Question) Which among the following statement is incorrect about the peninsular plateaus?

- a) The general elevation of Peninsular plateau is from the east to the west.
- b) Delhi Ridge is the northwest extension of the peninsular plateau.
- c) The north-eastern extension of peninsular plateau is separated by Malda fault.
- d) Ravines of Madhya Pradesh are relief features of Peninsular plateau.

Answer: A

General elevation of peninsular plateau is from west to east. That is why most rivers in peninsular India flow towards Bay of Bengal. Hence, statement a is incorrect. Karbi Anglong and Shillong are North eastern Extension of peninsular plateau. The Ravines of Chambal, Bhind and Morena are a part of Peninsular plateau.

QUESTION:) As per Indian Meteorological department's classification of droughts which of the following are correctly matched?

- 1. Hydrological drought deficiency of rainfall at a specified area level
- 2. Agricultural drought manifestation of critically low ground water table or reduced river and stream flow.
- 3. Metrological drought four consecutive weeks of deficiency of half or more than half of normal rainfall

Select the correct answer by using the codes given below:

a) 1 only

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

Answer: D

All the statements are incorrect. Hydrological Drought occurs when the availability of water in different storages and reservoirs like aguifers, lakes, reservoirs, etc. falls below what the precipitation can replenish. Agricultural Drought is also known as soil moisture drought. It is characterized by low soil moisture that is necessary to support the crops, thereby resulting in crop failures. Moreover, if an area has more than 30 per cent of its gross cropped area under irrigation, the area is from the drought-prone excluded category.

QUESTION:) Which of the following are aspects of co-operative farming?

- 1. Social ownership of means of production i.e. collective farm instead of individual farms
- 2. Helping farmers in procuring inputs of farming
- 3. Farmers can retain very small plot of land to meet their own needs.

Select the correct answer using the codes given below.

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

Answer: B

In Cooperative farming, a group of farmers form a co-operative society by pooling in their resources voluntarily for more efficient and profitable farming. Individual farms remain intact and farming is a matter of cooperative initiative. Hence statement 1 and 3 are incorrect. While collective farming is based on social ownership of the means of production and collective labor.

QUESTION:) The seasonal or periodic movement of pastoral farmers with their livestock over relatively short distances seeking fresh pastures between two areas of different climatic conditions is called as:

- a) Ley Farming
- b) Cattle Ranching
- c) Transhumance
- d) None of the above

Answer: C

The alternate growing of crops and called Lev Farming. arass is Transhumance is the seasonal or periodic movement of pastoral farmers with their livestock over relatively short seeking fresh pastures distances between two areas of different climatic conditions. A ranch is an area of including various landscape. structures, given primarily to the practice of ranching, the practice of raising grazing livestock such as cattle or sheep for meat or wool.

QUESTION:) The Brahmaputra is well-known for floods, channel shifting and bank erosion because

- 1. Most of its tributaries are large.
- 2. Tributaries bring large quantity of sediments in Brahmaputra.
- 3. Heavy rainfall in its catchment area.

Select the correct statement(s) using the codes given below.

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

Answer: D

Brahmaputra is well-known for floods, channel shifting and bank erosion. This is due to the fact that most of its tributaries are large, and bring large quantity of sediments owing to heavy rainfall in its catchment area. Some tributaries of Bhramputra are dihang, dibang, lohit and subhansri.

QUESTION: Which among the following statement(s) is incorrectly stated?

- a) Jharkhand is the largest producer of Bauxite.
- b) Two main types of iron ore found in **India are haem**atite and magnetite
- c) Thorium is mainly obtained from monazite and ilmenite in the beach sands along the coast of Kerala and Tamil Nadu.
- d) 80 per cent of the coal deposits in India is of bituminous type and is of non-coking grade.

Answer: A

Orrisa is the largest producer of bauxite in India. Hence statement 'a' is incorrect.

QUESTION:) Consider the following statements regarding Mediterranean and China type climate.

- 1. Mediterranean Climate occurs on the western temperate margins and China type occurs on eastern temperate margins
- 2. Warm Moist summer is characteristic feature of both type of Climates

Select the correct statement(s) using the codes given below.

- a) 1 only
- b) 2 only
- c) 1 and 2 both
- d) Neither of them

Answer: A

Meditterranean Climate occurs on the western margins of continents between 30and 45 degree north and south of the equator. In summer when the sun is overhead at tropic of cancer the belt of influence of Westerlies is shifted a little polewards, rain bearing winds are therefore not likely to reach the Mediterranean lands. The prevailing Trade Winds are off shore and there is practically no rain. air is dry, heat is intense and relative humidity is low. It has rainfall in winter with on shore westerlies. In northern hemisphere the on shore westerlies bring cyclonic rain from the Atlantic to countries bordering mediterranean sea. China type climate occurs on the Eastern Margins in warm temperate latitudes. lt has comparatively mpore rainfall than the

Mediterranean climate in the same latitudes, mainly in summer. It is characterised by warm moist summer and cool dry winter.? Hence statement 2 is incorrect.

QUESTION:) During the south-west monsoon period after having rains for a few days, if rain fails to occur for one or more weeks, it is known as break in the monsoon. What are the reasons for occurrence of "Break in the monsoon"?

- 1. In northern India rains are likely to fail if the rain-bearing storms are not very frequent along the monsoon trough or the ITCZ over this region.
- 2. Over the west coast the dry spells are associated with days when winds blow parallel to the coast.
- 3. Due to finish off the moisture which brought by the trade winds.

Which of the above statement(s) is/are correct?

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

Answer: C

Break in the monsoon is caused when the monsoon is still active, it just stops for a few days in normal monsoon days. So it is not caused because of finishing of moisture but other factors like in west cast the wind sometimes blow parallel to the coast and in northern plains rain bearing storms have to be frequent along the monsoon trough.

QUESTION:) If you work out the latitudinal and longitudinal extent of India, they are roughly about 30 degrees, whereas the actual distance measured from north to south extremity is 3,214 km, and that from east to west is only 2,933 km. Because,

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

Answer: B

The latitudes are parallel to the equator while longitudes seem to originate from the poles with distance between two longitude maximum at equators while minimum at the poles.

QUESTION:) Which of the following pairs is/are correctly matched?

Soil conservation method – Description

- 1. Minimum tillage farming ploughing only to that depth which is needed for quick seed germination
- 2. No-till farming ploughing only along edges of croplands

3. Mulching – Covering the surface area of soil by an organic matter.

Select the correct answer using the codes given below.

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

Answer: B

Statement 1 and 3 are correct. Statement 2 is incorrect. No-till farming (also called zero tillage or direct drilling) is a way of growing crops or pasture from year to year without disturbing the soil through tillage.

QUESTION:) Which among the following statement is incorrectly stated?

- a) Sirocco is a hot, dry dusty wind coming from Sahara Desert
- b) Mistral is a cold wind from the north rushing down towards Europe
- c) Berg Wind is hot dry wind is south eastern Africa
- d) Harmattan are cold, dry winds blowing in winters in Nigeria

Answer: D

Harmattan is a dry and dusty wind that blows in the West Africa these are in fact the North east trade winds that blow off shore from Sahara desert and reach Guinea coast as dry dusty winds. Locally called "the doctor" because their relative humidity seldom goes above 30% and provide a welcome relief from the damp air by increasing the rate

of evaporation with resultant cooling fect.

QUESTION:) Match the following sets of pairs.

Regional Name of Jhum Cultivation : Region

- 1) Milpa ---- a) North east India
- 2) Watra ---- b) Mexico
- 3) Jhum---- c) Indonesia
- 4) Ladang ---- d) South-east Rajasthan
- 5) Roca ---- e) Brazil

Select the correct statement(s) using the codes given below.

b)
$$1 - b$$
, $2 - d$, $3 - a$, $4 - c$, $5 - e$

c)
$$1 - a$$
, $2 - d$, $3 - b$, $4 - c$, $5 - e$

d)
$$1 - e$$
, $2 - d$, $3 - a$, $4 - c$, $5 - b$

Answer:B

Option (b) correctly represents the names of Shifting Cultivation in different parts on the world.

QUESTION:) Which among the following is/are the reason(s) for over emphasis on fishing in Japan?

- 1. Lack of agricultural land.
- 2. Abundance of lowlands and pastures.

Select the correct answer using the codes given below.

- a) 1 only
- b) 2 only
- c) Both 1 and 2

d) Neither 1 nor 2

Answer:A

Statement 1 is correct. Only 20% of Japan's land is suitable for cultivation. When cold and hot current meet, there will be lot of planktons, hence lot of fishes. The Kuroshio (warm) and Oyashio (cold) current meet in the North Pacific Ocean near the coast of Japan. This confluence zone creates favorable conditions for the growing of fishing.

QUESTION:) Which among the following sets of pair is/are correctly matched?

- 1. Typhoons China sea
- 2. Tornadoes West Indian Islands
- 3. Tropical Cyclones Indian Oceans

Select the correct answer using the codes given below.

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

Answer:A

Typoons occur in the China Sea; Tropical cyclones occur in the Indian Ocean; Hurricanes in West Indies; Tornadoes in Guinea lands of West Africa and southern U.S.A. in which the local name of whirl-wind is often applied; Willy willies occur in North Western Australia.

QUESTION: Which among the following statement is incorrectly stated?

- a) West coast of continents in latitudes between 30° N to 30° S suffers from great aridity.
- b) Polar Easterlies are more regular in northern hemisphere than in southern.
- c) Westerlies bring precipitation to the western coasts of continents.
- d) California receive westerlies only in winters

Answer:B

Polar easterlies blow from the polar high pressure belts towards the temperate low pressure belts. These are extremely cold winds that come from the Tundra and Icecap regions of the poles. The Polar Easterlies are more regular in the southern hemisphere in comparison to the northern hemisphere. Hence, statement b is incorrect.

QUESTION:) Consider the following statements regarding the Northern Plains.

- 1. River tends to disappear in Bhabar region due to deposition of heavy rocks and boulders.
- 2. Swampy and marshy conditions are peculiarity of Tarai region due to nondemarcated channel of rivers.
- 3. Riverine islands and sand bars can be found in Brahmaputra plains.
- 4. Punjab serve as a water divide between Indus and Ganges river system.

Select the correct statement(s) using the codes given below.

a) 1, 2 and 3 only

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

Answer:a

States of Haryana and Delhi form the water divide between Indus and Ganga river system. Hence, statement 4 is incorrect.

QUESTION:) Which of the following is incorrectly stated about climatic condition caused due to ocean currents? a) Ocean currents help in maintaining the horizontal heat balance of the earth.

- b) Convergence of warm and cold current leads to a sunny and clear weather
- c) Gulf stream is responsible for intensified heat waves during summer in coastal plains of USA.
- d) Winds blowing over warm current picks up moisture and help increase precipitation in affected coastal areas.

Answer: B

Explanation:

Option (b) is incorrect. Convergence of warm and cold current leads to foggy weather making it difficult navigation. Mixing of cold and warm ocean currents bear richest fishing grounds in the world. Example: Grand Banks around Newfoundland, Canada and NorthEastern Coast of Japan. The mixing of warm and cold currents help to replenish the oxygen and favor the growth of planktons, the primary food for fish population. The best fishing grounds of the world exist mainly in

these mixing zones. Warm ocean currents transport warm waters of the tropical zones to the colder areas of the temperate and polar zones and cold currents bring cold waters of high latitudes to the areas of low latitudes. Thus, ocean currents help in bringing homogeneity in the distribution of temperature of ocean water and helps in maintaining the horizontal heat balance of the earth. They transfer additional heat of low latitudes (areas of surplus heat) to high latitudes (areas deficient heat). The Gulf Stream raises the temperature of Atlantic and Gulf coastal plains of the USA during summer months and causes and intensifies heat waves and thus becomes responsible for hazardous weather conditions. The winds blowing over warm currents pick up moisture and help in increasing the amount of precipitation in the affected coastal areas. For example, the North Atlantic Drift and Kuroshio Current bring in sufficient rainfall along the western coasts of Europe and eastern coasts of Japan respectively.

