

1. Consider the following assertion and reason:

Assertion: The climate of India has been described as Monsoon type.

Reason: Due to India's location in the tropical region, most of the rain is brought by monsoon winds.

- a) Both the Assertion and the Reason are correct and the Reason is the correct explanation of the Assertion.
- b) The Assertion and the Reason are correct but the Reason is not the correct explanation of the Assertion.
- c) The Assertion is correct but the Reason is not correct.
- d) The Assertion is not correct but the Reason is correct.

**Correct Answer:A**

**Explanation:**

The climate of India has been described as Monsoon type due to India's location in the tropical region, most of the rain is brought by monsoon winds. Hence, option a is correct.

2. Match List - I with List - II and select the correct answer:

List-I

List-II

- |                      |                              |
|----------------------|------------------------------|
| A.Rosewood, Mahogany | 1.Mountain Vegetation        |
| B.Peepal, Neem       | 2.Tropical Evergreen Forests |
| C.Khair, Babool      | 3.Thorny Bushes              |
| D.Pine, Deodar       | 4.Tropical Deciduous Forests |

Code:

A B C D

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

**Correct Answer: C**

**Explanation:**

Tropical Evergreen Forests - Rosewood, Mahogany

Tropical Deciduous Forests - Peepal, Neem

Thorny Bushes - Khair, Babool

Mountain Vegetation - Pine, Deodar

3. How many Indian states share their boundaries with at least two countries?

- a) 8 states
- b) 9 states
- c) 7 states
- d) 6 states

**Correct Answer: C**

**Explanation:**

Jammu and Kashmir - Pakistan, China, Afghanistan

Uttarakhand - Nepal and China

Sikkim - Nepal, Bhutan and China

Arunachal Pradesh - China, Bhutan and Myanmar

Assam - Bhutan and Bangladesh

West Bengal - Bangladesh, Bhutan and Nepal

Mizoram - Bangladesh and Myanmar

4. Consider the following statements:

- 1. The rivers Mahanadi, Godavari, Narmada and Kaveri drain into the Bay of Bengal.
- 2. The Andaman and Nicobar islands are coral islands located off the coast of Kerala.

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

**Correct Answer: D**

**Explanation:**

Lakshadweep Islands are located in the Arabian Sea. These are coral islands located off the coast of Kerala. The Andaman and the Nicobar Islands lie to the southeast of the Indian mainland in the Bay of Bengal. The rivers Mahanadi, Godavari, Krishna and Kaveri drain into the Bay of Bengal.

5. With reference to South America continent, consider the following statements:

1. The Pacific Ocean in the east and the Atlantic Ocean to the west of this continent.
2. The Andes, world's longest mountain range, runs through its length from north to south
3. The Amazon River, the largest river in the world, flows in this continent.

Which of the statements given above is/are correct?

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

**Correct Answer: B**

**Explanation:**

Statement (1) is not correct. The Atlantic Ocean is in the east and the Pacific Ocean to the west of this continent. Most part of the continent of South America is located in the southern hemisphere. Hence, option b is correct.

6. Consider the following assertion and reason:

Assertion: The coastline of Atlantic Ocean provides ideal location for natural harbors and ports.

Reason: The coastline of the Atlantic Ocean is straight and wide

Code:

- a) Both the Assertion and the Reason are correct and the Reason is the correct explanation of the Assertion.
- b) The Assertion and the Reason are correct but the Reason is not the correct explanation of the Assertion.
- c) The Assertion is correct but the Reason is not correct
- d) The Assertion is not correct but the Reason is correct.

**Correct Answer: C**

**Explanation:**

The Atlantic Ocean is the second largest Ocean in the world. It is flanked by the North and South Americas on the western side, and Europe and Africa on the eastern side. The coastline of Atlantic Ocean is highly indented. This irregular and indented coastline provides ideal location for natural harbours and ports. Hence, option c is correct.

7. With reference to the Equinox, consider the following statements

1. In this position, direct rays of the sun fall on the equator.
2. The whole earth experiences equal days and equal nights.
3. Neither of the poles is tilted towards the sun.

Which of the statements given above are correct?

Code:

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

**Correct Answer: D**

**Explanation:**

The above three statements are correct. On 21st March and September 23rd, direct rays of the sun fall on the equator. This is called an equinox. On 23rd September, it is autumn season in the Northern Hemisphere and spring season in the Southern Hemisphere. The opposite is the case on 21st March. Hence, option d is correct.

