements is/are NOT CORRECT?

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

Q.7) Solution (c)
Lithosphere consists of crust and upper mantle.
Hence Statement 1 is incorrect
Pacific plate is the only major plate which is completely oceanic.
Hence Statement 2 is correct
Continental Drift theory talks about Pangaea and Panthalassa.
Hence Statement 3 is incorrect

Q.8) Consider the following statements:

1. The lithosphere is broken in fragments called plates and they are moving with respect to each other.
2. The forces responsible for movement of plates are gravitational pull of the moon and earth's rotation.

Which of the above statements is/are correct?

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

Q.8) Solution (a)
The lithosphere is believed to have been broken into fragments which are in constant movement with respect to each other.
Hence Statement 1 is correct
The movement of these plates is attributed to the convention currents being generated in upper mantle.
Hence Statement 2 is incorrect

Q.9) Consider the following statements with reference to the Block Mountains:

1. Block Mountains are created when large areas are broken and displaced vertically.
2. The uplifted blocks are termed as graben and the lowered blocks are called horsts.

Which of the above statements is/are correct?

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

Q.9) Solution (a)
Block Mountains are created when large areas are broken and displaced vertically.
Hence Statement 1 is correct
The uplifted blocks are termed as horsts and the lowered blocks are called graben.
Hence Statement 2 is incorrect
Sierra Nevada, Rhine valley and Vosges (France, Europe), Great Rift Valley (Africa), Narmada and Tapi valley are examples of Block Mountains

Q.10) With reference to residual mountain which of the following statements is/are correct?

1. Residual mountains are formed by general lowering of level of surfaces nearby due to faulting.
2. Residual mountains can also be formed by the action of weathering.
3. Vindhyas and Rajmahal hills are example of residual mountains.

Select the correct answer using the code given below:

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

Q.10) Solution (c)

Residual mountains are those mountains which have been eroded by the agents of degradation such as winds, rain, frost and running water. The hard rocks that are left behind are called residual mountains.

Hence Statement 1 is incorrect

Residual mountains can also be formed by the action of weathering.

Hence Statement 2 is correct

Hills like Vindhyas, the Nilgiris, the Parasnath, the Rajmahal and the Aravalis in India are examples of residual mountains.

Hence Statement 3 is correct

Q.11) Consider the following statements regarding acidic lava and basic lava

1. Acidic lavas are highly viscous compared to basic lavas
2. Basic lavas flow slowly and seldom travels far before they solidify.

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

Q.11) Solution (b)

Acidic lavas are highly viscous and they generally do not travel far.

Hence Statement 1 is correct.

Basic lavas are less viscous compared to acidic lavas hence they travel far before they solidify.

Hence Statement 2 is incorrect.

Q.12) Which of the following energy can contribute to endogenic geomorphic processes

1. Radio activity
2. Primordial heat
3. Rotational and tidal friction

Which of the statements given above is/are correct?

a) 1 and 3 only
b) 3 only
c) 1, 2 and 3

d) 1 and 2 only

Q.12) Solution (c)

The Energy that is emanating from within the Earth is the main force behind the Endogenic Geomorphic process. The Energy that is generated within the Earth is due to Radioactivity, Rotational and Tidal friction and Primordial heat. Due to Geothermal gradients, the Energy and heat flow within the Earth induces diastrophism and Volcanism.

Hence all the statements are correct.

Q.13) Consider the following statements

1. Weathering influences enrichment of certain valuable ores
2. Weathering is an ex-situ process
3. Weathering is pre-requisite for mass movements

Which of the statements given above is/are correct?

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

Q.13) Solution (b)

Weathering of rocks and deposits helps in enrichment and concentrations of certain valuable ores of iron, manganese, aluminum, copper etc.

Hence Statement 1 is correct.

As very little or no motion of materials takes place in weathering, hence it is an in-situ or on site process.

Hence Statement 2 is incorrect.

Weathering is not a pre requisite for mass movement though it aids mass movement. Mass movements are aided by gravity. No geomorphic agent like running water, glaciers, wind, waves and currents participate in the process of mass movements. This shows that mass movement do not come under erosion though there is shift of materials from one place to another.

Hence Statement 3 is incorrect.

Q.14) The Vindhyan system of Rocks is important for the production of

a) Precious stones and materials
b) Bauxite and Mica
c) Iron Ore and Manganese
d) Copper and Uranium

Q.14) Solution (a)

The Vindhyan system of rocks is important for the production of precious stones and building materials. The system derives its name from the Vindhyan hills where its rocks are prominently exposed. The main rocks of the Vindhyan system are coarse, medium and line textured sandstones, shales and lime stones. The Vindhyan system of rocks bed out precious stones, ornamental stones, diamond building materials, and raw materials for cement, lime, glass and chemical industries

Q.15) Which of the following straits is nearest to the International Date Line

a) Bering straits
b) Florida straits
c) Malacca straits
d) Bosporus straits

Q.15) Solution (a)

Bering Strait is nearest to the International Date Line, because the International Date Line runs equidistant between the American continents, on its East and Asia, Australia, and Europe on its west.

Q.16) Which of the following Islands of India are Volcanic in character?

1. Narcondam Island
2. Barren Island
3. Minicoy
4. Majauli

Select the correct answer from the code given below:

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

Q.16) Solution (a)

The Barren and Narcondam islands, north of Port Blair, are volcanic islands.

Q.17) Which of the following are necessary conditions for generation of Tsunami waves?

1. Earthquake
2. Vertical displacement of water in ocean
3. Fast wind speed on the surface of the ocean

Select the correct answer from the code given below:

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

Q.17) Solution (b)

The seismic waves travelling through the ocean and sea water results into high sea waves which are known as Tsunamis.

For a Tsunami to occur, two conditions are required:

There should be an earthquake from which energy can be transferred.

There should be a vertical displacement of the water. i.e. during earthquake the crust should move vertically.

Q.18) Which of the following is/are the characteristic features of the convergent plate boundary?

1. Formation of zone of progressively deeper earthquakes.
2. Formation of chain of volcanic islands.
3. Shortening and thickening of the plates within the collision zone.

Select the correct answer from the code given below:

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

Q.18) Solution (d)

Effects that are found at convergent plate boundary (oceanic) include: a zone of progressively deeper earthquakes, an oceanic trench, a chain of volcanic islands, and the destruction of oceanic lithosphere.

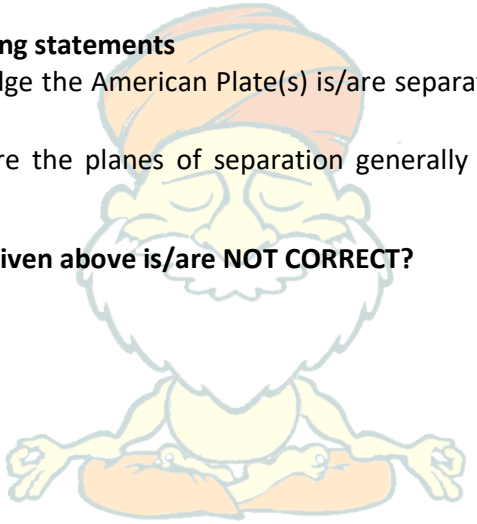
Effects found at a convergent boundary between continental plates include: intense folding and faulting, a broad folded mountain range, shallow earthquake activity, shortening and thickening of the plates within the collision zone.

Q.19) Consider the following statements

1. At Mid- Atlantic Ridge the American Plate(s) is/are separated from the Eurasian and African Plates.
2. Transform faults are the planes of separation generally perpendicular to the mid oceanic ridges.

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



Q.19) Solution (d)

Divergent boundaries

The sites where the plates move away from each other are called spreading sites. The best-known example of divergent boundaries is the Mid- Atlantic Ridge. At this, the American Plate(s) is/are separated from the Eurasian and African Plates.

Hence Statement 1 is correct.

Transform Boundaries

Where the crust is neither produced nor destroyed as the plates slide horizontally past each other. Transform faults are the planes of separation generally perpendicular to the midoceanic ridges. As the eruptions do not take all along the entire crest at the same time, there is a differential movement of a portion of the plate away from the axis of the earth.

Hence Statement 2 is correct.

Q.20) Which of the following pair of rocks DO NOT lead to formation of caves in Karst Topography?

a) Shale and limestone
b) Limestone and sandstone
c) Shale and sandstone

d) None of the above

Q.20) Solution (c)

A region with a large stretch of limestone possesses a very distinct type of topography – Karst topography.

Karst regions have a bleak landscape. In areas where there are alternating beds of rocks (shales, sandstones, quartzites) with limestones or dolomites in between or in areas where limestones are dense, massive and occurring as thick beds, cave formation is prominent.

Q.21) The Himalayan mountains are dissected by many fast flowing rivers which are in youthful stage. Which of the following Landforms are formed by these fast flowing rivers?

1. V-Shaped valleys
2. Gorges
3. Waterfalls

Which of the statements given above is/are correct?

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

Q.21) Solution (c)

The Himalayas along with other peninsular mountains are young, weak and flexible in their geological structure unlike the rigid and stable Peninsular Block. Consequently, they are still subjected to the interplay of exogenic and endogenic forces, resulting in the development of faults, folds and thrust plains.

The Himalayas are tectonic in origin, dissected by fast- flowing rivers which are in their youthful stage. Therefore, various landforms like gorges, V shaped valleys, rapids, waterfalls, etc. are indicative of this stage. These are formed both due to the speed of the rivers as well as the weak geological structure.

Q.22) Consider the following statements

1. Srinagar is located on the Banks of Jhelum River
2. Jhelum River in the Kashmir valley though is in mature state, it doesn't form any meanders.

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

Q.22) Solution (a)

Srinagar is located on the banks of the Jhelum River. The Jhelum has its source in a spring at Verinag in the south-eastern part of the Kashmir Valley.

Hence Statement 1 is correct.

The Jhelum River in the Kashmir valley presents an interesting feature – Though it is still in youthful stage, it forms meanders. Typically, the meanders are associated with the evolution of fluvial Landform.
Hence statement 2 is incorrect.

Q.23) Which of the following pairs is/are correctly matched:

	Mountain pass	::	**Range**
1.	Zoji La	::	Great Himalayas
2.	Banihal pass	::	Zanskar
3.	Photu La	::	PirPanjal
4.	Khardung La	::	Ladakh

Select the correct answer using the code given below

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

Q.23) Solution (a)
Mountain pass :: Range

- Zoji La :: Great Himalayas
- Banihal pass :: PirPanjal
- Photu La :: Zanskar
- Khardung La :: Ladakh

Q.24) Consider the following statements regarding the Himalayan and Peninsular rivers

1. The Peninsular rivers have narrow catchment area whereas the Himalayan rivers have large catchment area
2. The Himalayan Rivers are characterized by broad and shallow valleys whereas peninsular Rivers are characterized by narrow and deep valleys.
3. Most of the Himalayan rivers are in their mature stage where as the peninsular rivers are in youthful stage.

Which of the statements given above is/are NOT correct?

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

Q.24) Solution (d)
The Peninsular Rivers have narrow catchment area whereas the Himalayan rivers have large catchment area.
Hence statement 1 is correct.
The Himalayan rivers flow through deep V – shaped valleys called gorges. These gorges have been carved out by down cutting carried on side by side with the uplift of the Himalayas.
The Peninsular Rivers flow in comparatively shallow valleys. These are more or less completely graded valleys. The rivers have little erosional activity to perform.

Hence statement 2 is incorrect.
The Himalayan Rivers flow across the young fold mountains and are still in a youthful stage. The Peninsular Rivers have been flowing in one of the oldest plateaus of the world and have reached maturity
Hence statement 3 is incorrect.

Q.25) Indian Standard meridian 82.5° East passes through which of the following states

1. Andhra Pradesh
2. Telangana
3. Tamilnadu
4. Odisha

Which of the statements given above is/are correct?

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

Q.25) Solution (a)
The 82˚5' E longitude is taken as the Standard Time Meridian of India. It passes through the following states

- Uttar Pradesh
- Madhya Pradesh
- Chhatisgarh
- Odisha
- Andhra Pradesh.

Q.26) Consider the below statements with regard to Western Ghats and Eastern Ghats:

1. The mean height of the Western Ghats is more than that of Eastern Ghats.
2. The Eastern Ghats do not form a continuous chain like the Western Ghats.
3. The Eastern Ghats average width is less than that of Western Ghats.

Which of the statements given above is/are correct?

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

Q.26) Solution (a)
Western Ghats average elevation is 900 to 1,100 meters above sea-level. But the average elevation of Eastern Ghats is about 600 meters above sea level.
Hence statement 1 is correct.
Western Ghats is continuous and can be crossed through passes only. But Eastern Ghats has been divided into several parts by large rivers.
Hence statement 2 is correct.

The Western Ghats average width is 50 to 80 km. But Eastern Ghats width varies from 100 to 200 km.
Hence statement 3 is incorrect.