QUESTION:) Despite the longest length of day at the poles, insolation becomes minimum. This can be attributed to

- 1. The sun rays become more or less parallel to the ground surface.
- 2. A huge amount of solar radiation is reflected back due to Albedo effect.

Select the correct answer using the codes given below.

- a) 1 only
- b) 2 only

- c) Both 1 and 2
- d) Neither 1 nor 2

Answer:C

Statement 1 is correct. The poles receive Oblique rays from the Sun resulting minimum insolation. Statement 2 is correct. The Earth's surface is a vast patchwork of colours, ranging from the dazzling white of ice and snow, to the dark surfaces of oceans and forests. Each surface has a specific effect the Earth's on temperature. Snow and ice reflect a lot of the sun's energy back into space. Thus, Albedo effect is highest in the poles.

QUESTION:) With reference to the Himachal and Uttaranchal Himalayas, consider the following statements.

- 1. This part of Himalayas lies between the Ravi in the west and Kali in the east.
- 2. It is drained by the tributaries of the rivers Indus, Ganga and Brahmaputra.
- 3. The famous 'valley of flowers' is in this region.

Which of the statements given above is/are true?

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

Answer: B

This part of Himalayas lies between the Ravi in the west and Kali in the east. It is drained by the tributaries of the rivers Indus and Ganga only. The tributaries of the river Indus concerned are Ravi,

Beas and Satlujand those of the Ganga are Yamuna and Ghaggar. The famous 'valley of flowers' is in this region.

QUESTION:) Which of the following is incorrectly stated about the oceanic movements?

- a) Tidal bore happens when tide enters a narrow and low lying river which opens into a sea or bay.
- b) Monsoon currents of Indian ocean are not influenced or modified by the coastlines.
- c) The sea water level become relatively higher in the areas of low evaporation and high rainfall.
- d) Ocean currents are not influenced by the bottom reliefs of the ocean in the low latitudes.

Answer: B

Option (b) is incorrect. Monsoon currents of Indian Ocean branch are influenced modified the or coastlines. Due to the western coastline. the monsoon winds originating over the Arabian Sea further split into three branches; i.e. Its one branch is obstructed by the Western Ghats causing little rainfall east of the Western Ghats. Another branch of the Arabian sea monsoon strikes the coast north of Mumbai. Moving along the Narmada and Tapi river valleys, these winds cause rainfall in extensive areas of central India. A third branch of this monsoon wind strikes the Saurashtra Peninsula and the Kachchh. It then passes over west Rajasthan and along the Aravalis, causing only a scanty rainfall in places of Punjab and Haryana.

QUESTION:) With reference to the rift valley, consider the following statements?

- 1. A rift valley is formed after the formation of Fold Mountain.
- 2. A rift valley is formed on a divergent plate boundary.
- 3. The most extensive rift valley is located along the crest of the mid-ocean ridge system.

Select the correct answer using the code given below

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

Answer: C

Statement 1 is incorrect. A rift valley is not formed after the formation of Fold Mountain. Fold Mountain is formed where two continental plates move towards each other or a continental and an oceanic plate. The movement of the two plates forces sedimentary rocks upwards into a series of folds. Fold mountains are usually formed from sedimentary rocks and are usually found along the edges continents. Example: The Himalayas, Statement 2 is correct. A rift valley is a lowland region that forms where Earth's tectonic plates move apart, or rift. Rift valleys are found both on land and at the bottom of the ocean, where they are created by the process of seafloor spreading. Statement 3 is correct. The mid-ocean ridge system is the most extensive chain of mountains on earth, but more

than 90% of this mountain range lies in the deep ocean.

QUESTION:) With reference to the Polar Stratospheric Clouds (PSCs), consider the following statements.

- 1. They are formed mainly during the event of Polar vertex in winter and are more intense in the North Pole.
- 2. The ozone depletion is dramatically enhanced in the presence of Polar Stratospheric Clouds (PSCs) Select the correct answer using the code given below
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Answer: B

Exp) Statement 1 is incorrect. Polar Stratospheric Clouds (PSCs) formed mainly during the event of polar vertex in winter; more intense at South Pole. They are seen mostly during winter at high latitudes like Scandinavia, Iceland, Alaska and Northern Canada. Sometimes, however, they occur as far south as England. Statement 2 is correct. Because, Polar stratospheric clouds convert 'reservoir' compounds into reactive free radicals (Cl and ClO). These free radicals deplete ozone as shown in the animation below. **Stratospheric** Polar Clouds accelerate ozone depletion. Knowledge base Polar Stratospheric Clouds (PSCs) extend from 12 km - 22 km above the surface i.e. it lies in stratosphere. They are nacreous clouds, sometimes called mother-of-pearl clouds, and are rare clouds. They are mostly visible within two hours after sunset or before dawn.

QUESTION:) Which of the following condition would prevail in India in absence of the Himalayas?

- 1. North India would be a cold desert in winters.
- 2. There would be no monsoon
- 3. There would be no existence of rivers like Ganga and Indus.

Select the correct answer using the code given below

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

Answer: A

Exp) Statement 1 is correct. It there will be no Himalayas to block the biting cold winds from Siberia and Central Asia. Then Northern India would be a cold desert. Statement 2 is incorrect. Monsoon and Monsoon rainfall are two different things. Monsoon traditionally defined as a seasonal reversing wind accompanied bv corresponding changes in precipitation. But it is now used to describe seasonal changes in circulation atmospheric and precipitation associated with the asymmetric heating of land and sea. So, Monsoon would still be there but, monsoon rainfall on the part of northern India may not be there because of absence of Himalayas. However, Monsoon rainfall would also be there at the Western Ghats region. Statement 3 is incorrect. The Indus, the Ganga and the Brahmaputra comprise the Himalayan river systems. The

Himalayan Rivers existed even before the formation of Himalayas i.e. before the collision of Indian Plate with the Eurasian plate. (Antecedent Drainage) They were flowing into the Tethys Sea. These rivers had their source in the now Tibetan region. The deep gorges of the Indus, the Satluj, and the Brahmaputra etc. clearly indicate that these rivers are older than the Himalayas. Hence, if there would be no Himalaya, then also these mentioned rivers would be there.

QUESTION:) Consider the following statements:

- 1. The sea surface temperature in the Eastern Pacific Ocean is colder during La Nina when compared to El Nino.
- 2. The tropical cyclones that influence South Asia is not part of the regional monsoon wind system. 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

Answer: A

Exp) Statement 1 is correct. The La Nina phenomenon occurs when the easterly trade winds get stronger and blow more warm water towards west allowing cold water below the sea's surface to push towards the top near the South American coast to replace the warm water. Thus, easterly trade winds are to be blamed for partly causing La Nina. During a La Nina period, the sea surface temperatures across the eastern and central Pacific Ocean tend to be lower than the normal temperatures (between

3-5 degrees Celsius). Statement 2 is incorrect. Statement 2 is incorrect. South Asia mostly refers to the Indian subcontinent which has a peculiar monsoonal pattern of wind system. The tropical cyclones that occur in this region are mostly due to the monsoon winds in the Indian subcontinent. Thus, the tropical cyclones that influence South Asia is a part of the regional monsoon wind system.

QUESTION: Identify the type of Mountain having following characteristics:

- 1. These mountains are formed when great blocks of the earth's crust may be raised or lowered during the late stages of mountain-building.
- 2. These mountains have flat tops, steep fault scraps and the subsided portions between parallel fault are flat-bottomed.

The above features are of which type of mountain?

- a) Block Mountain
- b) Volcanic Mountain
- c) Fold Mountain
- d) Structural mountain

Answer (a)

Fault-block mountains (or just "block mountain") are created when faults or cracks in the Earth's crust force materials upward. So instead of folding, like the plate collision we get with fold mountains, block mountains break up into chunks and move up or down. Fault-block mountains usually have a steep front side and then a sloping back side. Examples of fault-block

mountains include the Sierra Nevada mountains.

QUESTION:) Consider following statements related to the health indicators:

- 1.Maternal mortality Rate refers to number of women who die as a result of pregnancy and childbirth complications per 100000 live births in a given year.
- 2.A Total Fertility Rate of 2.1 is considered to be a Replacement Rate.
- 3.Late Neonatal Mortality Rate is calculated as ratio of neonatal deaths 0-7 days of total of 1000 live births.

Which of the above statements is/are correct?

- (a)1 and 2
- (b)2 and 3
- (c)Only 2
- (d)All

Answer:A

QUESTION:) Consider the following statements:

- 1.These regions have a mean monthly temperature which remains always around 26 °C with little variation and no winters.
- 2. These regions record the heaviest rainfall on this planet with over 200 centimeters which is well distributed throughout the year.
- 3.Due to substantial heat the mornings are bright and sunny with high evaporation.

4. These regions receive heavy convectional rain in the afternoon from the towering cumulonimbus clouds.

The above features are of which type of climate?

- (a) Humid Sub-tropical climate
- (b) Equatorial Climate
- (c) Tropical Savanna Climate
- (d) None

Answer:B

QUESTION:) Coal is a one of the important minerals which is mainly used in the generation of thermal power and smelting of iron ore. Which of the following statements is/are correct in the context of coal?

- 1. Coal occurs in rock sequences mainly of two geological ages, namely Gondwana and tertiary deposits.
- 2. About 80 per cent of the coal deposits in India is of bituminous type and is of coking grade.
- 3. Jharia is the largest coal field followed by Raniganj.
- 4. The river valleys associated with coal are Godavari, Mahanadi and Sone.

Select the correct answer using the codes given below.

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

Answer:C

About 80 per cent of the coal deposits in India is of bituminous type and is of non-coking grade.

QUESTION:) Which of the following pairs is/are correctly matched?

(Local name) (Region)

- 1. Jhuming North East
- 2. Pamlou Telangana
- 3. Dipa Rajasthan

Codes:

- a) Only 1
- b) 1 and 2
- c) Only 3
- d) 1 and 3

Answer:A

It is jhumming in north-eastern states like Assam, Meghalaya, Mizoram and Nagaland; Pamlou in Manipur, Dipa in Bastar district of Chhattishgarh, and in Andaman and Nicobar Islands.

QUESTION:) Which of the following factors can be the direct causes of climate change?

- 1. Increase and decrease of sun's dark and cooler patches in a cyclic manner.
- 2. Variations in the earth's orbital characteristics around the sun.
- 3. Decrease in biodiversity.
- 4. Concentration of greenhouse gases.
- 5. Volcanic activities.

Codes:

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

Answer: C

Increase and decrease of sun's dark and cooler patches in a cyclic manner changes the solar output for earth. When they increase ,cooler and wetter weather and greater storminess occurs.

Variations in the earth's orbital characteristics around the sun alter the amount of insolation on earth. Decrease in biodiversity is an effect of climate change. It is not a direct cause of climate change.

Concentration of greenhouse gases trap more longwave radiations from earth.

Volcanic activities releases GHGs, ashes ,etc which trap heat energy.

QUESTION:) "Climate is continental type with extreme temperatures, annual rainfall is moderate, ideal for growth of grass and the people have successfully harnessed technology to utilize their rich natural resources." The above statement best describes which of the following regions?