8. With reference to the Winter Solstice of Northern Hemisphere, consider the following statements:

1. The South Pole tilts towards the sun.
2. The rays of the sun fall directly on the Tropic of Capricorn.
3. In the southern hemisphere, there are seasons with longer nights and shorter days.

Which of the statements given above are correct?

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

**Correct Answer: C**

**Explanation:**

On 22nd December, the Tropic of Capricorn receives direct rays of the sun as the South Pole tilts towards it. As the sun's rays fall vertically at the Tropic of Capricorn ( $23\frac{1}{2}^{\circ}$  S), a larger portion of the Southern Hemisphere gets light. Therefore, it is summer in the Southern Hemisphere with longer days and shorter nights. This position of the earth is called the Winter Solstice. It is noted that Christmas is celebrated in Australia in the summer season. Hence, option c is correct.

9. Consider the following assertion and reason:

Assertion: Those places east of Greenwich will be ahead of Greenwich Time and those to the west will be behind it.

Reason: The Earth rotates around its imaginary axis from east to west.

- a) Both the Assertion and the Reason are correct and the Reason is the correct explanation of the Assertion.
- b) The Assertion and the Reason are correct but the Reason is not the correct explanation of the Assertion.
- c) The Assertion is correct but the Reason is not correct.
- d) The Assertion is not correct but the Reason is correct.

**Correct Answer: C**

**Explanation:**

As the Earth rotates around its imaginary axis from west to east, those places east of Greenwich will be ahead of Greenwich time and those to the west will be behind it. Hence, option c is correct.

10. Moon can be seen sometimes during the day because?

- a) The moon is brighter than the sun.
- b) Moon has apparent luminosity
- c) Moon does not have light of its own.
- d) None of the above

**Correct Answer: B**

**Explanation:**

The earth is tilted on an axis, all the while going around the sun and meanwhile, the moon is going around the earth. The light from the moon is bright enough to overpower the usual light that we see at particular times of the day. Most of the light that is visible to the human eye is in the blue colour range and the moon's reflected light combined with its location gives us the chance to see it during certain daylight hours. Due to the rotation of the moon around the earth, it is actually above our horizon for about 12 hours out of our 24 hour day. We can only usually see the moon for about 6 hours during that time period and then the bright light energy of the Sun overpowers the reflection.

11. Which of the following is the shape of the population pyramid of a country in which birth and death rates both are high?
- a) It is broad at the base and rapidly narrow towards the top.
  - b) It is broad at the young age group.
  - c) It is narrow at the base and broadening towards the top.
  - d) None of the above.

**Correct Answer: A**

**Explanation:**

The shape of the population pyramid of a country in which birth and death rates both are high is broad at the base and rapidly narrow towards the top. This is because although many children are born, a large percentage of them die in their infancy, relatively few become adults and there are very few old people.

The population pyramids of some African countries such as Kenya are of this type.

12. Consider the following assertion and reason:

Assertion: Only one side of the moon is visible to us on the earth.

Reason: The time taken to complete one rotation of the earth through the Moon is more than the time it takes to complete one revolution on its axis.

- a) Both the Assertion and the Reason are correct and the Reason is the correct explanation of the Assertion.
- b) The Assertion and the Reason are correct but the Reason is not the correct explanation of the Assertion.
- c) The Assertion is correct but the Reason is not correct.
- d) The Assertion is not correct but the Reason is correct.

**Correct Answer: C**

**Explanation:**

The Assertion is correct but the Reason is not correct. The moon revolves around the earth in about 27 days. It takes exactly the same time to complete one spin. Therefore, the time taken to complete one revolution of the earth by the moon is equal to the time taken to complete one rotation on its axis. As a result, only one side of the moon is visible to us on the earth. Hence, option c is correct.

13. Match — List-I with List-II:

List I

List II

- A. Intrusive igneous rocks
- B. Extrusive igneous rocks
- C. Sedimentary rocks
- D. Metamorphic rocks

- 1. Slate
- 2. Basalt
- 3. Granite
- 4. Limestone

Code:

- a) A-1 B-4 C-3 D-2
- b) A-2 B-3 C-4 D-1
- c) A-3 B-4 C-2 D-1
- d) A-3 B-2 C-4 D-1

**Correct Answer: D**

**Explanation:**

Intrusive igneous rocks — granite

Extrusive igneous rocks — basalt

Sedimentary rocks — limestone

Metamorphic rocks — slate

Consider the following assertions:

14. Consider the following statements:

- 1. In thermosphere temperature rises very rapidly with increasing height.
- 2. Troposphere helps in radio transmission.