Q.27) Which among the following is/are the extensions of Peninsular plateau?

1. Rajmahal hills
2. Gir range
3. Karbi-Anglong
4. Cardamom hills

Choose the correct answer using the code given below:

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

Q.27) Solution (d)
Delhi ridge in the northwest, (extension of Aravalis), the Rajmahal hills in the east, Gir range in the west and the Cardamom hills in the south constitute the outer extent of the Peninsular plateau. However, an extension of this is also seen in the northeast, in the form of Shillong and Karbi-Anglong plateau.
Hence all the given statements are extensions of peninsular plateau.

Q.28) Why Western Ghats in Karnataka receive more monsoon rainfall than Maharashtra and Kerala?

1. Due to continuous topography of the Ghats in Karnataka.
2. Due to the greater width of the mountains in Karnataka.
3. Mountains of Karnataka have very steep slopes.

Choose the correct answer using the code given below:

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

Q.28) Solution (a)
Western Ghats in Karnataka receive more monsoon rainfall than Maharashtra and Kerala.
The continuous mountain range presents a greater barrier to rain-bearing winds than a range comprising isolated mountains with gaps in between where the winds can easily pass to the leeward side.
Hence statement 1 is correct.
Due to the greater width of the mountains, the rain bearing winds have to necessarily travel a longer distance and have more time for the drops to coalesce and precipitate as rainfall, resulting in higher rainfall.
Hence statement 2 is correct.
The slope of the mountain in Karnataka has a direct bearing on the possibility of precipitation. This is borne out by the Ghats of Karnataka where the mountains are gently sloping, compared to the steep slopes of the Ghats in Maharashtra and Kerala.

Hence statement 3 is incorrect.

Q.29) Consider the following statements with respect to the Aravallis?

1. They are the oldest mountain ranges of India.
2. Aravalli is an example of block mountains.
3. Guru Shikhar is the highest peak of Aravalli range.
4. Aravalli hills lie perpendicular to the direction of monsoon winds causing heavy rainfall in eastern Rajasthan.

Which of the above statements is/are NOT CORRECT?

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

Q.29) Solution (b)

Aravalli hills are the oldest mountain ranges of India.
Hence statement 1 is correct.
Aravalli range is an old folded mountain range.
Hence statement 2 is incorrect.
Guru Shikhar is the highest peak of Aravalli range.
Hence statement 3 is correct.
Aravalli hills lie parallel to the monsoon winds causing no interception hence very little rainfall.
Hence statement 4 is incorrect.

Q.30) Which of the statements given below is/are not true with respect to the western coastal plain?

a) It is a narrow belt.
b) Eastern coastal plain receives comparatively low rainfall but the Western coastal plain receives heavy rainfall.
c) West Coast Plain is very fertile and agriculturally prosperous except in the Malabar Coast.
d) All the above statements are correct.

Q.30) Solution (c)

West Coast Plain is infertile and agriculturally not prosperous except in the Malabar Coast.

Q.31) Consider the following statements

1. Western Ghats are lower in elevation compared to the Eastern Ghats
2. Most of the peninsular rivers have their origin in the Eastern Ghats

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

Q.31) Solution (c)
Western Ghats are higher in elevation compared to the Eastern Ghats.
Hence statement 1 is incorrect
Most of the peninsular rivers have their origin in the Western Ghats.
Hence statement 2 is incorrect

Q.32) Gypsum is added to the Soil

a) To decrease the acidity
b) To increase the alkalinity
c) To decrease the alkalinity
d) As an insecticide

Q.32) Solution (c)
Gypsum is **Calcium Sulfate** and is a naturally occurring mineral. It has been touted as beneficial for breaking up compact soil, especially clay soil. It is **useful in changing the soil structure of excessively heavy soils** which have been impacted by heavy traffic, flooding, over cropping, or simply overly weatherized. **It decreases their alkalinity.**
Hence option c is correct.

Q.33) Which of the following statement Is true regarding drainage pattern:

a) Radial drainage pattern is formed when a river originates from a Hill and flows in all directions
b) Dendritic drainage pattern is formed when the rivers discharge their waters from all directions in a lake or depression
c) Centripetal drainage pattern is formed when primary tributaries flow parallel to each other and secondary tributaries join them at right angles
d) Trellis drainage pattern is formed when the drainage pattern resembles branches of a tree

Q.33) Solution (a)
Radial drainage pattern is formed when a river originates from a Hill and flows in all directions.

Hence option a is correct.
Centripetal drainage pattern is formed when the rivers discharge their waters from all directions in a lake or depression.

Hence option b is incorrect.
Trellis drainage pattern is formed when primary tributaries flow parallel to each other and secondary tributaries join them at right angles.

Hence option c is incorrect.
Dendritic drainage pattern is formed when the drainage pattern resembles branches of a tree.

Hence option d is incorrect.

Q.34) In which of the following cities one can never see the Sun shine overhead at noon?

a) Hyderabad
b) Mumbai
c) Chennai
d) Delhi

Q.34) Solution (d)

The mid-day Sun is exactly overhead at least once a year on all latitudes between the Tropic of Cancer and Tropic of Capricorn. Hence, among the given options, except Delhi, the remaining three are well in between the Tropic of Cancer and Tropic of Capricorn and the mid-day Sun is exactly overhead at least once in a year. Delhi is slightly away from equator, so the Sun is slightly tilted from being over head.

Q.35) Which of the following pairs is/are correctly matched:

	River	Origin
1.	The Brahmaputra	Chemayungdung glacier
2.	The Ganga	Gangotri Glacier
3.	The Ghaghara	Mapchachungo glacier
4.	The Sarda	Milan glacier

Select the correct answer using the code given below

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

Q.35) Solution (d)

The Brahmaputra, one of the largest rivers of the world, has its origin in the Chemayungdung glacier of the Kailash range near the Mansarover Lake.

Hence statement 1 is correct.

The Ganga river raises in the Gangotri glacier near Gaumukh in the Uttarkashi district of Uttaranchal.

Hence statement 2 is correct

The Ghaghara river raises in the glaciers of Mapchachungo.

Hence statement 3 is correct

The Sarda or Sarayu river rises in the Milan glacier in the Nepal Himalayas where it is known as the Goriganga. Along the Indo-Nepal border, it is called Kali or Chauk, where it joins the Ghaghara.

Hence statement 4 is correct

Q.36) Consider the following statements:

1. The world-famous valley of Kashmir lies between the Karakoram Range and Ladakh Range.
2. The Kashmir Himalayas are also famous for Karewa formations.

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

Q.36) Solution (b)

Between the Great Himalayas and the Pir Panjal range, lies the world-famous valley of Kashmir and the famous Dal Lake.

Hence Statement 1 is incorrect.

The Kashmir Himalayas are also famous for Karewa formations, which are useful for the cultivation of Zafran, a local variety of saffron.

Hence statement 2 is correct.

Q.37) Which of the following best defines Duars?

a) The land drained by the brackish water.
b) The landscape all along the foothills of Shiwaliks.
c) The tract of land lying between two converging, or confluent, rivers.
d) The alluvial floodplains in north-eastern India that lies south of the outer foothills of the Himalayas and north of the Brahmaputra River basin.

Q.37) Solution (d)

The Dooars or Duars are the alluvial floodplains in northeastern India that lie south of the outer foothills of the Himalayas and north of the Brahmaputra River basin. This region is about 30 km wide and stretches over about 350 km (220 mi) from the Teesta River in West Bengal to the Dhanshiri River in Assam. The region forms the gateway to Bhutan. It is part of the Terai-Duar savanna and grasslands ecoregion.

Q.38) Consider the following statements:

1. The region is swampy and marshy.
2. The underground streams re-emerge in this region.
3. The forests in this region have been cleared and intensive agriculture is being practiced.
4. The region is conducive for the breeding of mosquitoes and flies.

The above statements are true for which of the following regions?

a) Bhabar
b) Bhangar
c) Tarai

d) Khadar

Q.38) Solution (c)

- Tarai lies South of Bhabar.
- It is 15-30km wide with its width increasing from west to east. (Note: this is opposite from the Bhabar plains).
- This is a zone of excessive dampness, thick forests, rich wild life and malarial climate.
- This zone is formed as the rivers which got submerged in Bhabar plains reemerge in this region.
- In most of the northen states, from Haryana to Bihar, the Tarai forests have been cleared and plains are used for agriculture now.
- The Tarai belt is known for the cultivation of Sugarcane, rice, wheat, maize, oil seeds, pulses and fodder.

Q.39) Which of the following statements regarding Meghalaya plateau are *NOT CORRECT*?

1. It is an extension of Himalayan range in North Eastern India.
2. It is separated from peninsular plateau by Garo – Rajmahal gap.
3. It is filled with fertile alluvial soil deposited by Brahmaputra.

Choose the correct answer using the code given below:

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

Q.39) Solution (b)

The peninsular plateau extends further east beyond the Rajmahal hills to from Meghalaya or the Shillong plateau.

Hence statement 1 is incorrect.
Garo-Rajmahal Gap separates the Meghalaya plateau from the main block.

Hence statement 2 is correct.
This gap was formed by down-faulting (normal fault: a block of earth slides downwards). It was later filled by sediments deposited by the Ganga and Brahmaputra.

Hence statement 3 is incorrect.

Q.40) Consider the following:

1. Himalayas
2. Peninsular Plateau
3. North Indian Plains

Arrange the following in chronological order of their formations.

a) 1-3-2
b) 2-3-1

c) 2-1-3
d) 3-2-1

Q.40) Solution (c)

The oldest landmass, (the Peninsula part), was a part of the Gondwana land. The Gondwana land included India, Australia, South Africa, South America and Antarctica as one single land mass.

The northward drift of Peninsular India resulted in the collision of the plate with the much larger Eurasian Plate. Due to this collision, the sedimentary rocks which were accumulated in the geosyncline known as the Tethys were folded to form the mountain system of western Asia and Himalayas.

The Himalayan uplift out of the Tethys Sea and subsidence of the northern flank of the peninsular plateau resulted in the formation of a large basin. In due course of time this depression, gradually got filled with deposition of sediments by the rivers flowing from the mountains in the north and the peninsular plateau in the south. A flat land of extensive alluvial deposits led to the formation of the northern plains of India.

Q.41) Consider the following statements

1. CO2 is transparent to incoming Solar radiation and opaque to outgoing terrestrial radiation.
2. CO2 is a primary Greenhouse gas.

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

Q.41) Solution (c)

CO2 is a meteorologically very important Gas. It is transparent to incoming Solar radiation and opaque to outgoing terrestrial radiation. It absorbs a part of terrestrial radiation and reflects back some part of it towards the Earth surface.

Hence statement 1 is correct.

It is largely responsible for the Greenhouse effect. It is also a is a primary Greenhouse gas. The volume of CO2 is rising over the decades because of burning of fossil fuel.

Hence statement 2 is correct.

Q.42) Consider the following statements

1. The Troposphere is also called "Changing sphere" as the air never remains static in this layer.
2. All the climate and weather changes occur in the Stratosphere.
3. The stratosphere is considered ideal for flying of aircraftas the air blows vertically here.

Which of the statements given above is/are correct?

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

Q.42) Solution (a)

The Air never remains static in Troposphere. That's why it is called "Changing sphere". Thickness of Troposphere is greatest at the Equator. Reason – The strong convectional currents transports the heat to greater heights near the Equator.

Hence statement 1 is correct.

All the climate and weather changes occur in Troposphere.

Hence statement 2 is incorrect.

Weather related incidents do not take place in Stratosphere. The air blows **horizontally** in Stratosphere. Therefore this layer is considered ideal for flying of aircraft.

Hence statement 3 is incorrect.

Q.43) Which of the following pairs is/are *NOTCORRECTLY* matched:

	Local wind	**Area**
1.	Chinook	The Appalachians
2.	Bora	West Africa
3.	Elephanta	South California
4.	Harmattan	The Alps and France

Select the answer using the code given below

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

Q.43) Solution (d)

Chinook is a hot and dry wind that blows in the Rockies Mountains.

Hence statement 1 is incorrect.

Bora is a cold and dry wind that blows from Hungary to North Italy.

Hence statement 2 is incorrect.

Elephanta is a moist wind that blows during Monsoons in the Malabar Coast.

Hence statement 3 is incorrect.

Harmattan is a hot, dry wind that blows in West Africa.

Hence statement 4 is incorrect.

Q.44) The main reason that the earth experiences highest temperatures in the subtropics in the northern hemisphere rather than at the equator is:

a) Subtropical areas tend to have less cloud cover than equatorial areas.

b) Subtropical areas have longer day hours in the summer than the equatorial.
c) Subtropical areas have an enhanced "greenhouse effect" compared to equatorial areas.
d) Subtropical areas are nearer to the oceanic areas than the equatorial locations.