- A) African Savannah
- B) Central Asian Steppe
- C) North American Prairie
- D) Siberian Tundra

Answer:C

The temperate grasslands of North America known as the Prairies, have

continental type with extreme temperatures because located in the middle of a continent. The annual rainfall is moderate and is ideal for the growth of grass. A local wind "Chinook" blows in this region due to the absence of the north- south barrier. People have successfully harnessed technology to utilise their rich natural resources.

QUESTION:) Consider the following statements regarding the forces acting on the landforms:

- 1. For endogenic process, the energy is generated by the rotational & tidal friction only.
- 2. The process of Diastrophism & gravity come under exogenic forces.
- 3. Temperature and precipitation control the various exogenic forces.

Codes:

- (a) 1 and 2
- (b) 1 and 3
- (c) Only 3

Answer:C

The energy emanating from within the earth is the main force behind endogenic geomorphicprocesses. This energy is mostly generated by radioactivity, rotational and tidal friction and primordial heat from the origin of the earth. Diastrophism & Vulcanism come under endogenic forces. Climate is the main controlling factors for exogenic forces.

QUESTION:) Consider the following statements:

- 1. These are a series of large ocean waves generated by large undersea disturbances.
- 2. These are characterized by enormous wavelength and high velocity that are triggered by the sudden disturbances.
- 3. There occurrence are relatively rare in the Indian Ocean, and are most common in the Pacific Ocean.

The above features are of:

- (a) Harbour Wave
- (b) Tsunami
- (c) Cyclone
- (d) Both a and b

Answer:D

The above features are of Tsunami which is also known as Harbour Wave in Japan. Tsunamis are caused by earthquakes generated in a subduction zone, and area where the oceanic plate is being forced down into the mantle by plate tectonic forces.

QUESTION:) Which of the following is incorrect about foot loose industries?

- (a) These industries are not located in any specific raw materials, weight losing or otherwise.
- (b) These industries produce in small quantities and also employ a small labour force.
- (c) These are highly polluting industries and major contributor of GHGs.
- (d) These industries can be located in a wide variety of places which has the transportation network by road.

Answer:C

These are generally not polluting industries. Footloose industry is a general term for an industry that can be placed and located at any location without effect from factors such as resources or transport. These industries often have spatially fixed costs, which mean that the costs of the products do not change despite where the product is assembled.

QUESTION:) Which of the following pairs is/are correctly matched?

- 1. Fazenda : A coffee plantation in Brazil
- 2. Ranches : Large scale farms where animals are bred and reared on commercial scale
- 3. Quarry : An open air excavation from which stone is obtained by cutting, blasting etc.

Codes:

- (a) Only 1
- (b) 2 and 3
- (c) 1 and 2
- (d) All

Answer: D

Fazenda is a Brazilian plantation; especially a coffee plantation.

A ranch is an area of landscape, including various structures, given primarily to the practice of ranching, the practice of raising grazing livestock such as cattle or sheep for meat or wool.

Quarry is a deep pit, from which stone or other materials are or have been extracted.

QUESTION:) Which of the following statements regarding laterite soils of India are correct?

- 1. The laterite soil develops in areas with high temperature and heavy rainfall.
- 2.Due to high tropical rains iron oxide and silica get leached out.
- 3.Red laterite soils are more suitable for crops like sugarcane, wheat and cashew nuts.
- 4. Humus content of the soil is low because most of the micro-organisms get destroyed due to high temperature.

Codes:

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

Answer:C

Red laterite soils in Tamil Nadu, Andhra Pradesh and Kerala are more suitable for crops like cashew nut. Due to heavy rain lime and silica get leached out and soils rich in iron oxide and aluminum compound are left behind.

QUESTION:) Which of the following statements is/are true about action of running water?

1. Overland flow of water causes sheet erosion which leads to formation of rills and gullies, respectively.

- 2. Sheet erosion leads to formation of peneplain comprising several monad-nocks.
- 3. V-shaped valleys in youthful stage are formed due to lateral erosion of valley sides.

Codes:

- (a) 1 and 2
- (b) Only 1
- (c) Only 3
- (d) All

Answer: B

First sheet erosion occurs in steep slopes forming rills. These rills will gradually develop into long and wide gullies; the gullies will further deepen, widen, lengthen and unite to give rise to a network of valleys. Stream erosion forms the peneplain. Lateral erosion occurs in maturity stage.

QUESTION:) Doab is a term used in India and Pakistan for the "tongue" or "tract" of land lying between two converging, or confluent, rivers. Which of the following doabs are correct?

- 1. Sind Sagar Doab between River Indus and Satluj.
- 2. Rechna Doab between River Chenab and the Ravi.
- 3. Jech Doab between River Jhelum and the Beas.
- 4. Jullundur Doab between River Beas and the Sutlej.
- 5. Majha Doab between River Ravi and the Beas.

Codes:

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

Answer:C

Sind Sagar Doab - lies between the Indus and Jhelum rivers.

Jech Doab (also Chaj Doab) - lies between the Jhelum and the Chenab.

Rechna Doab - lies between the Chenab and the Rayi.

Bari Doab or Majha - lies between the Ravi and the Beas.

Bist Doab (also Ju<mark>llun</mark>dur Doab or Doaba)

- lies between the Beas and the Sutlej.

QUESTION:) The Nilgiris along the west coast are relatively tectonically stable as compared to the Himalayas; but, still, debris avalanches and landslides occur though not as frequently as in the Himalayas, in these hills. Why?

- 1. Many slopes are steeper with almost vertical cliffs and escarpments in the Western Ghats and Nilgiris.
- 2. Mechanical weathering due to temperature changes and ranges is pronounced in this region.
- 3. They are mostly made up of sedimentary rocks and unconsolidated and semi- consolidated deposits.
- 4. They receive heavy amounts of rainfall over short periods.

Codes:

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

Answer: C

The debris avalanches and landslides occur very frequently in the Himalayas because the Himalayas are tectonically active. They are mostly made up of sedimentary rocks and unconsolidated and semi-consolidated deposits. The slopes are very steep. Compared to the Himalayas, the Nilgiris bordering Tamil Karnataka, Kerala and the Nadu, Western Ghats along the west coast are relatively tectonically stable and are mostly made up of very hard rocks; but, still, debris avalanches and landslides occur though not as frequently as in the Himalayas, in these hills. Why? Many slopes are steeper with almost vertical cliffs and escarpments in the Western Nilairis. Mechanical Ghats and weathering due to temperature changes and ranges is pronounced. They receive heavy amount of rainfalls over short period.

QUESTION:) Which of the following industry is not a raw material oriented industry or the availability of raw material does not play an important role in the localization of the industry?

- (a) Cement Industry.
- (b) Paper Industry
- (c) Glass Industry
- (d) None of the above

Answer:D

All the given industries are raw material oriented industry. Hence the answer will be none of the above. Cement industry-Manufacturing of cement requires heavy, low value and weight loosing materials and is primarily a raw material oriented industry. Limestone is the main raw material and comprises 60-65 per cent of the total product by weight. On an average 1.5 tonnes of limestone are required to produce one tonne of cement. Hence, the location of a cement plant is based on the limestone deposits. Paper Industry- Paper and paper board manufacturing uses coarse, cheap and weight losing raw materials and seeks raw material oriented locations. Glass Industry-Glass industry requires a large number of raw materials. The most important raw material is silica sand which constitutes 75 per cent of the basic materials. This is a bulky material and cannot bear high transportation cost. Obviously the availability of silica sand affects the localization of alass industry.

QUESTION:) Consider the following statements

- 1. Straight isobars and negligible friction
- 2. Balanced Pressure gradient force by the Coriolis force
- 3. Wind blowing parallel to the isobar

Which of the above is related to Geostrophic wind system?

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

(d) All of the above

ANS: D

All of the above statements are related with Geostrophic wind as when isobars are straight and when there is no or negligible friction, the pressure gradient force is balanced by the Coriolis force and the resultant wind blows parallel to the isobar. This wind is known as the geostrophic wind.

QUESTION:) Consider the following statements about Abyssal Plains

- 1. Abyssal Plainsare extensive plains that lie between thecontinental margins and mid-oceanic ridges
- 2. It is made up of sediments washed away from surface.
- 3. There is no marine life due to the extreme depths of Abyssal Plains

Choose the correct statement/s

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

ANS: B

Abyssal Plainsare extensive plains that lie between the continental margins and mid- oceanic ridges. The abyssal plains are the areas where the continental sediments that move beyond the margins get deposited.

At the extreme depths of abyssal plains, water pressure is enormous, temperatures are near freezing, and it is dark. Even so, many organisms live on the abyssal plains. They typically eat what is known as marine snow, which is

made up of fragments of dead bodies and feces from organisms living far above them that slowly drift down to the surface of the abyssal plains. Organisms that live on the abyssal plains have extremely slow metabolisms and can go for months without eating. Hence statement 3 is INCORRECT.

QUESTION: Consider the following statements about coffee.

- 1. Both variety of coffee, Arabica and Robusta, requires soil which is deep, fertile, rich in organic matter, well drained and slightly acidic.
- 2. Both variety of coffee, Arabica and Robusta, requires hot and humid climate.

Choose the correct statements:

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

ANS: A

1st statement is correct. India's coffee growing regions have diverse climatic conditions, which are well suited for cultivation of different varieties of coffee. Some regions with high elevations are ideally suited for growing Arabicas of mild quality while those with warm

humid conditions are best suited for Robustas. The soil requirement for both the type of coffee is same. They require deep, fertile, rich in organic matter, well drained and slightly acidic (Ph6.0-6.5).

2nd statement is incorrect. While Arabica variety requires cool and equable climate, temperature of 15 to 25 degree Celsius the Robusta variety requires hot and humid climate with a temperature range of 20 to 30 degree Celsius. Similarly the relative humidity for Arabica variety should be 70-80% while for Robusta variety the relative humidity should be 80-90%.

QUESTION:) Consider the following statements and choose the incorrect one/s

- 1. Dairy farming is low capital intensive and an advanced type of animal rearing.
- 2. Australia is the largest region for commercial dairy farming.
- 3. India is called as OYSTER of global dairy industry.

Code:

- (a) 1 and 2
- (b) 1 and 3
- (c) Only 2
- (d) All of the above

ANS: A

Dairy is the most advanced and efficient type of rearing of milch animals. It is highly capital intensive. Animal sheds, storage facilities forfodder, feeding and milching machines add to the cost of dairy farming. Special emphasis islaid on cattle breeding, health care andveterinary services. Hence statement 1 is INCORRECT.

Dairy is practised mainly near urban and industrial centres which providene ig hourh ood market for fresh milk and dairy products. The development of

transportation,refrigeration, pasteurisation and otherpreservation processes have increased theduration of storage of various dairy products. There are three main regions of commercialdairy farming. The largest is North Western

Europe the second is Canada and the third beltincludes South Eastern Australia, New Zealand and Tasmania. Hence statement 2 is INCORRECT.

India is the highest milk producer of the world, hence also called OYSTER of the global dairy industry. Hence it presents an opportunity for entrepreneurs across the globe. Hence statement 3 is CORRECT.

QUESTION:) Consider the following statements and choose the incorrect one/s

- 1. NH- 2 connects Delhi to Amritsar.
- 2. The East-West Corridor aims to connect Silchar in Assam with rann of kutch in Gujarat
- 3. The National Highways Authority of India (NHAI) is an autonomous body under the Ministry of Road Transport & Highways.