Which of the above assertions is/are true?

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

**Correct Answer: A**

**Explanation:**

The temperature rises very rapidly with increasing height in the thermosphere. The ionosphere is a part of the thermosphere. It extends between 80-400 km. Hence, statement 1 is correct.

Radio waves transmitted from the earth are reflected back to the earth by the thermosphere and not by the troposphere. Hence statement 2 is not correct.

The troposphere is the most important layer of the atmosphere. Its average height is 13 km. The air we breathe exists here. Almost all the weather phenomena like rainfall, fog and hailstorm occur in this layer.

15. Read the following assertions carefully:

1. Horizontally the distribution of air pressure is influenced by temperature of air at a given place.
2. The low pressure area is associated with cloudy sky and wet weather.
3. High pressure is associated with clear and sunny skies.
4. Air always moves from high pressure areas to low pressure areas.

Which of the above assertions is/are true?

- a) 1 and 2 only
- b) 2, 3 and 4 only
- c) 1, 3 and 4 only
- d) All of the above

**Correct Answer: D**

**Explanation:**

Air pressure is defined as the pressure exerted by the weight of air on the earth's surface. The air pressure is highest at sea level and decreases with height. Horizontally the distribution of air pressure is influenced by temperature of air at a given place. In areas where temperature is high the air gets heated and rises. This creates a low-pressure area. Low pressure is associated with cloudy skies and wet weather. In areas having lower temperature, the air is cold. It is therefore heavy. Heavy air sinks and creates a high pressure area. High pressure is associated with clear and sunny skies. The air always moves from high pressure areas to low pressure areas.

16. What is the required condition for the occurrence of spring tides?

- a) When the sun, moon and earth are all in a same line.
- b) When the sun and moon make right angles on the earth.
- c) When the temperature of the ocean surface is high.
- d) When very fast winds run.

**Correct Answer: A**

**Explanation:**

During the full moon and new moon days, the sun, the moon and the earth are in the same line and the tides are highest. These tides are called spring tides.

17. In the context of ocean currents, which of the following statements is/are false?

- a) In general, warm ocean currents originate near the equator and move towards the poles.
- b) The cold currents carry water from polar or high latitudes to tropical or lower latitudes.
- c) The Labrador Ocean current is hot current.
- d) The ocean current influence the temperature conditions of the area.

**Correct Answer: C**

**Explanation:**

The third assertion is wrong.

The Labrador Ocean current is cold current while the Gulf Stream is a warm current.

18. In the context of the characteristics of tropical evergreen forests, consider the following assertions:

- 1. These thick forests occur in the regions near the equator and close to the tropics.
- 2. These regions are hot and receive heavy rainfall throughout the year.
- 3. The thick canopies of the closely spaced trees do not allow the sunlight to penetrate inside the forest even in the day time.
- 4. The trees of these forests shed their leaves in the dry season.

Which of the above assertions is/are correct?

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

**Correct Answer: C**

**Explanation:**

The assertions 1, 2 and 3 are correct and the 4th assertion is wrong. As there is no particular dry season, the trees do not shed their leaves altogether.

19. In which part of the continents are Mediterranean vegetation found?

1. Western part
2. Eastern part
3. Southwestern part
4. Northern part

Code:

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

**Correct Answer: A**

**Explanation:**

Mediterranean vegetation is found on the western and south-western edges of the continents. It is mostly found in the areas around the Mediterranean sea in Europe, Africa and Asia, hence the name. This kind of vegetation is also found outside the actual Mediterranean region in California in the USA, south west Africa, south western South America and South west Australia. These regions are marked for hot dry summers and mild rainy winters.

20. Match List I to List II in accordance with forests and their trees.

List I

List II

- |                 |                               |
|-----------------|-------------------------------|
| A. Pine, Cedar  | 1. Tropical evergreen forest  |
| B. Ash, Beech   | 2. Tropical deciduous forests |
| C. Sal, Shisham | 3. Temperate deciduous forest |
| D. Ebony        | 4. Coniferous forest          |

Code:

- a) A-1 B-2 C-3 D-4
- b) A-4 B-3 C-2 D-1
- c) A-4 B-1 C-3 D-2
- d) A-2 B-1 C-3 D-4

**Correct Answer: B**

**Explanation:**

Pine cedar- Coniferous forest

Ash, Beech- Temperate deciduous forests

Sal, shisham- Tropical deciduous forest

Ebony- Tropical evergreen forest

21. Consider the following grasslands:

1. Savanna
2. Veld
3. Campos
4. Llanos

Which of the above are examples of tropical grasslands?