Q.44) Solution (a)

The main reason that the earth experiences highest temperatures in the subtropics in the northern hemisphere rather than at the equator is that the Subtropical areas tend to have less cloud cover than equatorial areas.

The equator does not experience the highest temperatures on the Earth. Here, rising air generates daily thunderstorms that consume considerable amounts of heat energy, suppressing the air temperature by several degrees Celsius.

The greater cloud cover also helps to reduce the amount of sunlight. In fact, the hottest places on Earth lie in the subtropical climate zone of high pressure between latitudes 25 to 40°, where cloud cover is virtually non-existent and sunshine levels are very high throughout the year.

Q.45) Arrange the following permanent gases of the atmosphere in decreasing order of their percentage by volume in the atmosphere

1. Oxygen
2. Neon
3. Hydrogen
4. CO2

Which of the statements given above is/are correct?

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

Q.45) Solution (b)

Table 8.1 : Permanent Gases of the Atmosphere

Constituent	*Formula*	*Percentage by Volume*
Nitrogen	N_2	78.08
Oxygen	O_2	20.95
Argon	Ar	0.93
Carbon dioxide	CO_2	0.036
Neon	Ne	0.002
Helium	He	0.0005
Krypto	Kr	0.001
Xenon	Xe	0.00009
Hydrogen	H_2	0.00005

Q.46) Consider the following statements:

1. When an air parcel is pushed up, first wet adiabatic cooling take place and then dry adiabatic cooling take place.
2. During dry adiabatic cooling, air contains no water vapour.
3. The rate of dry adiabatic cooling is constant across the world, while rate of wet adiabatic cooling constantly changes.

Which of the above statements is/are *NOT CORRECT*?

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

Q.46) Solution (a)

When an air parcel is pushed up, first dry adiabatic cooling take place and then wet adiabatic cooling take place.

Hence statement 1 is incorrect.

During dry adiabatic cooling air contains water vapour and during wet adiabatic cooling air contains condensed water.

Hence statement 2 is incorrect.

Dry adiabatic cooling is a physical phenomenon which occurs due to change in density as the air parcel moves up. The rate is constant across the world. On contrary, during wet adiabatic cooling, water starts condensing. Due to condensation, latent heat is released which reduces the net rate of cooling. More the heat is released, slower the rate of cooling becomes. That's why it is not constant.

Hence statement 3 is correct.

Q.47) Arrange the following planetary winds in order of their occurrence from South pole to North:

1. South Westerlies

2. South East Trade Winds
3. North East trade Winds
4. North Westerlies

Choose the correct answer from the code given below:

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

Q.47) Solution (c)

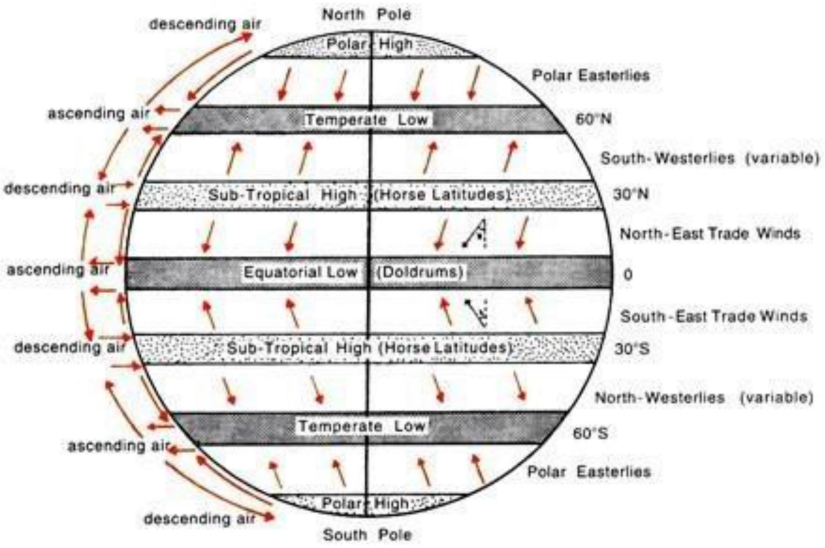


Fig. 115 The distribution of world pressure belts and planetary winds

Q.48) Consider the following statements:

1. Characteristics of Halo is associated with Cumulonimbus clouds
2. Severe thunderstorms and hail storms are associated with Cirrostratus Clouds.
3. Altocumulus clouds appear like waves in the sky and indicate fine weather.

Which of the above statements is/are *correct*?

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

Q.48) Solution (c)

Characteristics of Halo is associated with Cirrostratus Clouds
Hence statement 1 is incorrect.
Severe thunderstorms and hail storms are associated with Cumulonimbus clouds.
Hence statement 2 is incorrect.
Altocumulus clouds appear like waves in the sky and indicate fine weather.
Hence statement 3 is correct.

Q.49) Which of the following given ocean currents are the warm ocean currents:

1. Canary current
2. California current
3. Norwegian current
4. North Equatorial current
5. East Australian current

Choose the correct answer from the code given below:

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

Q.49) Solution (c)

- In general, currents in the western part of every continent are cold and currents coming from the polar region are generally cold.
- Those currents which flow from equatorial regions towards poles which have a higher surface temperature and are called warm current. They are usually observed on the east coast of the continents in the lower and middle latitudes of both hemispheres.

Hence Norwegian current, North Equatorial current, East Australian current are Warm current.

Q.50) Which of the following statements is/are correct with reference to the Convectional rainfall?

1. It occurs in the areas of intense heat and abundant moisture.
2. Solar radiation is the main source of heat to produce convectional currents in air.
3. This type of rainfall is much effective for crops.

Choose the correct answer from the code given below:

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

Q.50) Solution (a)

Convectional rainfall occurs in the areas of intense heat and abundant moisture.
Hence statement 1 is correct.
Solar radiation is the main source of heat to produce convectional currents in air.
Hence statement 2 is correct.
This type of rainfall is not much effective for crops as most of the water is drained off in the form of surface drainage.
Hence statement 3 is incorrect.

Q.51) The Tamil Nadu coast remains dry during the South-west Monsoon season. The reason

1. The Tamil Nadu coast is situated parallel to the Bay of Bengal branch of Southwest monsoon

2. It doesn't lie in the rain shadow region of the Arabian Sea branch of the South-west monsoon
3. Monsoon winds strike the coast and reroute due to the very high summits of the Eastern Ghats

Which of the statements given above is/are correct?

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

Q.51) Solution (a)
Tamil Nadu coast is situated parallel to the Bay of Bengal branch of Southwest monsoon. Because of this the monsoon winds do not strike it and instead pass over.
Hence statement 1 is correct.
Tamil Nadu coast lies in the rain shadow region of the Arabian Sea branch of the south-west monsoon. But the given statement says it doesn't lie in the rain shadow region of Arabian Sea branch. Since it is bereft of the moisture from both the branches it remains dry. It instead receives rainfall from the north-eastern monsoon that comes with a retreat.
Hence statement 2 is incorrect.
The Eastern Ghats have less elevation compared to the Western Ghats and they do not have very high summits.
Hence statement 3 is incorrect.

Q.52) The Winter Monsoons, that are also known as the North-East Monsoons blow from

a) Sea to the Land
b) Land to Sea
c) Upper air circulation
d) None

Q.52) Solution (b)
The North-East monsoon, commonly known as winter monsoon blows from the Land to sea, whereas south-west monsoon, known as summer monsoon blows from sea to land after crossing the Indian Ocean, the Arabian Sea, and the Bay of Bengal.
Hence option b is correct.

Q.53) Consider the following statements

1. High pressure systems usually bring wind and precipitation.
2. Low pressure systems are usually characterized by dry and settled weather.

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

Q.53) Solution (d)

A high pressure system is colder air moving from the upper layers of the atmosphere towards the earth's surface. The air is becomes more dense as it sinks, and any water is vaporized into the air mass. There is no water to form clouds and the air is stable, fair, and dry.

Hence statement 1 is incorrect.
Low pressure systems result in unsettled weather with precipitation or storms, while high pressure brings in settled dryer weather over longer periods. Low pressure systems tend to result in unsettled weather, and may present clouds, high winds, and precipitation. As the low pressure intensifies, storms or hurricanes can be formed.

Hence statement 2 is incorrect.

Q.54) Consider the following statements regarding Katabatic winds:

1. They are also called Gravity winds or Downslope winds
2. They occurs due to density differences in wind at different altitudes

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

Q.54) Solution (c)
These winds flow from high elevations of mountains, plateaus, and hills down their slopes to the valleys or planes below. A katabatic wind originates from radiational cooling of air atop a plateau, a mountain, glacier, or even a hill. Since the density of air is inversely proportional to temperature, the air will flow downwards, warming approximately adiabatically as it descends. The temperature of the air depends on the temperature in the source region and the amount of descent. They are also called Gravity winds or Downslope winds.
Hence both the statements are correct.

Q.55) Why does not the cyclones form at the Equator

a) The Coriolis force is zero at the Equator
b) The Coriolis force is maximum at the Equator
c) The wind blows parallel to the isobars at the Equator
d) None

Q.55) Solution (a)
The Coriolis force is directly proportional to the angle of latitude. Which means, the coriolis force is zero at the equator and maximum at the Poles. As the colriolis force is zero, at the equator the wind blows perpendicular to the isobars. The low pressure gets filled instead of getting intensified i.e., there is no spiraling of air due to zero Coriolis effect. The winds directly gets uplifted vertically to form thunderstorms.
Hence option a is correct.

Q.56) Consider the below statements with regard 'dew':

1. The ideal conditions for formation of dew are clear sky, calm air, high relative humidity, and cold and long nights.
2. For the formation of dew, it is necessary that the dew point is above the freezing point.

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

Q.56) Solution (c)

The ideal conditions for its formation are clear sky, calm air, high relative humidity, and cold and long nights.

Hence statement 1 is correct.

For the formation of dew, it is necessary that the dew point is above the freezing point.

Hence statement 2 is correct.

Q.57) Which of the following statement is *NOT CORRECT* regarding Chinook/Fohn winds?

a) They are strong, dry and warm winds
b) These winds are formed when ascending air becomes compressed with increased pressure
c) These winds develops on the leeward side of the mountains
d) The winds helps animal grazing by melting snow and fastens the ripening of grapes

Q.57) Solution (b)

Chinook/Fohn winds are strong, dry and warm winds which develop on the leeward side of the mountains.

Hence statement a is correct.

These winds are formed when descending air becomes compressed with increased pressure. **Hence statement b is incorrect.**

These winds are experienced in the valleys of the northern Alps, particularly in Switzerland in spring.

Hence statement c is correct.

The winds helps animal grazing by melting snow and fastens the ripening of grapes.

Hence statement d is correct.

Q.58) Select the appropriate climatic zone/type having the below given characteristics:

1. Precipitation level: 35-75cm
2. Warm, dry summer and cool, wet winter
3. Shifting of wind belts

Choose the correct answer from the code given below:

a) Laurentian type
b) Mediterranean climate
c) Steppe/Temperate grasslands
d) Coniferous forest Siberian climate

Q.58) Solution (b)

Mediterranean climate

- The basic cause of this type of climate is the shifting of the wind belts.
- Clear skies and high temperatures; hot, dry summers and cool, wet winters.
- Mean annual precipitation ranges from 35 - 90 cm.
- Climate is not extreme because of cooling from water bodies.

Q.59) Consider the following statements:

1. The centre of Tropical cyclone is characterized by extremely low pressure..
2. Normally Tropical cyclones move from east to west under the influence of trade winds and they mainly occur in summer.
3. Temperate Cyclones always travel from west to east and are produced predominantly in winter.

Which of the statements given above is/are correct?

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

Q.59) Solution (d)

The centre of Tropical cyclone is characterized by extremely low pressure.

Hence statement 1 is correct.

Normally Tropical cyclones move from east to west under the influence of trade winds and they mainly occur in summer.

Hence statement 2 is correct.

Temperate Cyclones always travel from west to east and more cyclones are produced in winter than in summer.

Hence statement 3 is correct.

Q.60) Which of the following are the favourite breeding grounds for temperate cyclone?

1. South-east Caribbean region
2. Mexican Gulf
3. Mediterranean basin extending up to Russia
4. North-west Australia

Choose the correct answer from the code given below:

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

Q.60) Solution (b)

The favourite breeding grounds of temperate cyclones are:

- Over USA and Canada, extending over Sierra Nevada, Colorado, Eastern Canadian Rockies and the Great Lakes region.

- Mexican Gulf
- The belt extending from Iceland to Barents Sea and continuing over Russia and Siberia.
- The Antarctic frontal zone.

Q.61) Factors that affect the salinity of the ocean waters are

a) Wind and Ocean Currents only
b) Wind, Ocean Currents and Fresh Water flow only
c) Ocean Currents and Fresh Water flow only
d) Wind, Ocean Currents, Fresh Water flow and Evaporation and Precipitation

Q.61) Solution (d)

Factors affecting the salinity of sea/ocean waters are

Evaporation and Precipitation - The salinity of water in the surface layer of oceans depend mainly on evaporation and precipitation.