Code:

- (a) 1 and 2
- (b) Only 1
- (c) 2 and 3
- (d) None of above

ANS: A

Sher Shah Suri built the Shahi (Royal) road to strengthen and consolidate his empire from the Indus Valley to the

Sonar Valley in Bengal. This road was renamed the Grand Trunk (GT) road during the Britishperiod, connecting Calcutta and Peshawar.

At present, it extends from Amritsar to Kolkata. It is bifurcated into 2 segments:

- (a) National Highway(NH)-1 from Delhi to Amritsar
- (b) NH- 2 from Delhi to Kolkata.

Hence statement 1 is INCORRECT

North-South and East-West corridor is one of the major projects of NHAI.North-South corridor aims at connectingSrinagar in Jammu and Kashmir with Kaniyakumari in Tamil Nadu (including Kochchi-Salem Spur) with 4,076 km longroad. The East-West Corridor has been planned to connect Silchar in Assam with the port town of Porbandar in Gujarat with 3,640 km ofroad length. Hence statement 2 is INCORRECT.

The National Highways Authority of India(NHAI) was operationalised in 1995. It is anautonomous body under theunder the Ministry of Road Transport & Highways. It is entrusted with the responsibility of development, maintenanceand operation of National Highways. This is also the apex body to improve the quality of the roadsdesignated as National Highways

.Hence statement 3 is CORRECT.

QUESTION:) Consider the following statements and choose the correct ones

- 1. Nepal is at the junction of the Indian and Eurasian tectonic plates so is earthquake prone
- 2. Most of the world's earthquake occurs along Pacific Ring of Fire.
- 3. Bureau of Indian Standards, based on the past seismic history, grouped the country into five seismic zones.

Code:

- (a) 1 and 2
- (b) 1 and 3
- (c) 2 and 3
- (d) All of the above

ANS: A

Explanation:

Statements 1 and 2 are true

The Ring of Fire is a string of volcanoes and sites of seismic activity, or earthquakes, around the edges of the Pacific Ocean. Roughly 70% of all earthquakes occur along the Ring of Fire, and the ring is dotted with 75% of all active volcanoes on Earth. So statement 1 is CORRECT.

Nepal is at the junction of the Indian and Eurasian tectonic plates so earthquake prone. The Indian plate continues to move northward beneath the Eurasian plate at 45mm a year. This is the reason for 2015 earthquake of Nepal. So statement 2 is CORRECT.

India has been divided into 4 earthquake zones by the BIS (Bureau of Indian Standard).

Bureau of Indian Standards, based on the past seismic history, grouped the country into four seismic zones, viz. Zone-II, -III, -IV and -V. Of these, Zone V

is the most seismically active region, while zone II is the least. Hence statement 3 is INCORRECT.

QUESTION:) Consider the following statements regarding Volcanic Landforms.

- 1. Sill near horizontal bodies of the intrusive igneous rocks are called sill or sheet, depending on the thickness of the material
- 2. Dykes almost perpendicular wall like structure of solidified magma
- 3. Lacolith Largedome-shaped intrusive bodies with a level base

Which of the statements given above is/ are correct?

- (a) 1 and 3
- (b) 2 and 3
- (c) 1 and 2
- (d) All of the above

Ans. D

Statement 1 is correct as the near horizontal bodies of the intrusive igneous rocks are called sill or sheet, depending on the thickness of the material. The thinner ones are called sheets while the thick horizontal deposits are called sills.

Statement 2 is correct as when the lava makes its way through cracks and the fissures developed in the land, it solidifies almost perpendicular to the ground. It gets cooled in the same position to develop a wall-like structure. Such structures are called dykes. These are the most commonly found intrusive forms in the western Maharashtra area. These are considered the feeders for

the eruptions that led to the development of the Deccan traps.

Statement 3 is correct as these are large dome-shaped intrusive bodies with a level base and connected by a pipe-like conduit from below. It resembles the surface volcanic domes of composite volcano, only these are located at deeper depths.

QUESTION:) Consider the following statements regarding Plate Boundaries

- 1.Divergent Boundaries are associated with destruction of converging crusts.
- 2. Convergent boundaries are associated with neither production nor destruction of crusts.
- 3. Transform boundaries are associated with generation of new crust.

Choose the correct statements by using the code given below

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

Ans. D

Statement 1 is incorrect as Divergent Boundaries are the boundaries where new crust is generated as the plates pull away from each other.

Statement 2 is incorrect as Convergent Boundaries are the boundaries where the crust is destroyed as one plate dived under another. The location where sinking of a plate occurs is called a subduction zone.

Statement 3 is incorrect as Transform Boundaries are 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 mid oceanic ridges.

QUESTION:) Large scale earth movements which results in the formation of fold mountains are due to stress set up in the earth crust. Such stresses may be due to -

- 1. Flow movements in the mantle
- 2. Increased load of the overlying rocks
- 3. Expansion and contraction of some part of the earth
- 4. Magnetic intrusions into the crust choose the correct answer by using the code given below
- (a) 1 and 3 only
- (b) 2, 3 and 4 only
- (c) 1, 2 and 4 only
- (d) All of the above

ANS: D

All the above statements are correct as Fold mountains are caused by large scale earth movements, when stresses are set up in the earth curst. Such stress may be due to the i ncreased load of the overlying rocks, flow m ovements in the mantle, expansion and c ontraction of some part of the earth, or m agnetic intrusion into the crust. Some great fold mountains of the world are The Himalayas, Rockies, Andes and alps.

QUESTION:) Consider the following statements

- 1. The amount of light received by a specific area in the Nothern Hemisphere during the summer solstice depends on the latitudinal location of the place.
- 2. At the Artic Circle, the sun never sets during the summer solstice.

Which of the given statements are correct?

- (a) 1 Only
- (b) 2 Only
- (c) Both 1 and 2
- (d) Neither 1 nor 2 ANS: C

Explanation:

The amount of light received by a specific area in the Nothern Hemisphere during the summer solstice depends on the latitudinal location of the place. The further north one moves from the equator, the more light one receives during the summer solstice.

At the Artic Circle, the sun never sets during the summer solstice.

QUESTION: Consider the following statements regarding Loess.

- 1. Loess is mostly created by wind, but can also be formed by glaciers
- 2. In parts of China, residents build cave-like dwellings in thick loess cliffs.
- 3. Unlike other soils, loess is loosely packed.

Choose the correct statement/s

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

ANS: D

All the statements are correct.

In some parts of the world, windblown dust and silt blanket the land. This layer of fine, mineral-rich material is called loess.

Loess is mostly created by wind, but can also be formed by glaciers. When glaciers grind rocks to a fine powder, loess can form. Streams carry the powder to the end of the glacier. This sediment becomes loess.

Loess ranges in thickness from a few centimeters to more than 91 meters (300 feet). Unlike other soils, loess is pale and loosely packed. It crumbles easily; in fact, the word "loess" comes from the German word for "loose." Loess is soft enough to carve, but strong enough to stand as sturdy walls. In parts of China, residents build cave-like dwellings in thick loess cliffs.

Extensive loess deposits are found in northern China, the Great Plains of North America, central Europe, and parts of Russia and Kazakhstan. The thickest loess deposits are near the Missouri River in the U.S. state of lowa and along the Yellow River in China.

Loess accumulates, or builds up, at the edges of deserts. For example, as wind blows across the Gobi, a desert in Asia, it picks up and carries fine particles. These particles include sand crystals made of quartz or mica. It may also contain organic material, such as the dusty remains of skeletons from desert animals.

On the far side of the desert, moisture in the air causes the particles and dust to settle on the ground. There, grass and the roots of other plants trap the dust and hold it to the ground. More dust slowly accumulates, and loess is formed.

Loess often develops into extremely fertile agricultural soil. It is full of minerals and drains water very well. It is easily tilled, or broken up, for planting seeds. Loess usually erodes very slowly—Chinese farmers have been working the loess around the Yellow River for more than a thousand years.

QUESTION:) Consider the following statements regarding Kanwar Lake.

- 1. It is the largest fresh water ox-bow lake in Asia.
- 2. It is a not a Ramsar site.
- 3. It is formed due to river Gandak.

Which of the following is/are correct?

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

ANS: D

Kanwar lake is not a Ramsar site.Located in the Begusarai, Bihar in India, Kanwar Lake Bird Sanctuary is less popular bird sanctuary among tourists. Kanwar Lake is the largest freshwater Oxbow lake in Asia around three times the size of famous Bharatpur Sanctuary in Rajasthan. It is formed due to river Gandak.

In the lower course of a river the meander becomes more pronounced

which results in the formation of ox-bow lakes.

QUESTION:) Consider the following statements regarding difference between geysers and hot springs.

- 1. In geysers jet of water is usually emitted with an explosion while in hot springs the water rises to the surface without any explosion.
- 2. Geysers contain dissolved minerals which may be of some medicinal value while they are not found in hot springs.

Choose the correct statements:

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

ANS: A

Statement 1 is correct. Geysers are fountains of hot water and superheated steam that may spout up to a height of 150 feet from the earth beneath. The jet of water is usually emitted with an explosion, and is often triggered off by gases seeping out of the heated rocks. Hot springs or thermal springs may be found in any part of the earth where water sinks deep enough beneath the surface to be heated by the interior forces. The water rises to the surface without any explosion.

Statement 2 is incorrect. Hot springs contain dissolved minerals which may be of some medicinal value.

QUESTION:) Consider the following statements and choose the correct one/s

- 1. Metamorphism is the process of recrystallisation and reorganization of already consolidated rock
- 2. Foliation is one of the feature of Metamorphic rock.
- 3. Formation of metamorphic rocks under the stress of temperature is called dynamic metamorphism

Code:

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

ANS: A

The word metamorphic means "change of form". Metamorphism occurs when rocks are forced down to lower levels by tectonic processes or when molten magma rising through the crust comes in contact with the crustal rocks.

Metamorphism is a process by which already consolidated rocks undergo recrystallization and reorganization of materials within original rocks.

Hence statement – 1 is CORRECT.

Metamorphic Rocks can be classified into Foliated like slate, schist, gneiss and Non-

Foliated like quartzite, marble metamorphic rocks on the basis of the presence or absence of bands of mineral grains.

Hence statement - 2 is CORRECT.

When the metamorphism happens without any appreciable chemical change, it is called as Dynamic Metamorphism.

If metamorphism happened due to the influence of heat, it is called as Thermal Metamorphism. Hence statement - 3 is INCORRECT.

QUESTION:) Consider the following statements with respect to Solar Energy Corporation of India Ltd. (SECI)

- 1. It is under the administrative control of the Ministry of Power
- 2. It is a private limited non-profit company under Section 8 of the Companies Act, 2013 Select the correct statement(s)
- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) None of the above

Answer: D

Solar Energy Corporation of India Ltd. CPSU under (SECI) is а administrative control of the Ministry of New and Renewable Energy (MNRE), set up on 20th Sept, 2011 to facilitate the implementation of JNNSM achievement of targets set therein. It is the only CPSU dedicated to the solar originally energy sector. It was incorporated as a section-25 (not forprofit) company under the Companies Act. 1956.

In India, a non-profit organisation can be registered as Trust by executing a Trust deed or as a Society under the Registrar of Societies, or as a private limited non-profit company under Section 8 Company under the Companies Act, 2013. A Section 8 Company is the same as the popular Section 25 company under the old Companies Act, 1956, which was one of the most popular forms of Non- Profit Organisations in India. But, as per the new Companies Act 2013, Section 25 (as per the old act) has now become Section 8.

However, through a Government of India decision, the company has recently been converted into a Section-3 company under the Companies Act, 2013. The mandate of the company has also been broadened to cover the entire renewable energy domain.

Section 3 provides for companies mainly for commercial activities that will help the company grow.