- a) 1 and 2
- b) 2, 3 and 4
- c) 1, 3 and 4
- d) All of the above

**Correct Answer: C**

**Explanation:**

The major examples of tropical grasslands in the world are:

Savanna grasslands of East Africa.

The grasslands found in Brazil, are known as Campos.

The grasslands of Venezuela, are known as Llanos.

22. In the context of temperate deciduous forests, which of the following assertions is/are true?

1. As we go towards higher latitudes, more temperate deciduous forests are found.
  2. They are found mostly in the northeastern part of USA, and coastal regions of Western Europe.
  3. They shed their leaves in the dry season.
- a) 1 and 2
  - b) 2 and 3
  - c) 1 and 3
  - d) All of the above

**Correct Answer: D**

**Explanation:**

All the above assertions are true, in the context of temperate Deciduous Forests. As we go towards higher latitudes, there are more temperate deciduous forests. These are found in the north eastern part of USA, China, New Zealand, Chile and also found in the coastal regions of Western Europe. They shed their leaves in the dry season.

23. In the context of temperate grasslands, consider the following assertions:

1. These grasslands are found in the mid-latitudinal zones and in the interior part of the continents.
2. Usually, grass here is short and nutritious.

Which of the above assertions is/are true?

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

**Correct Answer: C**

**Explanation:**

Temperate grasslands are found in the mid-latitudinal zones and in the interior part of the continents. Usually, grass here is short and nutritious. Wild buffaloes, bison, antelopes are common in the temperate region.

24. Regarding the waterways, consider the following statements:

1. Waterways are the cheapest for carrying heavy and bulky goods over long distances.
2. Only rivers are used for inland waterways.

Which of the above assertions is/are true?

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

**Correct Answer: A**

**Explanation:**

Only statement 1 is true. The waterway is the cheapest way to carry heavy and bulky goods over long distances.

The waterways are mainly of two types — inland waterways and sea routes.

Navigable rivers and lakes are used for inland waterways. Some of the important inland waterways are: the Ganga-Brahmaputra river system, the Great Lakes in North America and the river Nile in Africa.

Therefore, statement 2 is wrong.

Sea routes and oceanic routes are mostly used for transporting merchandise and goods from one country to another. These routes are connected with the ports.

25. In what areas are the scattered settlements found?

1. In mountainous areas
2. In the field
3. In coastal areas
4. In dense wild areas

Use the code given below to choose the correct answer:

Code:

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

**Correct Answer: D**

**Explanation:**

Rural settlements can be compact or scattered. A compact settlement is a closely built area of dwellings, wherever flat land is available. In a scattered settlement dwellings are spaced over an extensive area. This type of settlement is mostly found in hilly tracts, thick forests, and regions of extreme climate.

26. In the context of the rainforest of Amazon River basin, what is 'Maloca'?

- a) A specific type of organism found here.
- b) The main food items of its inhabitants.
- c) The houses built by the people living here.
- d) Agricultural system adopted by the people here.

**Correct Answer: C**

**Explanation:**

The RainForests of Amazon River basin, provide a lot of wood for the houses. Some families live in thatched houses shaped like beehives. There are other large apartment-like houses called "Maloca" with a steeply slanting roof.

27. In the fresh waters of which river/river basins, the variety of dolphin, Susu is found?

1. Ganges
2. Brahmaputra
3. Chambal
4. Kaveri

Code:

- a) 1 and 2
- b) 3 and 4
- c) 1, 2 and 4
- d) All of the above

**Correct Answer: A**

**Explanation:**

In the fresh waters of River Ganga and River Brahmaputra, a variety of dolphin locally called Susu (also called blind dolphin) is found. The presence of Susu is an indication of the health of the river. The untreated industrial and urban wastes with high amount of chemicals are killing this species.

28. In the context of the Amazon River Basin, which of the following assertions is/are true?

1. The Amazon Basin stretches directly on the equator and is characterized by hot and wet climate throughout the year.
2. Both day and nights are almost equally hot and humid.
3. It rains almost every day, that too without much warning.

Code:

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

**Correct Answer: D**

**Explanation:**

All the assertions are right. The Amazon Basin stretches directly on the equator and is characterized by hot and wet climate throughout the year. Both day and nights are almost equally hot and humid. The skin feels sticky. It rains almost everyday, that too without much warning. The day temperatures are high with very high humidity. At night the temperature goes down but the humidity remains high.