Fresh Water flow - Surface salinity is greatly influenced in coastal regions by the fresh water flow from Rivers, and in Polar Regions by the processes of freezing and thawing of ice.

Wind - Influences salinity of an area by transferring water to other areas.

The ocean currents - contribute to the salinity variations.

Salinity, Temperature and density of water are interrelated. Hence, any change in the Temperature or density influences the salinity of an area.

Hence option d is correct.

Q.62) Which of the following factors influence the ocean currents

1. Rotation of the Earth
2. Revolution of the Earth
3. Air Pressure and Wind
4. Density of the Ocean Water

Which of the statements given above is/are correct?

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

Q.62) Solution (d)

Rotation of the Earth results in Coriolis force. This force deflects the Ocean Currents.

Hence statement 1 is correct

Wind blowing on the surface of the ocean pushes the water to move. Friction between the wind and the surface water affects the movement of the water body in its course. Winds are responsible for both magnitude and direction of the ocean currents.

Hence statement 3 is correct

Differences in water density affect vertical mobility of ocean currents

Hence statement 4 is correct

Q.63) Consider the following statements

1. The shallowest part of the ocean is continental slope which shows an average slope gradient of 1° or even less
2. Deep sea plains are steeply sloping areas of the ocean basins.

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

Q.63) Solution (d)

The continental shelf is the extended margin of each continent occupied by relatively shallow seas and gulfs. It is the shallowest part of the ocean showing an average gradient of 1° or even less.

Hence statement 1 is incorrect.

Deep sea plains are gently sloping areas of the ocean basins. These are the flattest and smoothest regions of the world because of terrigenous [denoting marine sediment eroded from the Land] and shallow water sediments that buries the irregular topography.
Hence statement 2 is incorrect.

Q.64) Consider the following statements

1. The North Sea, in spite of its location in higher latitudes, records higher salinity due to more saline water brought by the North Atlantic Drift.
2. Baltic Sea, records low salinity due to influx of River waters in large quantity.
3. The Mediterranean Sea, records higher salinity due to high evaporation.
4. In Bay of Bengal, the low salinity trend is observed due to influx of River water by the River Ganga.

Which of the statements given above is/are correct?

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

Q.64) Solution (d)

The salinity for normal Open Ocean ranges between 33o/oo and 37 o/oo. In the Land locked Red Sea, it is as high as 41o/oo, while in the estuaries and the Arctic, the salinity fluctuates from 0 - 35 o/oo, seasonally. In hot and dry regions, where evaporation is high, the salinity sometimes reaches to 70 o/oo.

The North Sea - in spite of its location in higher latitudes, records higher salinity due to more saline water brought by the North Atlantic Drift.

Baltic Sea - records low salinity due to influx of River waters in large quantity.

The Mediterranean Sea -records higher salinity due to high evaporation.

Black Sea - Salinity is very low in Black Sea due to enormous fresh water influx by Rivers.

Indian Ocean - The average salinity of the Indian Ocean is 35 o/oo.

Bay of Bengal - The low salinity trend is observed in the Bay of Bengal due to influx of River water by the River Ganga.

Arabian Sea - On the contrary, the Arabian Sea shows higher salinity due to high evaporation and low influx of fresh water.

Hence all the statements are correct.

Q.65) The size and shape of the Waves reveal the origin the wave. Consider the following correlations in this regard:

1. Slow and steady waves originate from faraway places, possibly from another hemisphere.
2. Steep waves are fairly young ones and are probably formed by local wind.

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

Q.65) Solution (c)
Slow and steady waves originate from faraway places, possibly from another hemisphere. The maximum wave height is determined by the strength of the wind, i.e. how long it blows and the area over which it blows in a single direction.
Hence statement 1 is correct.

The largest waves are found in the open oceans. Waves continue to grow larger as they move and absorb energy from the wind. Most of the waves are caused by the wind driving against water. Waves may travel thousands of km before rolling ashore, breaking and dissolving as surf. A wave's size and shape reveal its origin. Steep waves are fairly young ones and are probably formed by local wind.
Hence statement 2 is correct.

Q.66) Consider the following statements with regard to Neap Tide:

1. It occurs when the Earth, Sun and Moon are aligned.
2. Results in greatest variation between high and low tides.
3. Neap tides occur during the first and third quarter moon, when the moon appears "half full."

Which of the statements given above is/are correct?

a) 1 only

b) 3 only

c) 1 and 2 only

d) 1, 2 and 3

Q.66) Solution (b)

It occurs when the Moon is 90 degree out of alignment with the Sun and Earth

Hence Statement 1 is incorrect

Results in smallest variation between high and low tides

Hence Statement 2 is incorrect

Neap tides occur during the first and third quarter moon, when the moon appears "half full."

Hence Statement 3 is correct

Q.67) Which of the following landforms are formed by the erosional action of Glaciers?

1. Fjords
2. Areti
3. Cirque
4. V – shape Valley
5. Moraines

Select the code from following:

a) 1, 2 and 3 only

b) 2, 3 and 4 only

c) 2, 3 and 5 only

d) All of the above

Q.67) Solution (a)

Q.68) Consider the following statements.

1. Wular Lake (Jammu & Kashmir) is the largest freshwater lake in India, formed by tectonic activity.
2. Lonar in Maharashtra is a crater lake formed by meteorite impact.
3. Lake Chilka is an erosional lake.

Which of the above statements is/are correct?

a) 3 only

b) 1 and 2 only

c) 1 and 3 only

d) 1, 2 and 3

Q.68) Solution (b)

Wular Lake (Jammu & Kashmir) is the largest freshwater lake in India, formed by tectonic activity.

Hence Statement 1 is correct

Lonar in Maharashtra is a crater lake formed by meteorite impact.

Hence Statement 2 is correct

Lake Chilka is formed due to Marine deposits.

Hence Statement 3 is incorrect

Q.69) Consider the following statements.

1. The lakes formed along rift valleys are deep, narrow and very long.
2. Water collects in troughs (Valley in the rift) and their floors are often below sea level.

Which of the above statements is/are *NOT CORRECT?*

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Q.69) Solution (d)

The lakes formed along rift valleys are deep, narrow and very long.

Hence Statement 1 is correct

Water collects in troughs (Valley in the rift) and their floors are often below sea level

Hence Statement 2 is correct

Q.70) Which of the below given are conditions that favour the formation of deltas?

1. Shallow sea, adjoining the delta
2. Strong current at the river mouth which leads to formation of tides
3. Active vertical and lateral erosion in the lower course of the river to supply large amount of sediments

Choose the correct answer using the code below:

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

Q.70) Solution (a)

Shallow sea, adjoining the delta

Hence Statement 1 is correct

No strong current at the river mouth which may wash away the sediments.

Hence Statement 2 is incorrect

Active vertical and lateral erosion in the upper course of the river to supply large amount of sediments

Hence Statement 3 is incorrect

Q.71) Block Soils are Black in color and also known as Regur Soils. Consider the following statements regarding black soils

1. As these soils are best for Cotton Cultivation, they are also known as Black Cotton Soil
2. They are well-known for their capacity to hold moisture
3. They are rich in soil nutrients, such as calcium carbonate, magnesium, potash and lime
4. These soils are sticky when wet and difficult to work on unless tilled immediately after the first shower or during the pre-monsoon period

Which of the statements given above is/are correct?

a) 1 and 2 only

b) 1 and 3 only

c) 1, 2 and 3 only

d) 1, 2, 3 and 4 only

Q.71) Solution (d)

Block Soils

These Soils are Black in color and also known as Regur Soils. As these soils are best for Cotton Cultivation, it is also known as Black Cotton Soil.

Hence statement 1 is correct

This type of soil is typical of the Deccan trap (Basalt) region spread over northwest Deccan plateau and is made up of lava flows. They are made up of extremely clayey material. They are well-known for their capacity to hold moisture.

Hence statement 2 is correct

Also they are rich in soil nutrients, such as calcium carbonate, magnesium, potash and lime. These soils are generally poor in phosphoric contents.

Hence statement 3 is correct

They develop deep cracks during hot weather, which helps in the proper aeration of the soil. These soils are sticky when wet and difficult to work on unless tilled immediately after the first shower or during the pre-monsoon period.

Hence statement 4 is correct

Q.72) Consider the following statements regarding Alluvial Soils

1. In the coastal regions, the Alluvial soils are formed due to the wave action
2. They are immature and have weak profiles due to their recent origin.
3. The proportion of Potash, phosphoric acid and alkaline are adequate.

Which of the statements given above is/are correct?

a) 1 and 2 only

b) 1 and 3 only

c) 1, 2 and 3

d) 2 and 3 only

Q.72) Solution (c)

Alluvial Soils

They are mainly formed due to the silt brought by the Rivers; The Ganga, The Brahmaputra and the Indus. In coastal regions, the alluvial soils are formed due to the wave action.

Hence statement 1 is correct

They are immature and have weak profiles due to their recent origin. Most of the soil is Sandy and clayey soils are not uncommon. These soils are constantly replenished by the recurrent floods.

Hence statement 2 is correct

The proportion of nitrogen is generally low. And the proportion of Potash, phosphoric acid and alkaline are adequate.

Hence statement 3 is correct

Q.73) Consider the following statements

1. Mangroves occur worldwide in the tropics and subtropics, mainly between latitudes 25° N and 25° S
2. The area of mangroves has greater species diversity as it is the junction of terrestrial and marine ecosystems.

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

Q.73) Solution (c)

Mangroves have a complex salt filtration system and complex root system to cope with salt water immersion and wave action. Mangroves occur worldwide in the tropics and

subtropics, mainly between latitudes 25° N and 25° S. They require high solar radiation to filter saline water through their roots. Hence, mangroves are confined to only tropical and sub-tropical coastal waters.

Hence statement 1 is correct.

Ecologically, they provide habitat for a diverse array of terrestrial and marine organisms. The area of mangroves has greater species diversity as it is the junction of terrestrial and marine ecosystems. They have very high salt tolerance and so some species which require this ambience also thrive upon mangroves.

Hence statement 2 is correct.

Q.74) Consider the following statements regarding Khadar and Bhangar soils

1. Both the Khadar and Bhangar soils contain calcareous concretions (Kankars)
2. The Bhangar is the older alluvium and the Khadar is composed of newer alluvium

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

Q.74) Solution (c)

The alluvial soils vary in nature from sandy loam to clay. They are generally rich in potash but poor in phosphorous.

In the Upper and Middle Ganga plain, two different types of alluvial soils have developed, viz. Khadar and Bhangar. Khadar is the new alluvium and is deposited by floods annually, which enriches the soil by depositing fine silts. Bhangar represents a system of older alluvium, deposited away from the flood plains.

Hence statement 2 is correct.

Both the Khadar and Bhangar soils contain calcareous concretions (Kankars). These soils are more loamy and clayey in the lower and middle Ganga plain and the Brahamaputra valley. The sand content decreases from the west to east.

Hence statement 1 is correct.

Q.75) Which of the following methods helps in Soil Conservation

1. Contour farming
2. Crop rotation
3. Mulching

Which of the statements given above is/are correct?

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

Q.75) Solution (c)

Contour farming

The fields are prepared with alternate furrows and ridges to reduce water flow. Ridges at the same level are known as contour. On slopes, however, this type of farming is coupled with terracing.

Hence statement 1 is correct.

Crop rotation

It decreases soil loss and preserves the productivity of land.

Hence statement 2 is correct.

Mulching

It is effective against wind as well as waster erosion. Some such plants as maize stalks, cotton stalks etc.., are used as a 'mulch' (a protective layer formed by the stubble). Mulches reduce soil moisture evaporation and increase amount of soil moisture by addition of organic matter to soil.

Hence statement 3 is correct

Q.76) Consider the following statements:

1. Terai is swampy lowland with silty soils.
2. The terai soils are rich in nitrogen and organic matter but are deficient in phosphate.
3. These soils are generally covered by tall grasses and forests but are suitable for a number of crops such as wheat, rice, sugarcane, jute.

Which of the statements given above is/are correct?

a) 1 only

b) 3 only

c) 1 and 2 only

d) 1, 2 and 3

Q.76) Solution (d)

Terai is swampy lowland with silty soils.

Hence Statement 1 is correct

The terai soils are rich in nitrogen and organic matter but are deficient in phosphate.

Hence Statement 2 is correct

These soils are generally covered by tall grasses and forests but are suitable for a number of crops such as wheat, rice, sugarcane, jute.

Hence Statement 3 is correct

Q.77) Consider the following statements with respect to Aluminium:

1. Aluminium production starts with the raw material bauxite.
2. Three different raw materials are needed to make aluminium - aluminium oxide, electricity and carbon.
3. Aluminium is known for its ductile nature and can be recycled over and over again with 100 percent efficiency.