In the present outlook of the RE sector, especially solar energy, SECI has a major role to play in the sector's development. The company responsible for implementation of a number of schemes of MNRE, major ones being the VGF schemes for largescale grid-connected projects under JNNSM, solar park scheme and gridconnected solar rooftop scheme, along with a host of other specialised schemes such as defence scheme. canal-top scheme, Indo-Pak border scheme etc. In addition, SECI has ventured into solar project development on turnkey basis for several PSUs. The company also has a power-trading license and is active in this domain through trading of solar power from projects set up under the schemes being implemented by it.

QUESTION:) Consider the following statements with respect Department of Industrial Policy & Promotion (DIPP)

- 1. It comes under the Ministry of Corporate Affairs
- 2. It is responsible for Intellectual Property Rights relating to Patents, Designs, Trade Marks etc
- 3. It is responsible for facilitating and increasing the FDI inflow in the country

Which of the following statements is/are correct?

- a) 1 and 2
- b) 2 and 3
- c) 1 and 3
- d) All of the above

Answer: B

DIPP is under the Ministry of Commerce and Industry

The role and functions of the Department of Industrial Policy and Promotion primarily include:

- Formulation and implementation of industrial policy and strategies for industrial development in conformity with the development needs and national objectives;
- Monitoring the industrial growth, in general, and performance of industries specifically assigned to it, in particular, including advice on all industrial and technical matters;
- Formulation of Foreign Direct Investment (FDI) Policy and promotion, approval and facilitation of FDI;
- Encouragement to foreign technology collaborations at enterprise

level and formulating policy parameters for the same;

- Formulation of policies relating to Intellectual Property Rights in the fields of Patents, Trademarks, Industrial Designs and Geographical Indications of Goods and administration of regulations, rules made there under;
- Administration of Industries (Development & Regulation) Act, 1951
- Promoting industrial development of industrially backward areas and the North Eastern Region including International Co-operation for industrial partnerships and
- Promotion of productivity, quality and technical cooperation.

QUESTION:) Match List I with List II and select the correct answer List I List II

(Crops) (Geographical conditions)

- 1. Cotton (A) Hot climate
- 2. Rice (B) moderate temperature and black soil
- 3. Millets (C) cool climate with high altitude
- 4. Tea (D) high temperature and high humidity Select the correct code:
- a) 1B, 2D, 3A, 4C
- b) 1C, 2D, 3A, 4B
- c) 1B, 2A, 3D, 4C
- d) 1C, 2B, 3D, 4A

Answer: A

Tea -

- It is a plantation crop
- grown over hilly areas and well drained soils in humid and sub-humid tropics and sub-tropics
- ideal temperature 20 30 ° c
- rainfall 150-300 cm
- in india brahmaputra valley of assam, sub himalayan region of west Bengal (darjiling, jalpaiguri and cooch bihar districts) and lower slopes of nilgiris and cardamom hills of western ghats

Rice -

- most important cereal crop in india
- tropical and sub-tropical plant
- high temperature >22 ° C + > 100 cm rainfall
- can be grown in lesser rainfall areas but requires irrigation
- clayey alluvial soil because can retain water
- good crop can be obtained only if fields are kept filled with water
- labour intensive crop
- 22% production by india in world (2 nd rank)
- 1/4 th area of india produces rice
- WB, Punjab, UP, Andhra Pradesh and TN

Cotton -

- Tropical crop
- Grown in kharif season in semiarid areas
- Requires clear sky during flowering stage

- Ideal temperature range 21 30° C
- Rainfall 50-100 cm
- 3 cotton growing areas
- North-west parts of Punjab,Haryana and northern Rajasthan
- o West Gujrat and Maharashtra
- o South Andhra Pradesh, Karnataka and TN
- Leading producers –
 Maharashtra, Gujarat, Andhra Pradesh,
 Punjab and Haryana

Millets -

- Coarse grains grown on less fertile and sandy soils
- Needs low rainfall and high to moderate temperature
- Adequate rainfall
- Jowar, bajra and ragi are grown in India.

QUESTION:) Consider the following statements about landslide

- 1. Landslide is mass movement of rock, debris or earth down a slope
- 2. Reasons for landslides are steep slope, earthquake, volcanic disturbances, rainfall
- 3. Rock slump and soil creep are types of landslides
- 4. Landslides can generate tsunamis.

Select the correct statements

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

- c) None of the above
- d) All of the above

Answer:D

QUESTION:) Consider the following statements

- 1. During the Neap Tides the high tide is lower and the low tide is higher than usual.
- 2. The Neap Tide, unlike the Spring Tide, occurs on the New Moon instead of on the Full Moon.

Select the correct answer

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

Solution (a)

Tide – periodical rise and fall of the sea level, once or twice a day because of attraction of sun and moon

High tide – when water covers much of the shore by rising to its highest level.

Low tide – When water falls to its lowest level and recedes from the shore.

Causes of tides -

To a great extent gravitational pull of moon

- To lesser extent gravitational pull of sun
- Centrifugal force
- o Force that acts to counterbalance the gravity
- Tide generating force is the difference between the gravitational attraction of the moon and the centrifugal force of the earth.

Types of tides -

- 1. Spring tide on full moon and new moon days, the sun, the moon and earth are almost in a same line. On these days, the sun and the moon exert their combined gravitational force on the earth. Thus on these two days the high tides are the highest and are known as spring tides. The height of a spring tide is 20% more than the normal high tide. (see images)
- 2. Neap tide on half-moon days (i.e. first and last quarter phases of the moon), the sun and the moon are at 90° to the centre of the earth. The tide producing forces of the moon and the sun, work in opposite directions and they partly cancel each other's force. The height of the high tide is lower than the normal high tide while low tide is higher than the normal low tide. Difference is 20% (see images)

QUESTION:) Consider the following statements

- 1. The place in the crust where the movement starts is called the epicentre.
- 2. The place on the surface above the Epicentre is called the focus.
- 3. Focus is also known as Hypocentre

Select the incorrect statements

- a) 1 and 2 only
- b) 1 and 3 only
- c) 2 and 3 only
- d) All of the above

Solution (a)

QUESTION:) Consider the following statements with regard to 'Usar' and 'Reh':

- 1. 'Usar' is a term collectively applied to all kinds of saline and alkaline soils in the plains of north India, particularly in Uttar Pradesh
- 2. 'Reh' is a white, grayish or ashcoloured salt that are found in low-lying plain areas in dry periods Which of the statements given above is/are incorrect?
- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

Solution (d)

Both the statements are correct and self-explanatory.

QUESTION:) With reference to natural vegetation types, Selvas refers to:

- (a) tropical rain forest in Amazon lowlands.
- (b) scrub vegetation found in arid and semi- arid regions.
- (c) large area of flat temperate grasslands.
- (d) type of natural region or biome that does not contain trees.

Answer: A

• High temperature and abundant rainfall in the equatorial regions support a luxuriant type of vegetation called the tropical rain forest. In Amazon lowlands, the forest is so dense and so complete in its vegetational extravagance that the special name 'selvas' is used. It is an alternate name for Amazon rainforest.

QUESTION:) With reference to the hamleted settlements in India, consider the following statements:

- 1. They are fragmented into several units physically separated from each other.
- 2. They are found in lower Ganga plain.
- 3. They are locally called as panna, para, palli.

Which of the statements given above is/are correct?

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

(d) 2 and 3 only

Answer:C

- Hamleted Settlements are often fragmented into several units physically separated from each other bearing a common name in various parts of the country. This segmentation of a large village is often motivated by social and ethnic factors.
- Such villages are more frequently found in the middle and lower Ganga plain, Chhattisgarh and lower valleys of the Himalayas.
- These units are locally called panna, para, palli, nagla, dhani, etc.

QUESTION:) Which of the following is the correct arrangement of the sources of irrigation in the decreasing order of their total area covered?

(a) Tube wells and other wells > Tanks >

Canals

(b) Tube wells and other wells > Canals >

Tanks

- (c) Canals > Tanks > Tube wells and other wells
- (d) Canals > Tube wells and other wells > Tanks

Answer: B

QUESTION:) In comparison to temperate regions, commercial extraction of timber resources is low in tropical forests due to which of the following reasons?

1. Trees do not occur in homogenous stands.

- 2. Absence of frozen surfaces.
- 3. Tropical hardwoods are too heavy to float on water.

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

Answer: D

• All the statements are correct. Though the tropics have great potential in timber resources, commercial extraction is difficult. The trees do not occur in homogeneous stands, there are no frozen surfaces to facilitate logging and tropical hardwood are sometimes too heavy to float in the rivers, even if these flow in the desired direction.

QUESTION:) Which of the following best describes the term Kolkhoz?

- (a) Rice cultivation in Middle East region
- (b) Tribe found in colder region of Russia
- (c) Collective farming system introduced by erstwhile USSR
- (d) Irrigation technique in Southern India

Answer:C

- Option (c) is correct.
- Collective farming or the model of Kolkhoz was introduced in erstwhile Soviet Union to improve upon the inefficiency of the previous methods of

agriculture and to boost agricultural production for self- sufficiency. The basic principal behind this types of farming is based on social ownership of the means of production and collective labour.

QUESTION:) Which of the following is the correct arrangement of Indian sectors in the decreasing order of their share in surface water utilization?

- (a) Agriculture Domestic use Industry
- (b) Industry Agriculture Domestic use
- (c) Agriculture Industry Domestic use

Industry - Dom<mark>estic use- Ag</mark>riculture
Answer: A

QUESTION: Which among the following sea routes is known as the Big Trunk Route?

- (a) Cape of Good Hope Sea Route
- (b) Mediterranean-Indian Ocean Sea Route
- (c) Northern Atlantic Sea Route
- (d) North Pacific Sea Route

Answer: C

 Northern Atlantic Sea Route links North-eastern U.S.A. and Northwestern Europe, the two industrially developed regions of the world. The foreign trade over this route is greater than that of the rest of the world combined. One fourth of the world"s foreign trade moves on this route. It is, therefore, the busiest in the world and otherwise, called the Big Trunk Route. Both the coasts have highly advanced ports and harbor facilities.

QUESTION: Consider the following pairs:

Town Functional

Classification

1. Jamshedpur : Industrial

2. Kolkata : Commercial Town

- 3. Agra: Transport City Which of the pairs given above is/are correctly matched?
- (a) 1 and 3 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

Answer: D

The cities above are classified broadly on the basis of dominant or specialised functions.

Industrial towns

Industries constitute prime motive force of these cities such as Mumbai, Salem, Coimbatore, Modinagar, Jamshedpur, Hugli, Bhilai, etc.

Transport Cities

They may be ports primarily engaged in export and import activities such as Kandla, Kochchi, Kozhikode, Vishakhapatnam, etc. or hubs of inland transport such as Agra, Dhulia, Mughal Sarai, Itarsi, Katni, etc.

Commercial towns

Towns and cities specialising in trade and commerce are kept in this class. Kolkata, Saharanpur, Satna, etc. are some examples.

Garrisson Cantonment towns

These towns emerged as garrisson towns such as Ambala, Jalandhar, Mhow, Babina, Udhampur, etc.

QUESTION:) Consider the following statements with regard to cropping seasons in India:

- 1. Kharif season in India largely coincides with Southwest Monsoon.
- 2. The rabi season begins with the onset of winter.
- 3. Zaid is a short duration summer cropping season beginning after harvesting of rabi crops

Which of the statements given above is/are correct?