29. Consider the following assertions:

1. 'Oasis' is the area of deserts where large quantities of animal husbandry is done.
2. In the depressions where underground water reaches the surface, an oasis is formed. These areas are fertile.
3. A fertile area around the desert which is gripped by the dispersal of the desert, such areas are called oasis.
4. The areas of the desert where the plains of the gravel and the elevated plateau of naked rocky surface are found are called the oasis.

Which of the above assertions correctly defines/define an oasis?

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

**Correct Answer: C**

**Explanation:**

Depressions are formed when the wind blows away the sands. In the depressions where underground water reaches the surface, an oasis is formed. These areas are fertile. People may settle around these water bodies and grow date palms and other crops. Sometimes the oasis may be abnormally large.

30. In the context of Ladakh, situated on the eastern side of Jammu and Kashmir, which of the following assertions is/are true?
- a) The Karakoram Range in the east and Zaskar mountains in the west enclose Ladakh.
  - b) The Nanga Mountain is present in north of Ladakh and there are Pir Panjal mountain ranges in the south.
  - c) Nanga Mountain is present in the north of Ladakh and Karakoram mountain ranges in the south.
  - d) The Karakoram Range in the north and the Zaskar mountains in the south enclose it.

**Correct Answer: D**

**Explanation:**

Ladakh is a cold desert lying in the Great Himalayas, on the eastern side of Jammu and Kashmir. The Karakoram Range in the north and the Zaskar mountains in the south enclose it.

31. Regarding the Ladakh region, consider the following assertions:

1. Groves of willows and poplars are seen in the valleys.
2. Most of the people here are Hindus or Buddhists.
3. Several Buddhists monasteries dot the Ladakh landscape with their traditional 'gompas'.

Which of the above mentioned assertions is/are correct?

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

**Correct Answer: C**

**Explanation:**

Due to high aridity, the vegetation is sparse. There are scanty patches of grasses and shrubs for animals to graze. Groves of willows and poplars are seen in the valleys. The finest cricket bats are made from the wood of the willow trees.

The people here are either Muslims or Buddhists. In fact several Buddhists monasteries dot the Ladakhi landscape with their traditional 'gompas'. Some famous monasteries are Hemis, Thiksey, Shey and Lamayuru.

32. Match the following shifting cultivation with regions where they are known so.

List-I

1. Jhum
2. Milpa
3. Roca
4. Ladang

List-II

- A. Mexico
- B. Brazil
- C. Malaysia
- D. India

Code:

1 2 3 4

- a) D C A B
- b) A D C B
- c) D A B C
- d) A C B D

**Correct Answer: C**

**Explanation:**

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

Jhumming -North-East India

Milpa -Mexico

Roca - Brazil.

Ladang – Malaysia

33. Match the following:

List-I

1. Open Cast Mining
2. Shaft mining
3. Drilling
4. Quarrying

List-II

- A. Deep bores to reach minerals at great depth.
- B. Digging out of minerals near the surface
- C. Minerals at shallow depth taken out by removing the surface layer.
- D. Boring deep wells to take out minerals from far below the earth crust.

Code:

1 2 3 4

- a) B A C D
- b) C B A D
- c) B A D C
- d) C A D B

**Correct Answer: D**

**Explanation:**

The process of taking out minerals from rocks buried under the earth's surface is called mining. Minerals that lie at shallow depths are taken out by removing the surface layer; this is known as open-cast mining. Deep bores, called shafts, have to be made to reach mineral deposits that lie at great depths. This is called shaft mining. Petroleum and natural gas occur far below the earth's surface. Deep wells are bored to take them out, this is called drilling. Minerals that lie near the surface are simply dug out, by the process known as quarrying.

34. Consider the following pairs:

City	: Prominent Industry
1. Pittsburg	: Iron and Steel
2. Manchester	: Cotton textile
3. Detroit	: Automobile

Which of the pairs given above is/are correct?

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

**Correct Answer: D**

**Explanation:**

All of the above pairs are correctly matched.

35. A naturally occurring substance that has definite chemical composition is a mineral. Choose the correct statement/s regarding minerals

1. Iron ore, bauxite, manganese ore and mica are examples of metallic minerals.
2. Metallic minerals are always ferrous.
3. Minerals that lie at shallow depths are taken out by removing the surface layer by the process called shaft mining.
4. A rock is an aggregate of one or more minerals with definite composition of constituent minerals.