Which of the statements given above is/are correct?

a) 2 and 3 only

b) 1 and 3 only

c) 1 and 2 only

d) 1, 2 and 3

Q.77) Solution (d)

Aluminium production starts with the raw material bauxite, a clay like soil type found in a belt around the equator.

Hence Statement 1 is correct

Three different raw materials are needed to make aluminium, they are – aluminium oxide, electricity and carbon.

Hence Statement 2 is correct

Aluminium is known for its ductile nature and can be recycled over and over again with 100 percent efficiency.

Hence Statement 3 is correct

Q.78) Sikkim and Darjeeling Himalayas are best suitable for tea plantations due to –

1. Moderate slope
2. Thick soil cover with high organic content
3. Well distributed rainfall throughout the year
4. Harsh winters.

Choose the correct answer using the code given below:

a) 1, 2 and 3 only

b) 2 and 3 only

c) 2, 3 and 4 only

d) 1, 2, 3 and 4

Q.78) Solution (a)

Sikkim and Darjeeling Himalayas physical conditions such as moderate slope, thick soil cover with high organic content, well distributed rainfall throughout the year and mild winters makes it very much suitable for tea plantations.

Q.79) Which of the following soils found in India are poor in nitrogen, phosphorous and humus?

1. Red and Yellow Soil
2. Black Soil
3. Laterite Soil
4. Peaty Soil

Select the correct answer using the codes given below:

a) 1, 2 and 3 only

b) 2, 3 and 4 only

c) 1, 3 and 4 only

d) All the above

Q.79) Solution (a)

- The fine-grained red and yellow soils are normally fertile, whereas coarse-grained soils found in dry upland areas are poor in fertility. They are generally poor in nitrogen, phosphorous and humus.

- Chemically, the black soils are rich in lime, iron, magnesia and alumina. They also contain potash. But they lack in phosphorous, nitrogen and organic matter. The color of the soil ranges from deep black to grey.
- Humus content of the laterite soil is removed fast by bacteria that thrives well in high temperature. These soils are poor in organic matter, nitrogen, phosphate and calcium, while iron oxide and potash are in excess.
- Peaty soils are found in the areas of heavy rainfall and high humidity, where there is a good growth of vegetation. Thus, large quantity of dead organic matter accumulates in these areas, and this gives a rich humus and organic content to the soil.

Q.80) Consider the following about Laterite Soils and select the *INCORRECT* statement:

a) They are formed under conditions of high temperature and heavy rainfall with alternate wet and dry periods.

b) They are rich in bauxite or ferric oxides.

c) They are fertile and suitable for growing plantation crops like tea, coffee, rubber.

d) They are found on the summits of Western Ghats and Eastern Ghats.

Q.80) Solution (c)

- Laterite Soils are formed under conditions of high temperature and heavy rainfall with alternate wet and dry periods.
- Heavy rainfall promotes leaching (nutrients gets washed away by water) of soil whereby lime and silica are leached away and a soil rich in oxides of iron and aluminium compounds is left behind.
- They lack fertility due to intensive leaching.
- They are found on the summits of Western Ghats and Eastern Ghats.

Q.81) Consider the following statements regarding laterite soils

1. These soils develop in areas with high temperature and high rainfall
2. Humus content is low because most of the microorganisms, particularly the decomposers get destroyed due to the high Temperatures.

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

Q.81) Solution (c)

Laterite Soil

Develops in areas with high temperature and high rainfall. This is the result of intense leaching [Lime and silica will be leached away from the soil] due to heavy rain.

Hence statement 1 is correct

Humus content is low because most of the microorganisms, particularly the decomposers, like bacteria get destroyed due to the high Temperatures. If sufficient amounts of manures and fertilizers are provided, then they are suitable for cultivation. These soils are mainly found in Karnataka, Kerala, Tamil Nadu, Madhya Pradesh, and the hilly areas of Orissa and Assam.

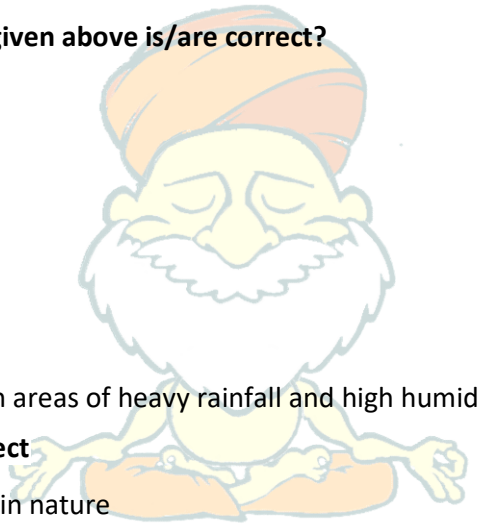
Hence statement 2 is correct

Q.82) Consider the following statements regarding Peaty Soils

1. They generally found in areas of heavy rainfall and high humidity
2. These soils can be alkaline in nature

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



Q.82) Solution (c)
Peaty / marshy soil

They are generally found in areas of heavy rainfall and high humidity.

Hence statement 1 is correct

These soils can be alkaline in nature

Hence statement 2 is correct

Q.83) Consider the following statements regarding Montreux Record

1. It is maintained as part of the Ramsar List.
2. Currently, two wetlands of India are in Montreux record - Keoladeo National Park (Rajasthan) and Loktak Lake (Manipur)
3. Chilika lake (Odisha) was placed in the record but was later removed from the record

Which of the statements given above is/are correct?

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

Q.83) Solution (c)

Montreux Record

Montreux Record under the Ramsar Convention is a register of wetland sites on the List of Wetlands of International Importance where changes in ecological character have occurred, are occurring, or are likely to occur as a result of technological developments, pollution or other human interference.

It is maintained as part of the Ramsar List.

Hence statement 1 is correct.

Currently, two wetlands of India are in Montreux record: Keoladeo National Park (Rajasthan) and Loktak Lake (Manipur).

Hence statement 2 is correct.

Chilika lake (Odisha) was placed in the record but was later removed from it.

Hence statement 3 is correct.

Q.84) What is/are the reason for the tendency for the Sugar mills to shift and concentrate in the Southern and western states in India, especially in Maharashtra, in recent years?

1. Peninsular India has tropical climate which suits Sugarcane crop, hence there is higher yield in South.
2. Sucrose Content is also high in Southern sugarcane
3. Crushing Season is also much longer i.e. 7 or 8 months as compared to 3 or 4 months in North

Which of the statements given above is/are correct?

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

Q.84) Solution (c)

Peninsular India has tropical climate which suits Sugarcane crop, hence there is higher yield in South.

Hence statement 1 is correct.

Sucrose Content is also high in Southern sugarcane

Hence statement 2 is correct.

Crushing Season is also much longer – 7/8 months as compared to 3/4 months in North. Cooperatives are also better managed in South than North. Most of the mills in South are new so they have modern machinery.

Hence statement 3 is correct

Q.85) Consider the following statements regarding coal

1. Anthracite Coal has approximately 90% carbon content and very little smoke and ash content.
2. Lignite is also known as brown coal.
3. Bituminous is most common in India and is also used in making coke.

Which of the statements given above is/are correct?

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

Q.85) Solution (c)

Anthracite is the best quality of coal which carries 80 to 95 per cent carbon content. It ignites slowly with a blue flame. It has the highest calorific value. It is found in small quantity in Jammu and Kashmir.

Hence statement 1 is correct.

Lignite is often brown in colour. It carries 40 to 55 per cent carbon content. It is an intermediate stage which happens during the alteration of woody matter into coal. It has high moisture content so it gives smoke when burnt. It is found in Rajasthan, Lakhimpur (Assam), and Tamil Nadu.

Hence statement 2 is correct.

Bituminous carries 60 to 80 per cent of carbon content and a low level of moisture content. It is used in making coke and has high calorific value. It is found in Jharkhand, West Bengal, Odisha, Chhattisgarh and Madhya Pradesh.

Hence statement 3 is correct.

Q.86) Consider the characteristics of the natural vegetation:

1. These kind of Forests found in areas with Moderate rainfall of 100 to 200 cm per annum
2. Mean annual temperature of about 27 degree C
3. Average relative humidity of 60 to 70 %
4. This type of forest is found in some parts of Odisha and West Bengal

Identify the type of Vegetation from the options given below:

a) Mediterranean Shrublands
b) Tropical wet evergreen Forests
c) Tropical dry evergreen forests
d) Tropical Moist deciduous Forests

Q.86) Solution (d)

Q.87) Consider the following statements about British type of climate.

1. The natural vegetation of this climatic type is deciduous forests that shed their leaves in the cold season, to protect themselves against winter snow & frost.
2. In northern America British type of climate is confined mainly to coastlands of British Columbia.

Which of the above statements is/are *NOT CORRECT*?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Q.87) Solution (d)

The natural vegetation of this climatic type is deciduous forests that shed their leaves in the cold season, to protect themselves against winter snow & frost.

Hence Statement 1 is correct

In northern America British type of climate is confined mainly to coastlands of British Columbia.

Hence Statement 2 is correct

Q.88) Match List I with List II and select the correct answer using the code given below:

List I (Plant)	**List II (Natural vegetation type)**
A. Walnut	1. Alpine
B. Birch	2. Himalayan moist
C. Shisham	3. Moist deciduous
D. Ebony	4. Tropical evergreen

Code:

A – B – C – D

a) 2 – 3 – 4 – 1

b) 2 – 1 – 3 – 4

c) 1 – 2 – 3 – 4

d) 1 – 3 – 2 – 4

Q.88) Solution (b)

Q.89) Natural vegetation in tropical rainforest is luxuriant, because of –

1. Seasonal change which facilitates nutrient absorption.
2. Hot and wet climate throughout the year.

3. Fertile soil.
4. Rapid nutrient cycling.

Choose the correct answer using the code given below:

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

Q.89) Solution (b)

- Soil in tropical rainforests is very poor; they are highly acidic and low in minerals and nutrients.
- The key to the luxuriant vegetation of these forests lies in the rapid nutrient cycling of the rainforest.

Q.90) Consider the following statements:

1. In India coal occurs in rock series of two main geological ages, namely Gondwana and in tertiary deposits.
2. The major resources of Gondwana coal are located in Damodar valley.
3. Carbon content is very low in Tertiary coal.

Which of the statements given above is/are correct?

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

Q.90) Solution (d)

In India coal occurs in rock series of two main geological ages, namely Gondwana and in tertiary deposits.

Hence Statement 1 is correct

The major resources of Gondwana coal are located in Damodar valley.

Hence Statement 2 is correct

Carbon content is very low in Tertiary coal.

Hence Statement 3 is correct

Q.91) Consider the following statements regarding forest and forest cover

1. Area under actual forest cover is different from area classified as forest

2. Forest is the area which the Government has identified and demarcated for forest growth
3. There may be an increase in Forest without any increase in the actual forest cover

Which of the statements given above is/are correct?

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

Q.91) Solution (a)

Forest and Forest cover

It is important to note that area under actual forest cover is different from area classified as forest.

Hence statement 1 is correct

Forest is the area which the Government has identified and demarcated for forest growth. The land revenue records are consistent with the Forest definition.

Hence statement 2 is correct

There may be an increase in Forest without any increase in the actual forest cover.

Hence statement 3 is correct

Q.92) Consider the following statements regarding Gross Cropped Area (GCA) and Net Sown Area

1. Gross Cropped Area (GCA) is the total area sown once as well as more than once in a particular year
2. Net Sown Area is the total area sown once as well as more than once in a particular year
3. Gross Cropped Area (GCA) is the area sown with crops but is counted only once
4. Net Sown Area is the area sown with crops but is counted only once

Which of the statements given above is/are correct?

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

Q.92) Solution (d)

Gross Cropped Area (GCA) is the total area sown once as well as more than once in a particular year. When the crop is sown on a piece of land for twice, the area is counted twice in GCA.

Hence statement 1 is correct

Net Sown Area is the area sown with crops but is counted only once.

This implies that if we deduct net sown area from gross cropped area; what we find is those areas where crops are cultivated for more than once in a particular agriculture year.

Hence statement 4 is correct

Q.93) Consider the following statements

1. In mixed farming the land is used for growing food and fodder crops and rearing livestock
2. Wheat requires moderate temperature and rainfall during growing season and bright sunshine at the time of harvest
3. Cotton requires high temperature, light rainfall, three hundred and sixty five days frost-free days and bright sunshine for its growth
4. Coffee needs well-drained loamy soils and gentle slopes

Which of the statements given above is/are correct?

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

Q.93) Solution (a)

In mixed farming the land is used for growing food and fodder crops and rearing livestock. It is practiced in Europe, eastern USA, Argentina, southeast Australia, New Zealand and South Africa.

Hence statement 1 is correct.