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

Answer:D

- There are three distinct crop seasons in the northern and interior parts of country, namely kharif, rabi and zaid.
- The kharif season largely coincides with Southwest Monsoon under which the tropical crops are cultivated. Hence, statement 1 is correct.
- The rabi season begins with the onset of winter in October-November

and ends in March-April. The low temperature conditions during this season facilitate the cultivation of temperate and subtropical crops. Hence, statement 2 is correct.

• Zaid is a short duration summer cropping season beginning after harvesting of rabi crops. Hence, statement 3 is correct.

QUESTION:) Which of the following best describes the Warabandi system?

- (a) It is a system of equitable distribution of water in the canal irrigation regions.
- (b) It is a system of creation of bunds to direct the agricultural runoff.
- (c) It is a system of soil conservation by creation of small check dams.
- (d) It is a method of grass cultivation in the regions of soil erosion.

Answer: A

•Warabandi system of water distribution is followed for canal irrigation system at many parts of India. It is observed that tail end fields receive less amount of water compared to fields situated at or near the head of water courses. This is because of seepage losses in unlined water courses. Warabandi rotational method for equitable distribution of the available water in an irrigation system by turns fixed according to a predetermined schedule specifying year, day, time and duration of supply to each irrigator in proportion to the size of his landholding.

QUESTION: Museum, often mentioned in news, is located in which of the following country?

- A. Iran
- **B. France**
- C. U.A.E
- D. Turkey

Answer:D

Explanation: Turkish President Recep Tayyip Erdogan ordered another ancient Orthodox church that became a mosque and then a popular Istanbul museum to be turned back into a place of Muslim worship.

The decision to transform the Kariye Museum into a mosque came just a month after a similarly controversial conversion for the UNESCO World Heritage-recognised Hagia Sophia.

The Holy Saviour in Chora was a medieval Byzantine church decorated with 14th-century frescoes of the Last Judgment that remain treasured in the Christian world.

It was originally converted into the Kariye Mosque half a century after the 1453 conquest of Constantinople by the Ottoman Turks.

It became the Kariye Museum after Second World War as Turkey pushed ahead with the creation of a more secular new republic out of the ashes of the Ottoman Empire.

The 1,000-year-old building's history closely mirrors that of the Hagia Sophia — its bigger neighbour on the historic western bank of the Golden Horn estuary on the European side of Istanbul. But they have added to Turkey's tensions with Greece and its

Orthodox Church. Hence, option (d) is the correct answer

QUESTION:) With reference to the National Strategy for Financial Education (NSFE): 2020-2025, consider the following statements:

- 1. It has been prepared by NITI Aayog.
- 2. It has recommended a '5 C' approach for dissemination of financial education in the country.

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

Answer: B

Explanation:

The National Strategy for Financial Education (NSFE): 2020-2025 document was released by the Reserve Bank of India (RBI).

This NSFE for the period 2020-2025 is the second one after the 2013-18 NSFE.

It has been prepared by the National Centre for Financial Education (NCFE) in consultation with all the Financial Sector Regulators (RBI, SEBI, IRDAI and PFRDA), DFS and other Ministries of Govt. of India and other stakeholders under the aegis of the Technical Group on Financial Inclusion and Financial Literacy under the Chairmanship of Deputy Governor, RBI.

The document has been approved by the FSDC-SC in its 24th meeting, held on June 2020.

It has recommended a '5 C' approach for dissemination of financial education in the country. These include emphasis on development of relevant content in curriculum in schools, colleges and training establishments. developing capacity among intermediaries involved financial providing services. leveraging the positive effect of community-led model for financial literacy through appropriate communication strategy. and, enhancing collaboration among various stakeholders.

Hence only statement 2 is correct.

QUESTION:) With reference to the Nationally Determined Contributions (NDC)—Transport Initiative for Asia (TIA), consider the following statements:

- 1. Aim of NDC-TIA programme is to promote a comprehensive approach to decarbonize transport in India, Vietnam, and China.
- 2. NDC-TIA is a joint programme, supported by the International Climate Initiative (IKI) of the German Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).

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

Answer:C

NITI Aayog will launch the India Component of the Nationally Determined Contributions (NDC)— Transport Initiative for Asia (TIA) on 27 August.

- Aim of NDC-TIA programme is to promote a comprehensive approach to decarbonize transport in India, Vietnam, and China.
- NDC-TIA is a joint programme, supported by the International Climate Initiative (IKI) of the German Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and implemented by a consortium of seven organisations, namely:
- o Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
- o International Council on Clean Transportation (ICCT)
- o World Resources Institute (WRI)
- o International Transport Forum (ITF)
- o Agora Verkehrswende (AGORA)
- o Partnership on Sustainable, Low Carbon Transport (SLoCaT) Foundation
- o Renewable Energy Policy Network for the 21st Century e.V. (REN21)
- The India Component is implemented by six consortium organisations, all except SLoCaT. On behalf of the Government of India, NITI Aayog, the country's premier policy think tank, will be the implementing partner.
- The NDC-TIA programme has a duration of 4 years.
- The NDC-TIA India Component will focus on

- o strengthening GHG and transport modelling capacities,
- o providing technical support on GHG emission reduction measures.
- o financing climate actions in transport,
- o offering policy recommendations on electric vehicle (EV) demand and supply policies etc.
- Hence both statements are correct.

QUESTION:) "KIRAN" helpline 1800-599-0019 was developed by which of the following union Ministry?

A. Ministry of Agriculture and Farmers Welfare

B. Ministry of Development of North Eastern Region

C. Ministry of Housing and Urban Affairs

D. Ministry of Social Justice and Empowerment

Answer: D

The Ministry of Social Justice & Empowerment (M/o SJ&E) has postponed the launch of "KIRAN" TOLL-FREE Mental Health Rehabilitation Helpline (1800-599-0019) number which was due to be launched on 27-08-2020.

• The helpline 1800-599-0019, developed by the Social Justice and Empowerment Ministry, along with its partners aims at providing support for early screening, first-aid, psychological support, distress management, mental wellbeing, preventing deviant

behaviour and psychological crisis management.

- The helpline will offer support in 13 languages for any individual, family, NGOs, DPOs, parent associations, professional associations, rehabilitation institutes, hospitals or anyone in need of support across the country.
- The helpline will be supported by 660 volunteers, clinical and rehabilitation psychologists and 668 volunteer psychiatrists along with 75 experts at 25 helpline centres which will have a capacity of handling 300 clients per hour.
- The helpline will be coordinated by the National Institute for the Empowerment of Persons with Multiple Disabilities (NIEPMD, Chennai) and the National Institute of Mental Health Rehabilitation (NIMHR, Sehore).

Hence, option (d) is the correct answer.

QUESTION: V. Ramagopal Rao committee, recently seen in news, is related to:

- A. review the charter of duties for all laboratories of the Defence Research and Development Organisation (DRDO).
- B. report on the working of capital market infrastructure institutions (MIIs)
- C. decide the appropriate level of reserves that the RBI should hold
- D. review the Operation of the Cash Credit System

Answer: A

With a focus on indigenous development of futuristic technologies, a five-member expert committee has been constituted to review the charter of duties for all laboratories of the Defence Research and Development Organisation (DRDO).

- The committee was constituted by G. Satheesh Reddy, Secretary, Department of Defence Research and Development (DDR&D), who is also the Chairman, DRDO.
- The five-member committee is headed by Professor V. Ramagopal Rao, Director, Indian Institute of Technology, Delhi.
- The terms of reference are: to study and review the charter of duties of all the labs of the DRDO, to redefine the charter of duties of the labs on the current and futuristic defence and battlefield scenario, and to minimise the overlap of technologies amongst the labs.
- The committee has to submit its report within 45 days.

Hence, option (a) is the correct answer.

QUESTION:) With reference to the International Day of Remembrance and Tribute to the Victims of Terrorism, consider the following statements:

- 1. International Day of Remembrance and Tribute to the Victims of Terrorism was observed on 21 August.
- 2. It was proclaimed to honour and support the victims and survivors of terrorism and to promote and protect the full enjoyment of their human rights and fundamental freedoms.

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

Answer: C

International Day of Remembrance and Tribute to the Victims of Terrorism was observed on 21 August.

- The General Assembly, in its resolution 72/165 (2017), established 21 August as the International Day of Remembrance of and Tribute to the Victims of Terrorism.
- It was proclaimed to honour and support the victims and survivors of terrorism and to promote and protect the full enjoyment of their human rights and fundamental freedoms.
- The Global Counter-Terrorism Strategy, adopted unanimously in its resolution 60/288, on 8 September 2006, notes that the dehumanization of victims counts among the conditions conducive to the spread of terrorism.
- Hence both statements are correct.

QUESTION:) National Fertilizers Limited (NFL) has decided to set up Organic Waste Converter Plant in:

- A. Uttar Pradesh
- B. Madhya Pradesh
- C. Tamil Nadu
- D. Karnataka

Answer: B

National Fertilizers Limited (NFL), a PSU under the Department of Fertilizers, Vijaipur (MP) is going to set up an Organic Waste Converter (OWC) Plant.

- biodegradable The waste collected in the unit shall be transported to OWC where the same be segregated from degradable parts. It will take around 10 days to convert it into ready to use compost.
- The project aims to recycle around 2000 Kg per day of the biodegradable waste generated in township including the horticulture waste and convert it into ready to use compost.
- The unit plans to utilize this compost as manure thus substituting consumption of fertilisers/ manure used for developments of Parks or Public places. The compost can also be used by the residents in their Lawns and Kitchen Gardens.
- Hence, option (b) is the correct answer.

QUESTION:) With reference to the RLF-100 (Aviptadil), consider the following statements:

- 1. It is a formulation of synthetic human Vasoactive Intestinal Polypeptide (VIP).
- 2. Vasoactive Intestinal Polypeptide (VIP) is released only in lungs.

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

Answer: A

An old drug formulation — RLF-100 — is being probed to treat Covid-19 patients after initial studies have shown that the drug is able to halt SARS-CoV-2 virus replication in lungs.

- RLF-100, also called Aviptadil, is a formulation of synthetic human Vasoactive Intestinal Polypeptide (VIP).
- VIP is released throughout the body, but remains mostly concentrated in lungs.
- It is produced by immune cells and nerve endings and acts as a neurotransmitter. It helps improve muscle activity and blood flow in gastrointestinal tract. Studies have shown VIP has anti-inflammatory and anti-cytokine activity properties.
- RLF-100 is not a new finding. It was discovered in 1970 by Dr Sami Said, a pulmonary medicine specialist.
- Hence only statement 1 is correct.

QUESTION: Consider the following statements:

- 1. India and Israel signed a cultural agreement that outlines a three-year programme of cooperation to further strengthen their strategic bilateral relations.
- 2. The programme of cooperation between India and Israel for the years 2020-23 is based on the cultural agreement signed between them on May 18, 2016.

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

Answer: A

India and Israel signed a cultural agreement that outlines a three-year programme of cooperation to further strengthen their strategic bilateral relations.

- The programme of cooperation between the two countries for the years 2020-23 is based on the cultural agreement signed between them on May 18, 1993, a little more than a year after they established full-fledged diplomatic relations.
- The major areas of cooperation identified to promote cultural ties include the exchange of culture and art experts, encouraging cooperation in the protection of cultural heritage and archaeology and organising literary fests and book fairs.
- It also includes student exchanges through scholarships, encouraging the participation of films and film-makers in each other's international film festivals, devising youth exchange programmes and encouraging sports-related interaction among youth.

Hence only statement 1 is correct.

QUESTION:) With reference to the Atal Bimit Vyakti Kalyna Yojna, consider the following statements:

1. Micro Units Development & Refinance Agency Ltd. (MUDRA) is

implementing the Atal Bimit Vyakti Kalyna Yojna.