Wheat requires moderate temperature and rainfall during growing season and bright sunshine at the time of harvest. It thrives best in well drained loamy soil. Wheat is grown extensively in USA, Canada, Argentina, Russia, Ukraine, Australia and India. In India it is grown in winter.

Hence statement 2 is correct.

Cotton requires high temperature, light rainfall**, two hundred and ten frost-free days** and bright sunshine for its growth. It grows best on black and alluvial soils. China, USA, India, Pakistan, Brazil and Egypt are the leading producers of cotton. It is one of the main raw materials for the cotton textile industry.

Hence statement 3 is incorrect.

Tea is a beverage crop grown on plantations. This requires cool climate and well distributed high rainfall throughout the year for the growth of its tender leaves. It needs well-drained loamy soils and gentle slopes. Labour in large number is required to pick the leaves. Kenya, India, China, Sri Lanka produce the best quality tea in the world.

Hence statement 4 is incorrect.

Q.94) Consider the following statements regarding oil palm cultivation in India.

1. Majority of the oil palm is grown on irrigated land In India
2. This oil palm is considered as golden palm due to its high yielding capacity
3. Oil palm consumes much less water than paddy and sugarcane
4. Andhra Pradesh accounts for the bulk of oil palm fruit production in India

Which of the statements given above is/are correct?

a) 1 and 2 only
b) 1, 2 and 3 only
c) 1, 3 and 4 only

d) 1, 2, 3 and 4

Q.94) Solution (d)

While Malaysia and Indonesia, which dominate the world's oil palm production, grow the crop in rain-fed conditions, India grows it on irrigated land. Majority of the oil palm is grown on irrigated land In India. This disadvantage sees India having to settle for far lesser yields.

Hence statement 1 is correct.

Oil palm tree produces edible palm-oil as well as palm kernel-oil. This oil palm is considered as golden palm due to its high yielding capacity.

Hence statement 2 is correct.

Oil palm doesn't require much water. It consumes much less water than paddy and sugarcane.

Hence statement 3 is correct

Andhra Pradesh accounts for the bulk of oil palm fruit production in India. Of the two lakh hectares under oil palm cultivation in the country, Andhra Pradesh accounts for 1.5 lakh acres.

Hence statement 4 is correct

Q.95) Consider the following statements regarding Coffee Cultivation in India

1. Its cultivation is mainly confined to Tamil Nadu, Karnataka and Kerala which form traditional coffee tracts
2. Coffee is a tropical plantation crop
3. Karnataka alone accounts for more than two-third of total production of coffee in the country

Which of the statements given above is/are correct?

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

Q.95) Solution (c)

Its cultivation is mainly confined to Karnataka (54%), Kerala (19%) and Tamil Nadu (8%) which form traditional coffee tracts.

Hence statement 1 is correct.

Coffee is a tropical plantation crop. Its seeds are roasted, ground and are used for preparing a beverage. There are three varieties of coffee i.e. arabica, robusta and liberica. India mostly grows superior quality coffee, arabica, which is in great demand in International market.

Hence statement 2 is correct.

Indian coffee, grown mostly in southern states under monsoon rainfall conditions, is also termed as "Indian monsooned coffee". New fields are also developed in NE states. Karnataka alone accounts for more than two-third of total production of coffee in the country. The two well-known species of coffee grown are the Arabica and Robusta.

Hence statement 3 is correct

Q.96) Consider the following statements about 'Plantation agriculture':

1. The plantation has an interface of agriculture and industry.
2. It is both capital intensive and labor intensive.
3. Tea, coffee, cocoa, rubber, cotton, sugarcane, bananas and pineapples are important plantation crops.

Which of the above statements is/are correct?

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

Q.96) Solution (d)

The plantation has an interface of agriculture and industry.

Hence Statement 1 is correct

It is both capital intensive and labor intensive.

Hence Statement 2 is correct

Tea, coffee, cocoa, rubber, cotton, sugarcane, bananas and pineapples are important plantation crops.

Hence Statement 3 is correct

Q.97) Consider the following statements about Seed Replacement Rate?

1. Seed Replacement Rate (SSR) is a measure of how much of the total cropped area was sown with farm saved seeds in comparison to certified seeds.
2. Seed Replacement Rate is directly proportional to productivity.
3. Seed Replacement Ratio denotes actual quality seed distributed to farmers

Which of the above statements is/are correct?

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

Q.97) Solution (c)

Seed Replacement Rate (SSR) or Seed Replacement Ratio is a measure of how much of the total cropped area was sown with certified seeds in comparison to farm saved seeds.

Hence Statement 1 is incorrect

Seed Replacement Rate is directly proportional to productivity.

Hence Statement 2 is correct

Seed Replacement Ratio denotes actual quality seed distributed to farmers

Hence Statement 3 is correct

Q.98) What are the benefits of mixed cropping?

1. Suppression of weeds and insect pests.
2. Resistance of climate extremes.
3. Suppression of plant diseases.
4. Increase in overall productivity.

Choose the correct answer using the code given below:

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

Q.98) Solution (d)

- Benefits of mixed cropping include the balance of input and outgo of soil nutrients, the suppression of weeds and insect pests, the resistance of climate extremes (wet, dry, hot, cold), the suppression of plant diseases, the increase in overall productivity, and the management of scarce resources (land) to the fullest degree.

Q.99) Consider the following statements:

1. Cropping intensity refers to raising of a number of crops during one agriculture year by expanding the net area under cultivation.
2. Crop combination refers to the quantum or diversity of crops entering a region in a given period.

Which of the above statements is/are *NOT CORRECT*?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Q.99) Solution (a)

Cropping intensity refers to the raising of a number of crops from the same field during one agriculture year. This also implies higher productivity per unit of arable land during one agricultural year.

Hence Statement 1 is incorrect

Crop combination refers to the quantum or diversity of crops entering a region in a given period.

Hence Statement 2 is correct

Q.100) Consider the following statements

1. Gross Command Area (GCA) is defined as total area that can be irrigated by a canal system on the perception that unlimited quantity of water is available.
2. Intensity of irrigation is defined as the percentage of the irrigation proposed to be irrigated annually.

Which of the above statements is/are *NOT CORRECT*?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Q.100) Solution (d)

Gross command area (GCA) is defined as total area that can be irrigated by a canal system on the perception that unlimited quantity of water is available.

Hence Statement 1 is correct

Intensity of irrigation is defined as the percentage of the irrigation proposed to be irrigated annually.

Hence Statement 2 is correct

Q.101) Consider the following statements

1. The infant mortality rate is the number of deaths of babies before the age of one year per 10000 live births.
2. The maternal mortality rate is the annual number of maternal deaths per 100000 live births.
3. The infant mortality rate is the number of deaths of babies before the age of one year per 1000 live births.
4. The maternal mortality rate is the number of women who die in childbirth per 10000 live births.

Which of the statements given above is/are correct?

a) 1 and 2

b) 2 and 3 only

c) 3 and 4 only

d) 1 and 4 only

Q.101) Solution (b)

The infant mortality rate is the number of deaths of babies before the age of one year per 1000 live births.

Hence statement 1 is incorrect and statement 3 is correct

The maternal mortality rate is the annual number of maternal deaths per 100000 live births

Hence statement 2 is correct and statement 4 is incorrect

High rates of infant and maternal mortality are an unambiguous indicator of backwardness and poverty; development is accompanied by sharp falls in these rates as medical facilities and levels of education, awareness and prosperity increase.

Q.102) Consider the following statements regarding PVTGs

1. 75 tribal groups have been categorized by Ministry of Tribal Affairs as Particularly Vulnerable Tribal Groups (PVTG)s.

2. In 1973, the Dhebar Commission created Primitive Tribal Groups (PTGs) as a separate category and in 2006, the Government of India renamed the PTGs as Particularly Vulnerable Tribal Groups (PVTGs).
3. The Ministry of Tribal Affairs implements the Scheme of "Development of Particularly Vulnerable Tribal Groups (PVTGs)" exclusively for them.

Which of the statements given above is/are correct?

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

Q.102) Solution (c)

75 tribal groups have been categorized by **Ministry of Home Affairs** as Particularly Vulnerable Tribal Groups (PVTG)s.

Hence statement 1 is incorrect

In 1973, the Dhebar Commission created Primitive Tribal Groups (PTGs) as a separate category, who are less developed among the tribal groups. In 2006, the Government of India renamed the PTGs as Particularly Vulnerable Tribal Groups (PVTGs).

PVTGs have some basic characteristics -they are mostly homogenous, with a small population, relatively physically isolated, social institutes cast in a simple mould, absence of written language, relatively simple technology and a slower rate of change etc.

Hence statement 2 is correct

The Ministry of Tribal Affairs implements the Scheme of "Development of Particularly Vulnerable Tribal Groups (PVTGs)" exclusively for them . Under the scheme, Conservation-cum-Development (CCD)/Annual Plans are to be prepared by each State/UT for their PVTGs based on their need assessment, which are then appraised and approved by the Project Appraisal Committee of the Ministry.

Hence statement 3 is correct

Q.103) Consider the following statements

1. The responsibility of conducting the decennial Census rests with the Office of the Registrar General and Census Commissioner, India.

2. Office of the Registrar General and Census Commissioner, India is under Ministry of Health and Family Welfare, Government of India.

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

Q.103) Solution (a)

The responsibility of conducting the decennial Census rests with the Office of the Registrar General and Census Commissioner, India.

Hence statement 1 is correct.

Office of the Registrar General and Census Commissioner, India is under Ministry of Home Affairs, Government of India.

Hence statement 2 is incorrect.

Q.104) Consider the following statements regarding Human Development Index (HDI)

1. It is published by World Bank
2. HDI emphasizes on inequalities, poverty, human security and empowerment
3. The four dimensions of HDI includes a long and healthy life, Knowledge, Decent standard of Living and Political Empowerment

Which of the statements given above is/are NOT CORRECT?

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

Q.104) Solution (b)

The Human Development Report (HDR) is published by the Human Development Report Office of the United Nations Development Programme (UNDP).

Hence statement 1 is incorrect.

The HDI simplifies and captures only part of what human development entails. It does not reflect on inequalities, poverty, human security, empowerment, etc.

Hence statement 2 is incorrect.

The Human Development Index (HDI) is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions.

Hence statement 3 is incorrect

Q.105) Consider the following statements

1. West Bengal is the state with highest population density in India as per 2011 census
2. Arunachal Pradesh is the state with lowest population density in India according to 2011 census
3. The rate of increase in population density of India has exhibited sharp decline during 2001-2011 as compared to 1991-2001

Which of the statements given above is/are correct?

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

Q.105) Solution (d)

Bihar is the state with highest population density in India as per 2011 census. West Bengal is the 2nd highest densely populated state in India for the same census.

Hence statement 1 is incorrect.

Arunachal Pradesh is the state with lowest population density in India according to 2011 census

Hence statement 2 is correct.

The rate of increase in population density of India has exhibited sharp decline during 2001-2011 as compared to 1991-2001

Hence statement 3 is correct

Q.106) Consider the following statements about Apatani tribe.

1. They are one of the major ethnic groups of North Western Himalayas.
2. The community has evolved a unique skill of rice-fish cultivation where along with paddy; fish is also reared on the fields.

Which of the above statements is/are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Q.106) Solution (b)

They are one of the major ethnic groups of eastern Himalayas.

Hence Statement 1 is incorrect

The community has evolved a unique skill of rice-fish cultivation where along with paddy; fish is also reared on the fields.

Hence Statement 2 is correct

The tribe is known for their colorful culture with various festivals, intricate handloom designs, skills in cane and bamboo crafts, and vibrant traditional village councils called bulyañ.

Q.107) Which of the following statements is/are *NOT CORRECT* regarding Compact settlements in India?

1. If the number of villages equals the number of hamlets in an area unit, the settlement is designated as compact.
2. Compact settlements developed by communities to protect themselves from attack of wild animals and other communities.

Choose the correct answer using the code given below:

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Q.107) Solution (d)

If the number of villages equals the number of hamlets in an area unit, the settlement is designated as compact.

Hence Statement 1 is correct

Compact settlements developed by communities to protect themselves from attack of wild animals and other communities.

Hence Statement 2 is correct

Q.108) Consider the following statements

1. In summer solstice (21st June) the northern hemisphere will have the longest day and shortest night.
2. In winter solstice (22nd December) the southern hemisphere will have the longest night and shortest day.

Which of the above statements is/are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Q.108) Solution (a)

The sun is vertically overhead at the Tropic of Cancer on about 21st June. This is known as June or Summer solstice, when northern hemisphere will have longest day and shortest nights.

Hence Statement 1 is correct

The sun is vertically overhead at the Tropic of Capricorn on about 22nd December. This is known as winter solstice, when southern hemisphere will have longest day and shortest nights.

Hence Statement 2 is incorrect

Q.109) The Tank irrigation is practised mainly in the peninsular region due to which of the following reasons?

1. The undulating relief and hard rocks make it difficult to dig canals and wells in peninsular region.
2. There is little percolation of rainwater due to hard rock structure and ground water is not available in large quantity.
3. The scattered nature of population and agricultural fields also favours tank irrigation there.

Which of the above statements is/are correct?

a) 1 and 3 only

b) 2 and 3 only

c) 1 and 2 only

d) 1, 2 and 3

Q.109) Solution (d)

The undulating relief and hard rocks make it difficult to dig canals and wells in peninsular region.

Hence Statement 1 is correct

There is little percolation of rainwater due to hard rock structure and ground water is not available in large quantity.

Hence Statement 2 is correct

The scattered nature of population and agricultural fields also favours tank irrigation.

Hence Statement 3 is correct

Q.110) With reference to Jet Streams, consider the following statements:

1. Jet streams are long meandering waves moving at the upper atmosphere.
2. The jet streams on Earth typically run from west to east.
3. Temperature influences the velocity of the jet stream.

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

Q.110) Solution (d)

Jet streams are long meandering waves moving at the upper atmosphere, strong at 30 degree to 60 degree latitude.

Hence Statement 1 is correct

The jet streams on Earth typically run from west to east.

Hence Statement 2 is correct

Temperature influences the velocity of the jet stream.

Hence Statement 3 is correct

Q.111) What does the term Olericulture refers to

a) It can be defined as a branch of horticulture, which deals with the scientific study of vegetable crops
b) It can be defined as a branch of horticulture, which deals with the scientific study of flowering and ornamental crops
c) It can be defined as a branch of horticulture, which deals with the scientific study of fruit
d) None of the above

Q.111) Solution (a)

The term Olericulture is derived from Latin words olerus meaning 'vegetables' and cultura meaning 'cultivation'. It can be defined as a branch of horticulture, which deals with the scientific study of vegetable crops

Hence option a is correct

Pomology

The term is derived from Latin words poma and logus. Poma means 'fruit' and logus means 'study, knowledge or discourse'. It can be defined as a branch of horticulture, which deals with the scientific study of fruit crops.

Floriculture

The term floriculture is derived from Latin words florus and cultura. Florus means 'flower' and cultura means 'cultivation'. It can be defined as a branch of horticulture, which deals with the scientific study of flowering and ornamental crops.

Q.112) Consider the following statements regarding Golden Rice

1. Golden rice is the collective name of rice varieties that are genetically modified to counter vitamin A deficiency in developing countries.
2. To create golden rice, scientists had modified rice plants with beta-carotene genes from maize. Hence rice plants started to produce the rich orange-colored pigment.

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

Q.112) Solution (c)

Golden rice is the collective name of rice varieties that are genetically modified to counter vitamin A deficiency in developing countries.

Hence statement 1 is correct

To create golden rice, scientists modified rice plants with beta-carotene genes from maize. By doing this, rice plants started to produce the rich orange-colored pigment.

Hence statement 2 is correct

Q.113) Consider the following statements regarding International Rice Research Institute (IRRI)

1. It is the world's premier research organization dedicated to reducing poverty and hunger through rice science, improving the health and welfare of rice farmers
2. IRRI is an independent, for-profit, research and educational institute.

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

Q.113) Solution (a)
The International Rice Research Institute (IRRI) is the world's premier research organization dedicated to reducing poverty and hunger through rice science; improving the health and welfare of rice farmers and consumers; and protecting the rice-growing environment for future generations.
Hence statement 1 is correct.

IRRI is an independent, nonprofit, research and educational institute, founded in 1960 by the Ford and Rockefeller foundations with support from the Philippine government.
Hence statement 2 is incorrect.

Q.114) Which of the following is true about Culturable Waste-Land

1. Any land which is left fallow (uncultivated) for more than five years is considered as Culturable Waste-Land
2. It can be brought under cultivation after improving it through reclamation practices
3. Any land which is left without cultivation for one or less than one agricultural year is considered as Culturable Waste-Land

Which of the statements given above is/are correct?

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

Q.114) Solution (a)
Culturable Waste-Land

Any land which is left fallow (uncultivated) for more than five years is included in this category.

It can be brought under cultivation after improving it through reclamation practices.

Hence statements 1 and 2 are correct.

Current Fallow
This is the land which is left without cultivation for one or less than one agricultural year. Fallowing is a cultural practice adopted for giving the land rest. The land recoups the lost fertility through natural processes.

Q.115) Which of the following pairs is/are correctly matched:

Shifting cultivation called	Practised in
1. Milpa	Mexico
2. Roca	Brazil
3. Ladang	Malaysia
4. Jhumming	The North-East India

Select the correct answer using the code given below

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

Q.115) Solution (d)

Shifting cultivation is known by different names in different parts of the world.

Shifting cultivation called	Practised in
1. Milpa	Mexico
2. Roca	Brazil
3. Ladang	Malaysia
4. Jhumming	The North-East India

Q.116) Crop rotation is done by growing different crops in the same field one after the other. Which of the following are benefits of crop rotation?

1. Maintains the soil fertility
2. Helps in pest control
3. Prevents soil depletion

Select the correct answer from the code given below:

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

Q.116) Solution (d)

- Crop rotation is one of the oldest and most effective cultural control strategies.
- It means the planned order of specific crops planted on the same field.
- It also means that the succeeding crop belongs to a different family than the previous one.
- The planned rotation may vary from 2 or 3 year or longer period.

Crop rotation:

1. Maintains the soil fertility
2. Helps in pest control
3. Prevents soil depletion

Q.117) Which of the following statements is/are correct regarding Organic Farming?

1. Organic farming refers to the use of traditional methods for farming without using artificial fertilizers and pesticides.
2. Organic farming produces much lower yield than conventional farming.
3. It helps in maintaining fertility of soil by encouraging soil biological activity.

Select the correct answer from the code given below:

a) 1 and 2 only

b) 1 only

c) 1 and 3 only

d) 1, 2 and 3

Q.117) Solution (c)

Organic farming refers to the use of traditional methods for farming without using artificial fertilizers and pesticides.

Hence Statement 1 is correct

There is no scientific basis to prove that yield in organic farming is less than conventional farming.

Hence Statement 2 is incorrect

It helps in maintaining fertility of soil by encouraging soil biological activity.

Hence Statement 3 is correct

Q.118) Consider the following statements with respect to the Millets:

1. Millets are short duration (3-4 months) warm weather grasses grown in those areas where the main crops like rice and wheat cannot be grown successfully.
2. Karnataka is the highest millet producing state in India.
3. Millets are cultivated in low-fertile land, mountainous, tribal and rain-fed areas.

Which of the statements given above is/are correct?

a) 1 only

b) 3 only

c) 1 and 3 only

d) 1, 2 and 3

Q.118) Solution (c)

Millets are short duration (3-4 months) warm weather grasses grown in those areas where the main crops like rice and wheat cannot be grown successfully.

Hence Statement 1 is correct

Rajasthan is the highest millet producing state in India.

Hence Statement 2 is incorrect

Millets are cultivated in low-fertile land, mountainous, tribal and rain-fed areas.

Hence Statement 3 is correct

Q.119) Consider the following statements with respect to the Wheat:

1. It can be grown in the temperate zone and the cold tracts of the far north, beyond even the 60 degree north altitude.
2. Soils with a clay loam or loam texture, good structure and moderate water holding capacity are ideal for wheat cultivation.
3. It can be cultivated from sea level as high as 3300 meters.

Which of the statements given above is/are correct?

a) 1 only

b) 3 only

c) 1 and 3 only

d) 1, 2 and 3

Q.119) Solution (d)

It can be grown in the temperate zone and the cold tracts of the far north, beyond even the 60 degree north altitude.

Hence Statement 1 is correct

Soils with a clay loam or loam texture, good structure and moderate water holding capacity are ideal for wheat cultivation.

Hence Statement 2 is correct

It can be cultivated from sea level as high as 3300 meters.

Hence Statement 3 is correct

Q.120) Consider the following statements with respect to the Wheat:

1. The parent material for most of the black soil is the volcanic rocks that were formed in the Deccan Plateau.
2. The black soil is highly retentive of moisture.
3. These soils are best suited for cotton crop, tobacco, castor, sunflower and millets.

Which of the statements given above is/are correct?

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

Q.120) Solution (d)

The parent material for most of the black soil is the volcanic rocks that were formed in the Deccan Plateau.

Hence Statement 1 is correct

The black soil is highly retentive of moisture.

Hence Statement 2 is correct

These soils are best suited for cotton crop, tobacco, castor, sunflower and millets.

Hence Statement 3 is correct

Q.121) Which of the following is true about the local wind Loo

a) It is a Hot, dry and oppressing winds blowing in the Northern plains from Punjab to Bihar with higher intensity between Delhi and Patna
b) It is a Cold, dry and oppressing winds blowing in the Northern plains from Punjab to Bihar with higher intensity between Delhi and Patna
c) It is a Hot, wet and oppressing winds blowing in the Northern plains from Punjab to Bihar with higher intensity between Delhi and Patna
d) It is a Cold, wet and oppressing winds blowing in the Northern plains from Punjab to Bihar with higher intensity between Delhi and Patna

Q.121) Solution (a)

Loo is a Hot, dry and oppressing winds blowing in the Northern plains from Punjab to Bihar with higher intensity between Delhi and Patna.

Hence option a is correct

Q.122) Consider the following statements regarding the relation between Indian subcontinent's climate and Western Cyclonic Disturbances

1. The western cyclonic disturbances enter the Indian subcontinent from the west and the northwest during the winter months
2. These Western Cyclonic Disturbances originate over the Mediterranean Sea
3. The western cyclonic disturbances enter the Indian subcontinent from the west and the northwest during the Summer months
4. These Western Cyclonic Disturbances brought into India by the westerly jet stream

Which of the statements given above is/are correct?

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

Q.122) Solution (d)
The western cyclonic disturbances which enter the Indian subcontinent from the west and the northwest during the winter months, originate over the Mediterranean Sea and are brought into India by the westerly jet stream. An increase in the prevailing night temperature generally indicates an advance in the arrival of these cyclones disturbances.
Hence statements 1, 2 and 4 are correct

Q.123) Consider the following statements regarding Inter Tropical Convergence Zone (ITCZ)

1. It is a low pressure zone located at the equator
2. The trade winds converge at ITCZ, and so, it is a zone where air tends to ascend
3. In July, the ITCZ is located around 20°N-25°N latitudes (over the Gangetic plain)

Which of the statements given above is/are correct?

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

Q.123) Solution (b)
The Inter Tropical Convergence Zone (ITCZ) is a low pressure zone located at the equator where trade winds converge, and so, it is a zone where air tends to ascend.

In July, the ITCZ is located around 20°N-25°N latitudes (over the Gangetic plain), sometimes called the monsoon trough.

This monsoon trough encourages the development of thermal low over north and northwest India.

Due to the shift of ITCZ, the trade winds of the southern hemisphere cross the equator between 40° and 60°E longitudes and start blowing from southwest to northeast due to the Coriolis force.

It becomes southwest monsoon. In winter, the ITCZ moves southward, and so the reversal of winds from northeast to south and southwest, takes place. They are called northeast monsoons.

Hence all the statements are correct.

Q.124) Consider the following statements regarding South-West Monsoons and their entry into Indian main Land

1. The southwest monsoon sets in over the Kerala coast by 1st May.
2. By mid-June, southwest monsoon engulfs the entire subcontinent

Which of the statements given above is/are correct?

a) 1 only
b) 2 only
c) Both 1 and 2
d) Neither 1 or 2

Q.124) Solution (d)
Entry of Monsoon into India

The southwest monsoon sets in over the Kerala coast by **1st June** and moves swiftly to reach Mumbai and Kolkata between 10th and 13th June.

Hence statement 1 is incorrect.

By mid July, southwest monsoon engulfs the entire subcontinent

Hence statement 2 is incorrect.

Q.125) Consider the following statements regarding Nor Westers

1. These are dreaded evening thunderstorms in Bengal and Assam
2. They are also called 'Kalbaisakhi'
3. These showers are useful for tea, jute and rice cultivation
4. In Assam, these storms are known as "Bardoli Chheerha"

Which of the statements given above is/are correct?

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

Q.125) Solution (d)
Nor Westers

These are dreaded evening thunderstorms in Bengal and Assam. Their notorious nature can be understood from the local nomenclature of 'Kalbaisakhi', a calamity of the month of Baisakh. These showers are useful for tea, jute and rice cultivation. In Assam, these storms are known as "Bardoli Chheerha".

Hence all the statements are correct

Q.126) Which type of Drainage Pattern the Ganga River system forms?

a) Trellis pattern

b) Dendritic pattern

c) Rectangular pattern

d) Radial pattern

Q.126) Solution (b)

- The Dendritic pattern develops where the river channel follows the slope of the terrain.
- The stream with its tributaries resembles the branches of a tree, thus the name Dendritic.
- The pattern is called dendritic on the ground that the network of tributaries of various orders and magnitudes of the trunk or master stream resembles the branches and roots and rootlets of a tree.
- **Dendritic pattern is one of the dominant patterns in the Himalayas**.