2. Recently the scheme got extended for one more year upto 30th June next year.

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

Answer: B

The Employees' State Insurance Corporation (ESIC) relaxed norms to pay 50 per cent of average wages of three months as unemployment benefit between March 24 and December 31 this year in view of the COVID-19 pandemic.

- The ESIC took the decision in its 182nd meeting held yesterday under the Chairmanship of Union Labour and Employment Minister.
- ESIC is implementing the Atal Bimit Vyakti Kalyna Yojna under which unemployment benefit is paid to the workers covered under Employees' State Insurance (ESI) Scheme.
- The ESIC has decided to extend the scheme for one more year upto 30th June next year. It has been decided to relax the existing conditions and the amount of relief for workers who have lost employment during the Covid-19 pandemic period.
- The eligibility criteria for availing the relief has also been relaxed.
- o The payment of relief has been enhanced to 50 per cent of average of wages from earlier 25 percent of

average wages payable upto maximum 90 days of unemployment.

o Instead of the relief becoming payable 90 days after unemployment, it shall become due for payment after 30 days.

Hence only statement 2 is correct.

QUESTION:) 'Framework agreement', recently seen in news, is related to:

- A. Naga issue
- B. Bru tribe displacement
 - C. Indus water treaty
 - D. None of the above

Answer: A

Fresh hurdles have emerged in the road to peace in Nagaland.

- After a framework agreement was signed in 2015 between the Centre and the Isak-Muivah faction of the National Socialist Council of Nagalim, or the NSCN (I-M), the largest of the extremist groups in the peace process, there have been more than 100 rounds of talks.
- The latest involves the demand by the NSCN (I-M) to remove Nagaland Governor R.N. Ravi as the Centre's interlocutor for the 23-year-old peace process and his alleged tweaking of the original framework agreement.
- On August 3, 2015, the Centre signed a framework agreement with the NSCN (I-M) to resolve the Naga issue, but both sides maintained secrecy about its contents.

- A few days ago, the NSCN (I-M) released the contents of the framework agreement.
- The outfit said Mr. Ravi had "craftily deleted the word 'new' from the original" line that referred to "shared sovereignty" between India and the Naga homeland and provided for an "enduring inclusive new relationship of peaceful co-existence".
- The NSCN (I-M) claimed "new" was a politically sensitive word that defined the meaning of peaceful co-existence of the two entities (sovereign powers) and strongly indicated a settlement outside the purview of the Constitution of India.

QUESTION:) Which of the following statement is **Not correct with** respect to Mali?

- A. Mali is a landlocked country in Horn of Africa.
- B. Most of the country lies in the southern Sahara Desert.
- C. It is the third largest producer of gold in the African continent and salt.
- D. Country's southern part features the Niger and Senegal rivers.

Answer: A

Mali President Ibrahim Boubacar Keita has announced his resignation amid a military coup. The development comes after more than two months of regular demonstrations calling for him to step down three years before his final term was due to end.

- Mali is a landlocked country in West Africa. Its capital is Bamako.
- Mali borders Algeria to the northnortheast, Niger to the east, Burkina Faso to the south-east, Ivory Coast to the south, Guinea to the south-west, and Senegal to the west and Mauritania to the north-west.
- Most of the country lies in the southern Sahara Desert. its borders on the north reach deep into the middle of the Sahara Desert, while the country's southern part features the Niger and Senegal rivers.
- Some of Mali's prominent natural resources include gold, being the third largest producer of gold in the African continent and salt.
- Hence, option (a) is the correct answer.

QUESTION:) With reference to the World Humanitarian Day (WHD), consider the following statements:

- 1. On August 19, the World Humanitarian Day (WHD) is being celebrated to commemorate humanitarian workers killed and injured in the course of their work.
- 2. This year World Humanitarian Day is being celebrated with the theme "#RealLifeHeroes" paying special tribute to the real-life heroes who have committed their lives to helping others in the most extreme circumstances throughout the world.

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

Answer: C

On August 19, the World Humanitarian Day (WHD) is being celebrated to commemorate humanitarian workers killed and injured in the course of their work.

- This day was designated in memory of the 19 August 2003 bomb attack on the Canal Hotel in Baghdad, Iraq, killing 22 people, including the chief humanitarian in Iraq, Sergio Vieira de Mello.
- In 2009, the United Nations General Assembly formalized the day as World Humanitarian Day.
- This year World Humanitarian Day is being celebrated with the theme "#RealLifeHeroes" paying special tribute to the real-life heroes who have committed their lives to helping others in the most extreme circumstances throughout the world.
- Hence both statements are correct.

QUESTION:) With reference to the Integrated Regional Offices (IROs) of the MoEF&CC, consider the following statements:

- 1. Ministry of Environment, Forest and Climate Change (MoEF&CC) has recently approved establishment of 19 Integrated Regional Offices (IROs).
- 2. The head of each of the IRO will be called "Regional Officer" of MoEF&CC.

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

Answer: C

Ministry of Environment, Forest and Climate Change (MoEF&CC) has approved establishment of 19 Integrated Regional Offices (IROs).

- This had been done to achieve outcomes related to the mandates of Ministry in an improved manner and to further enhance its outreach to stakeholders.
- These IROs of the MoEF&CC started functioning from October 1st, 2020.
- Each IRO shall have representation from existing Regional Office/Regional Centre of MoEF&CC, Forest Survey of India (FSI), National Tiger Conservation Authority (NTCA), Central Zoo Authority (CZA) and Wildlife Crime Control Bureau (WCCB) as available to them from time to time.
- The head of each of the IRO will be called "Regional Officer" of MoEF&CC.
- Hence both statements are correct.

QUESTION:) What is Dhanwantari Rath, recently seen in news?

- A. A Rath yatra in Odisha established by Chodaganga Deva of the Ganga dynasty.
- B. Mobile unit of Ayurveda health care services

- C. India's new anti-tank guided missile
 - D. None of the above

Answer: B

A MoU was signed between All India Institute of Ayurveda (AllA) and Delhi Police for extending the Ayurveda Preventive and Promotive health services in the residential colonies of Delhi Police.

- These services are to be provided through a mobile unit named 'Dhanwantari Rath' and Police Wellness Centres and are to be catered by AllA, supported by Ministry of AYUSH.
- Dhanwantari Rath Mobile unit of Ayurveda health care services would consist a team of Doctors who would be visiting Delhi Police colonies regularly.
- These Ayurveda Health care services are expected to reduce the incidence/prevalence of various diseases and also reduce the number of referrals to hospitals thereby reducing cost to healthcare system as well as patient.
- AYURAKSHA a joint venture of AllA, an autonomous Institute under Ministry of AYUSH and Delhi Police aims for maintaining the health of frontline COVID warriors like Delhi police personal through Ayurveda immunity boosting measures.
- In continuation of the project, Ayurveda Preventive and Promotive health care are now planned to be extended to the families of Delhi Police personnel.
- Hence, option (b) is the correct answer.

QUESTION:) With reference to the dividend payment by Reserve Bank of India, consider the following statements:

- 1. The RBI board recently approved the transfer of Rs 57,128 crore as surplus to the central government for the accounting year 2019-20
- 2. There is no act/ rules specifying that any profits made by the Reserve Bank from its operations to be sent to the Centre.

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

Answer: A

The Reserve Bank of India (RBI) approved a dividend payment of Rs 57,128 crore to the government. The RBI board approved the transfer of Rs 57,128 crore as surplus to the central government for the accounting year 2019-20, while deciding to maintain the contingency risk buffer at 5.5%. The decision was taken at the 584th meeting of the Central Board of the RBI chaired by governor Shaktikanta Das. Earlier in the Union Budget, the government had budgeted Rs 60.000 crore as dividend from the central bank as well as staterun financial institutions. This push from the Reserve Bank comes at a time when the government is staring at a record high fiscal deficit of Rs 6.62 lakh crore in the April-June period as the affected the Centre's coronavirus

revenue targets. According to the RBI Act of 1934, section "Allocation of Surplus funds" mandates for any profits made by the Reserve Bank from its operations to be sent to the Centre. The RBI primarily earns its profits from the interest it gets from the purchase and sale of government securities (Gsecs), the interest earned from lending to banks and interest earned on bond holdings earned on open market principles. From this, the net profit is calculated by subtracting the operation expenditures, and other expenses as per the RBI Act. Hence only statement 1 is correct.

QUESTION:) With reference to 'SRIJAN' portal, consider the following statements:

- 1. It is an initiative of Department of Commerce, Govt of India.
- 2. It is a one stop shop online portal that provides access to the vendors to take up items that can be taken up for indigenization.

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

Answer:B

Defence Minister Rajnath Singh has launched 'SRIJAN' portal which is a one stop shop online portal that provides access to the vendors to take up items that can be taken up for indigenization. Pursuant to Atmanirbhar Bharat announcement, Department of Defence

Production has developed indigenization portal, srijandefence.gov.in, as 'opportunities for Make in India' in Defence, which will give information on items that can be taken up for indigenization by the private sector. On this portal, DPSUs/OFB/SHQs can display their items which they have been importing or are going to import which the Indian Industry can design, develop and manufacture as per their capability or through joint venture with OEMs. The Indian Industry will be able to show their interest. The concerned DPSUs/OFB/SHQs, based on their requirement of the items and their guidelines & procedures will interact Indian industry indigenization. Hence only statement 2 is correct.

QUESTION:) Recently initiative, Krishi Megh is aimed at protecting the precious data of which of the following organisations?

- A. CSIR
- B. DRDO
- C. Indian Council of Agricultural Research (ICAR)
 - D. None of the above

Answer: C

Union Agriculture Minister has launched ICAR's data recovery centre - Krishi Megh. The move is aimed at protecting the precious data of the government's premier research body Indian Council of Agricultural Research (ICAR). It has been set up at National Academy of Agricultural Research Management (NAARM) in Hyderabad. NAARM, Hyderabad has been chosen as it lies in a different seismic zone with

regard to the Data Centre at ICAR-IASRI in New Delhi. Currently, the main data centre of the ICAR is at the Indian Agricultural Statistics Research Institute (IASRI) in the national capital. Krishi Megh has been set up under the National Agricultural Higher Education Project (NAHEP), funded by both the government and World Bank. Hence, option (c) is the correct answer.

QUESTION:) Which of the following state government has introduced 'Samadhan-se-vikas', a one-time settlement scheme for recovery of External Development Charges (EDC)?

- A. Haryana
- B. Kerala
- C. Uttar Pradesh
- D. Gujarat

Answer:A

Recently, the Haryana government has introduced 'Samadhan-se-vikas', a onetime settlement scheme for recovery of External Development Charges (EDC). The new scheme called 'Samadhan se Vikas' is modelled on the central scheme of 'Vivad se Vishwas-2020'. The scheme will be applicable to the full outstanding EDC including interest as well as penal interest. Several real estate giants in Haryana have not deposited hundreds of crores of rupees mandatory **EDC** for residential and commercial colonies they have built across Haryana. In a bid to recover this massive sum, Harvana government introduced this scheme. The developer is supposed to pay EDC to civic authorities for maintenance of civic amenities within the periphery of developed including the project construction of roads. water

electricity supply, landscaping, maintenance of drainage and sewage systems, waste management etc. The EDC is decided by the civic authorities. Hence, option (a) is the correct answer.

QUESTION:) With reference to the Next Generation Sequencing machines (NGS), consider the following statements:

- 1. It is an initiative of Council of Scientific and Industrial Research (CSIR).
- 2. It aims to ramp up testing for COVID-19 as well as improve the accuracy rate.