Q.127) With respect to River Regime, Consider the following statements:

1. It represents the pattern of flow of water in a river channel over a year.
2. The river regime of Peninsular Rivers witnesses greater fluctuations than Himalayan Rivers.

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

Q.127) Solution (c)

The pattern of flow of water in a river channel over a year is known as its regime.

Hence Statement 1 is correct

The river regime of Peninsular Rivers witnesses greater fluctuations than Himalayan Rivers.

Hence Statement 2 is correct

The north Indian rivers originating from the Himalayas are perennial as they are fed by glaciers through snow melt and also receive rainfall water during rainy season.

The rivers of South India do not originate from glaciers and their flow pattern witness's fluctuations. The flow increases considerably during monsoon rains. Thus, the regime of the rivers of South India is controlled by rainfall which also varies from one part of the Peninsular plateau to the other.

Q.128) The rivers originating from the Amarkantak range present a good example of

a) Dendritic Drainage pattern
b) Radial Drainage pattern
c) Trellis Drainage pattern
d) Centripetal Drainage pattern

Q.128) Solution (b)

When the rivers originate from a hill and flow in all directions, the drainage pattern is known as 'radial'. This can be seen in the Amarkantak range.

Hence Statement b is correct

Q.129) Consider the below statements with regard to River Chenab:

1. Chenab is the largest tributary of the Indus.
2. It is formed by two streams, the Chandra and the Bhaga.
3. It runs parallel to the Pir Panjal range.

Which of the statements given above is/are correct?

a) 2 only
b) 2 and 3 only
c) 1 and 3 only

d) 1, 2 and 3

Q.129) Solution (d)

Chenab is the largest tributary of the Indus.

Hence Statement 1 is correct

It is formed by two streams, the Chandra and the Bhaga.

Hence Statement 2 is correct

It runs parallel to the Pir Panjal range.

Hence Statement 3 is correct

Q.130) Arrange the following rivers according to their drainage basin in India from highest to lowest:

1. Indus
2. Godavari
3. Krishna
4. Brahmaputra

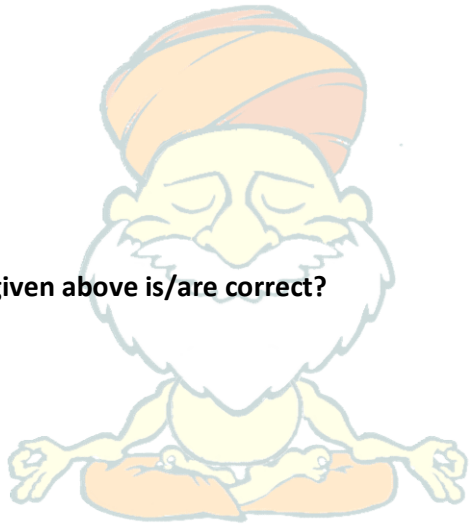
Which of the statements given above is/are correct?

a) 1-2-3-4

b) 4-2-3-1

c) 2-4-3-1

d) 4-3-2-1



Q.130) Solution (a)

Additional Information:

On the basis of the size of catchment area, the river basins of India have been classified into three categories.
I. Large river basins: River basins with a catchment area of more than 20,000 sq km are known as large river basins.
II. Medium River basins: River basins with a catchment area between 20,000 sq km to 2000 sq km are known as medium river basin.
III. Minor river basin: River basins with a catchment area of less than 2000 sq km are known as minor river basin.

Q.131) Consider the following statements which describe one of the prominent Himalayan River systems

1. It is the westernmost of the Himalayan rivers in India
2. It flows in the northwest direction between the Ladakh and Zaskar ranges
3. It originates from a glacier near Bokhar Chu in the Tibetan region in the Kailash Mountain range

Which of the following River fulfils the above statements?

a) The Sutlej River
b) The Jhelum River
c) The Indus River
d) None of the above

Q.131) Solution (c)
The Indus System

It is one of the largest river basins of the world, covering and has a total length of 2,880 km (in India 1,114 km). The Indus also known as the Sindhu, is the westernmost of the Himalayan rivers in India.

It originates from a glacier near Bokhar Chu (in the Tibetan region at an altitude of 4,164 m in the Kailash Mountain range. In Tibet, it is known as 'Singi Khamban; or Lion's mouth.

After flowing in the northwest direction between the Ladakh and Zaskar ranges, it passes through Ladakh and Baltistan. It cuts across the Ladakh range, forming a spectacular gorge near Gilgit in Jammu and Kashmir.

Hence option c is correct

Q.132) Consider the following statements regarding the Brahmaputra river

1. It has its origin in the Chemayungdung glacier of the Kailash range near the Mansarovar lake
2. The Rango Tsangpo is the major left bank tributary of this river in Tibet
3. It enters India west of Sadiya town in Arunachal Pradesh
4. its main Right bank tributaries are Dibang or Sikang and Lohit

Which of the statements given above is/are correct?

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

Q.132) Solution (d)
The Brahmaputra, one of the largest rivers of the world, has its origin in the Chemayungdung glacier of the Kailash range near the Mansarovar lake. From here, it traverses eastward longitudinally for a distance of nearly 1,200 km in a dry and flat region of southern Tibet, where it is known as the Tsangpo, which means 'the purifier.'

Hence statement 1 is correct.

The Rango Tsangpo is the major right bank tributary of this river in Tibet. It emerges as a turbulent and dynamic river after carving out a deep gorge in the Central Himalayas near Namcha Barwa (7,755 m).

Hence statement 2 is incorrect.

The river emerges from the foothills under the name of Siang or Dihang. It enters India west of Sadiya town in Arunachal Pradesh.

Hence statement 3 is correct.

Flowing southwest, it receives its main left bank tributaries, viz., Dibang or Sikang and Lohit; thereafter, it is known as the Brahmaputra.

Hence statement 4 is incorrect.

Q.133) Three major geological events in the distant past have shaped the present drainage systems of Peninsular India. These include

1. Subsidence of the western flank of the Peninsula leading to its submergence below the sea
2. Upheaval of the Himalayas when the northern flank of the Peninsular block was subjected to subsidence and the consequent trough faulting
3. Slight tilting of the Peninsular block from northwest to the southeastern direction

Which of the statements given above is/are correct?

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

Q.133) Solution (b)
The Evolution of Peninsular Drainage System

Three major geological events in the distant past have shaped the present drainage systems of Peninsular India

1. **Subsidence of the western flank of the Peninsula** - leading to its submergence below the sea during the early tertiary period. Generally, it has disturbed the symmetrical plan of the river on either side of the original watershed.
2. **Upheaval of the Himalayas** - when the northern flank of the Peninsular block was subjected to subsidence and the consequent trough faulting. The Narmada and The Tapi flow in trough faults and fill the original cracks with their detritus materials. Hence, there is a lack of alluvial and deltaic deposits in these rivers.
3. **Slight tilting of the Peninsular block from northwest to the southeastern direction** - gave orientation to the entire drainage system towards the Bay of Bengal during the same period.

Hence all the statements are correct.

Q.134) Consider the following statements

1. The River Kosi flows by the Jim Corbett National Park
2. The Kosi *River is known* as the "*Sorrow of Bihar*"
3. *The Narmada and the Tapi are the only long rivers, which flow west and make estuaries*

Which of the statements given above is/are correct?

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

Q.134) Solution (b)

The river Kosi flows by Jim Corbett National Park and serves as the significant water resources for the nearby area. The major portion of the Corbett wild is situated on the bank of River Kosi.

Hence statement 1 is correct.

The Kosi *River is known* as the "*Sorrow of Bihar*"

Hence statement 2 is correct.

There are numerous small streams flowing west of the Western Ghats. The Narmada and the Tapi are the only long rivers, which flow west and make estuaries.

Hence statement 3 is correct.

Q.135) Consider the following statements

1. It is the largest lagoon in India.
2. It was designated as the 1st “Ramsar Site” of India
3. The Nalabana island is part of it

Which of the following best describes the above features?

a) The Pulikat lake
b) The Chilika lake
c) The Kolleru lake
d) None of the above

Q.135) Solution (b)

Located in the state of Odisha, Chilika is the largest coastal lagoon in India and the second-largest lagoon in the world. The largest coastal lagoon in the world is the New Caledonian Barrier reef in New Caledonia. Chilika lake in winter becomes the largest winter ground for migratory birds in the Indian subcontinent. The lake hosts a number of endangered species of plants and animals.

On account of its rich bio-diversity and ecological significance, Chilika was designated as the 1st "Ramsar Site" of India.

The Nalabana island is part of the Chilika Lake, India's largest brackish water lagoon.

Hence option b is correct

Q.136) Which of the following is/are the implications of the shift of monsoon trough closer to Himalayas?

1. There are longer dry spells in the plains.
2. The situation of drought establishes in the plains.
3. Widespread rain occurs in the mountainous catchment areas of the Himalayan Rivers.

Select the correct answer using the codes given below.

a) 1 and 3 only

b) 1 and 2 only

c) 1 only

d) 1, 2 and 3

Q.136) Solution (a)

Whenever the axis shifts closer to the Himalayas there are longer dry spells in the plains.

Hence Statement 1 is correct

It will cause heavy rains in Plains. These heavy rains bring in their wake, devastating floods causing damage to life and property in the plains.

Hence Statement 2 is incorrect

Widespread rain occurs in the mountainous catchment areas of the Himalayan Rivers.

Hence Statement 3 is correct

Q.137) Which of the following statements is/are correct with respect to monsoons?

1. Southwest monsoon brings rain during summer whereas Northeast monsoon brings rain during winter.
2. During Southwest monsoon, Indian Subcontinent has high pressure and the direction of air movement is from Australia to Indian subcontinent.

3. Direction of Northeast monsoon is land to sea so it doesn't contains moisture and brings dryness and coldness after blowing through Bay of Bengal and brings rainfall only in Eastern part of Tamil Nadu.

Select the correct answer using the codes given below.

a) 1 only

b) 2 only

c) 2 and 3 only

d) 1 and 2 only

Q.137) Solution (a)

Southwest monsoon brings rain during summer whereas Northeast monsoon brings rain during winter.

Hence Statement 1 is correct

During Southwest monsoon, Indian Subcontinent has low pressure and the direction of air movement is from Australia (high) to Indian subcontinent (low).

Hence Statement 2 is incorrect

Direction of Northeast monsoon is land to sea so it doesn't contains moisture and brings dryness and coldness after blowing through Bay of Bengal and brings rainfall Andhra Pradesh, Puducherry and Tamil Nadu.

Hence Statement 3 is incorrect

Q.138) Consider the following statements.

1. Jet streams help in maintenance of latitudinal heat balance by mass exchange of air.
2. Jet streams can also cause a bumpy flight.

Which of the above statements is/are correct?

a) 1 only

b) 2 only

c) Both 1 and 2

d) Neither 1 nor 2

Q.138) Solution (c)

Jet streams help in maintenance of latitudinal heat balance by mass exchange of air.

Hence Statement 1 is correct

Jet streams can also cause a bumpy flight, because the jet stream is sometimes unpredictable and can cause sudden movement, even when the weather looks calm and clear.

Hence Statement 2 is correct

Q.139) Consider the following statements about Brahmaputra River:

1. It flows eastwards parallel to the Himalayas.
2. On reaching the Nanga Parbat, it takes a 'U' turn and enters India in Arunachal Pradesh through a gorge.
3. Teesta River is its right bank tributary.

Select the correct answers using the codes given below.

a) 2 and 3 only

b) 1 and 2 only

c) 1 and 3 only

d) 1, 2 and 3

Q.139) Solution (c)

It flows eastwards parallel to the Himalayas.

Hence Statement 1 is correct

On reaching the Namcha Barwa it takes a 'U' turn and enters India in Arunachal Pradesh through a gorge.

Hence Statement 2 is incorrect

Right bank tributaries of Brahmaputra are Kameng River, Manasarover, Beki River, Raidak River, Jaldhaka River, Teesta River, Subansiri River.

Hence Statement 3 is correct

Q.140) Consider the following statements about Mahadayi/Mandovi river:

1. Kalasa and Banduri are its tributaries.
2. It is the west flowing river.
3. Mahadayi river water dispute is between Madhya Pradesh, Karnataka and Maharashtra.

Select the correct answers using the codes given below.

a) 2 and 3 only

b) 1 and 2 only

c) 1 and 3 only

d) 1, 2 and 3

Q.140) Solution (b)

Kalasa and Banduri are its tributaries.

Hence Statement 1 is correct

It is the west flowing river.

Hence Statement 2 is correct

Mahadayi river water dispute is between Goa, Karnataka and Maharashtra

Hence Statement 3 is incorrect