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

Answer: C

The Council of Scientific and Industrial (CSIR) Research is working developing "mega labs" to ramp up testing for COVID-19 as well as improve the accuracy rate. The labs will be repurposing large machines, called **Next Generation Sequencing machines** (NGS), which are normally used for sequencing human genomes. sequence 1,500 to 3,000 viral genomes at a go to detect the SARS-CoV-2 virus. The CSIR has partnered with the U.S.based Illumina, a company that specialises in the manufacture of NGS Five such machines. sequencers, costing ₹4 crore each, are currently available in India. These machines can substantially detect the presence of the

virus even in several instances where the traditional RT-PCR (reverse transcription polymerase chain reaction) tests fail. This is because the RT-PCR test identifies the SARS-CoV-2 virus by exploring only specific sections, whereas the genome method can read a bigger chunk of virus genome. lt can also trace evolutionary history of the virus and track mutations more reliably. Unlike the RT-PCR that needs primers and probes the NGS only needs custom reagents. Hence both statements are correct.

QUESTION:) What is AR2770, recently seen in news?

- A. A massive Sunspot group
 - B. An exoplanet
 - C. A group of malware
 - D. None of the above

Answer: A

A massive Sunspot group, AR2770, was observed recently spaceweather.com using images of the Sun's surface from NASA's Solar Dynamics Observatory (SDO). Sunspot is an area on the Sun that appears dark on the surface and is relatively cooler than surrounding parts. These spots, some as large as 50,000 km in diameter, are the visible markers of the Sun's magnetic field, which forms a blanket that protects the solar system from harmful cosmic radiation. On the photosphere- the outer surface of the Sun which radiates heat and light- Sunspots are the areas where the star's magnetic field is the

strongest; around 2,500 times more than the Earth's magnetic field. Most Sunspots appear in groups that have their own magnetic field, whose polarity reverses during every solar cycle, which takes around 11 years. In every such cycle, the number of Sunspots increases and decreases. The current solar cycle, which began in 2008, is in its 'solar minimum' phase, when the number of Sunspots and solar flares is at a routine low. Hence, option (a) is the correct answer.

QUESTION:) With reference to the International Day of the World's Indigenous People, consider the following statements:

- 1. It is being observed on August 9.
- 2. This year's theme is "COVID-19 and indigenous peoples' resilience".

Which of the statements given above is/are incorrect?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: D

Explanation:

International Day of the World's Indigenous Peoples or World Tribal Day observed on August 9 2020. This year's theme was "COVID-19 and indigenous peoples' resilience". The day is aimed at promoting and protecting the rights of the world's indigenous population. The date recognizes the first meeting of the United Nations Working Group on Indigenous Populations in Geneva in

1982. Hence both statements are correct.

QUESTION:) With reference to the Khadi Agarbatti Aatmanirbhar Mission, consider the following statements:

- 1. The program named as "Khadi Agarbatti Aatmanirbhar Mission" aims at creating employment for unemployed and migrant workers in different parts of the country while increasing domestic Agarbatti production substantially.
- 2. Khadi and Village Industries Commission will provide 25% subsidy on the cost of the machines and will recover the remaining 75% of the cost from the artisans in easy installments every month.

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

Answer: C

Union Minister for MSME has approved a unique employment generation program proposed by Khadi and Village Industries Commission (KVIC) to make India Aatmanirbhar in Agarbatti production.

• The program named as "Khadi Agarbatti Aatmanirbhar Mission" aims at creating employment for unemployed and migrant workers in different parts of the country while increasing domestic Agarbatti production

substantially. The pilot project will be launched soon.

- The scheme is designed by KVIC on PPP mode. Under the scheme, KVIC will provide Automatic Agarbatti making machines and powder mixing machines to the artisans through the successful private Agarbatti manufacturers who will sign the agreement as business partners.
- KVIC will provide 25% subsidy on the cost of the machines and will recover the remaining 75% of the cost from the artisans in easy installments every month. The business partner will provide the raw material to the artisans for making Agarbatti and will pay them wages on job work basis.
- Cost of artisans' training will be shared between KVIC and the private business partner wherein KVIC will bear 75% of the cost while 25% will be paid by the business partner.
- The current consumption of Agarbatti in the country is approximately 1490 per day: MT however, India's per day production of Agarbatti is just 760 MT. There is a huge gap between the demand and the supply and hence, immense scope for iob creation.

Hence both statements are correct.

QUESTION:) With reference to the 'Tabletop Airport', consider the following statements:

1. It is an airport located and built on top of a plateau or hilly surface, with one or both ends of the runway overlooking a drop.

2. Cochin International airport is a Tabletop Airport.

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

Answer:A

On 7 August 2020, a Boeing 737 aircraft of Air India Express (the low cost subsidiary of national carrier Air India) overshot the runway while landing at Calicut International Airport. The crash killed 18 people and over 100 were injured. The accident has once again turned the spotlight on operations to what are called 'tabletop airports' in India. Tabletop Airport' is an airport located and built on top of a plateau or hilly surface, with one or both ends of the runway overlooking a drop. There are not many differences between a 'normal' airport and a 'tabletop' airport. The airports in the country which would count as "tabletops", are namely Lengpui (Mizoram), Shimla and Kullu (Himachal Pradesh), Pakyong (Sikkim), Mangaluru (Karnataka), Kozhikode and Kannur (both Kerala). There is no such term as a 'tabletop airport' in any International Civil **Aviation** technical (ICAO) Organisation document. But India's statutory aviation body, the Directorate General of Civil Aviation (DGCA). refers to these airports in this manner by way of highlighting safety measures during operations to these runways. Hence, option (a) is the correct answer.

QUESTION:) With reference to the Emergency Credit Line Guarantee Scheme, consider the following statements:

- 1. The Emergency Credit Line Guarantee Scheme was rolled out as part of the Centre's Aatmanirbhar package in response to the COVID-19 crisis.
- 2. It has a corpus of ₹41,600 crore and provides fully guaranteed additional funding of up to ₹3 lakh crore.

Which of the statements given above is/are incorrect?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

Answer: D

The Centre has expanded its credit guarantee scheme for micro, small and medium enterprises (MSMEs) to cover loans given to larger firms, as well as to self-employed people professionals who have taken loans for business purposes. The Emergency Credit Line Guarantee Scheme was rolled out in May as part of the Centre's Aatmanirbhar package in response to the COVID-19 crisis. It has a corpus of ₹41.600 crore provides and quaranteed additional funding of up to ₹3 lakh crore. Eligible MSMEs had to have an annual turnover up to ₹100 crore, with outstanding loans of up to ₹25 crore as on February 29, 2020. The scheme has been expanded to cover enterprises with a turnover up to ₹250 crore. with outstanding loans up to ₹50 crore. Individual beneficiaries include both professionals such as doctors,

lawyers and chartered accountants, as well as self-employed people such as vendors or taxi drivers. Hence both statements are correct.

QUESTION:) Who among the following was recently conferred with the Tamil Nadu chief minister's special award, in recognition of her advisory role in combating the Covid-19 pandemic in the state?

A. Soumya

Swaminathan

B. Ritu Karidhal

Srivastava

C. Devi Prasad Shetty

D. Neelam Kler

Answer: A

of World Chief Scientist Health Organisation, Soumva Swaminathan was conferred with the Tamil Nadu chief minister's special award, in recognition of her advisory role in combating the Covid-19 pandemic in the state. The WHO representative has been offering suggestions to the state department to step up measures in fighting the pandemic. According to the World Health Organisation, Swaminathan has 30 vears experience in clinical care and research and has worked throughout her career to translate her research into impactful programmes. Hence, option (a) is the correct answer.

QUESTION:) Which of the following became the first Central Armed Police Force (CAPF) to have supplies from the

Khadi & Village Industries Commission, KVIC?

- A. SSB
- B. ITBP
- C. CRPF
- D. CISF

Answer:B

Indo Tibetan Border Police. ITBP became the first Central Armed Police Force CAPF to have supplies from the Khadi & Village Industries Commission, KVIC. An agreement was signed between the ITBP and the KVIC in New Delhi. According to the agreement, total 1200 Quintal of Mustard Oil is being procured from KVIC by ITBP with a total financial implication of 1 Crore 73 Lakh 80 Thousand rupees. It was decided during a meeting of the Directors General of the CAPFs held at Home Ministry in October last year that use of Terry Khadi Uniform and other items of swadeshi origin should be available to the CAPFs. The ITBP had suggested that Durrie, Blankets, Towel, Mustard Oil, Yoga Kit, Hospital Bed Sheets, Pickles etc can be purchased for jawans of the Force through KVIC. Hence, option (b) is the correct answer.

QUESTION:) With reference to the Kisan Special Parcel Train, consider the following statements:

- 1. The country's first Kisan Special Parcel Train or Kisan Rail will start from August 7, 2020 to provide seamless supply of perishable produce.
- 2. The train will transport material between Maharashtra's Devlali and Bihar's Danapur Railway station.

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

Answer:C

The country's first Kisan Special Parcel Train or Kisan Rail will start from August 7, 2020 to provide seamless supply of perishable produce. The train will transport material between Devlali Maharashtra's and Bihar's Danapur Railway station. It will covering a distance of 1,519 kilometres in around 32 hours. The Kisan Rail will carry fruits vegetables and will stoppages at several stations and pickup and deliver them. This will help in perishable bringing agricultural products like vegetables, fruits to the market in a short period of time. The Kisan Rail train with frozen containers is expected to build a seamless national cold supply chain for perishables, inclusive of fish, meat and milk. Finance Nirmala Minister Sitharaman announced to start 'Kisan Rail' in the current year's Budget, for providing a seamless supply chain of perishable produce. Hence both statements are correct.

QUESTION:) With reference to the 'Sahakar Cooptube NCDC India', consider the following statements:

- 1. It aims to encourage farmers and the youth to take benefit of cooperatives.
- 2. National Cooperative Development Corporation (NCDC) is an apex-level

statutory institution under the Ministry of Finance.

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

Answer: A

Union Agriculture Minister launched the Cooperative Development National YouTube Corporation's channel. 'Sahakar Cooptube NCDC India', to encourage farmers and the youth to take benefit of cooperatives. He also released videos on formation and registration of cooperatives for 18 states in Hindi and regional languages. The videos will be aired on the new The quidance videos in channel. different languages covering 18 states would also strengthen and deepen the major initiatives of our government to promote and form 10,000 farmerproducer organisations (FPOs). More states will be added to the collection of guidance videos on Sahakar Cooptube NCDC India channel on YouTube in due course of time. National Cooperative Development Corporation (NCDC) as an apex-level statutory institution under the Ministry of Agriculture and Farmers' Welfare has achieved tremendous success with a cumulative financial assistance to cooperatives to the tune of Rs 1,54,000 crore. Hence, option (a) is the correct answer.

QUESTION:) ICAR-National Bureau of Plant Genetic Resources (NBPGR) is

under which of the following union ministry?

- A. Ministry of Agriculture
 - B. Ministry of AYUSH
- C. Ministry of Science & Technology
- D. Ministry of Environment and Forests

Answer: A

National Medicinal **Plants Board** (NMPB) and ICAR-National Bureau of Plant Genetic Resources (NBPGR) have entered into a MoU to conserve the **Medicinal and Aromatic Plants Genetic** (MAPGRs). Resources conservation will be done at designated space of ICAR-NBPGR in long-term storage module in the National Gene bank and/or at Regional Station for medium term storage module. National **Medicinal Plants Board (NMPB) is under** Ministry of AYUSH. ICAR-National **Bureau of Plant Genetic Resources** (NBPGR) is under Department of Agricultural Research and Education. Hence, option (a) is the correct answer.