Code:

- a) 1, 3 and 4 only
- b) 1, 2 and 3 only
- c) All the above
- d) None of the above

**Correct Answer: D****Explanation:**

Metallic minerals contain metal in raw form. Metals are hard substances that conduct heat and electricity and have a characteristic lustre or shine. Iron ore, bauxite, manganese ore are some examples. Metallic minerals may be ferrous or non-ferrous. Ferrous minerals like iron ore, manganese and chromites contain iron. A non-ferrous mineral does not contain iron but may contain some other metal such as gold, silver, copper or lead.

Non-metallic minerals do not contain metals. Limestone, mica and gypsum are examples of such minerals. The mineral fuels like coal and petroleum are also non-metallic minerals.

Minerals that lie at shallow depths are taken out by removing the surface layer; this is known as open-cast mining.

A rock is an aggregate of one or more minerals but without definite composition of constituent of mineral. Rocks from which minerals are mined are known as ores.

36. Which of the following statements is/are correct regarding major crops in the world?

1. India is the second largest producer of rice after China.
2. India and Bangladesh are the leading producers of Jute.
3. Brazil is the leading producer of coffee followed by Columbia and India.

Code:

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

**Correct Answer: D**

**Explanation:**

All of the statements above are correct.

37. Following pair represent the sites of Nuclear power plants and corresponding states in India.

1. Kalpakkam – Tamil Nadu
2. Tarapur – Karnataka
3. Narora – Maharashtra
4. Kaiga – Uttar Pradesh

Which of the above pair is/are not correctly matched?

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

**Correct Answer: D****Explanation:**

The nuclear power stations in India are located in:  
Kalpakkam in Tamilnadu,  
Tarapur in Maharastra,  
Ranapratap Sagar near Kota in Rajasthan,  
Narora in Uttar Pradesh  
Kaiga in Karnataka

38. Which of the statements is/are correct?

1. The first successful mechanized textile mill was established in Ahmadabad in 1854.
2. Ahmadabad is known as Manchester of India.
3. Osaka is known as Manchester of Japan whose Textile industry depends completely upon imported raw material.
4. About one third of the Indian textile industry's total production is exported.

Code:

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

**Correct Answer: C****Explanation:**

The first successful mechanized textile mill was established in Mumbai in 1854.

39. Vultures in the Indian subcontinent are disappearing very fast. Which of the following reasons can be attributed to this

- a) Killed by farmers and poachers
- b) Dwindling of prey on which they survive
- c) Dying due to kidney failure shortly after scavenging livestock treated with diclofenac
- d) All of the above

**Correct Answer: C**

**Explanation:**

Vultures in the Indian subcontinent were dying of kidney failure shortly after scavenging livestock treated with diclofenac, a painkiller that is similar to aspirin or ibuprofen. Efforts are on to ban the drug for livestock use and breed vultures in captivity.

40. Which of the following is/are an example of Plantation Crop?

- 1. Cashew
- 2. Coffee
- 3. Sugarcane
- 4. Banana
- 5. Cotton

Code:

- a) 2, 3 and 4 only
- b) 1, 2, 3 and 4 only
- c) 2, 3, 4 and 5 only
- d) All the above

**Correct Answer: D**

**Explanation:**

Plantations are a type of commercial farming where single crop of tea, coffee, sugarcane, cashew, rubber, banana or cotton are grown.

41. Consider the following statements about various non-conventional sources of energy

- 1. The site of the world's first solar and wind powered bus shelter is in Scotland
- 2. In India, geothermal plants are located in Manikaran in Utrakhand and Puga valley in Ladakh

Which any the above statements is/are correct?

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

**Correct Answer: A**

**Explanation:**

In India, geothermal plants are located in Manikaran in Himachal Pradesh and Puga Valley in Ladakh.

42. Consider the following statements:

1. CITES is an international agreement between governments
2. It aims to conserve the species that are threatened or declared endangered under IUCN

Which any the above statements is/are not correct?

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

**Correct Answer: B**

**Explanation:**

CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments. It aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival. Roughly 5,000 species of animals and 28,000 species of plants are protected. Bears, dolphins, cacti, corals, orchids and aloes are some examples.

43. Sustainable Development is defined as the type of development that meets the needs of the present generations without compromising the ability of future generations to meet their own needs. Consider the following in the context of Sustainable Development.

1. Caring all forms of life.
2. Conserving the earth's vitality.
3. Empowering the Communities.
4. Minimize the depletion of natural resources.

Which of the above are the principles of Sustainable Development?

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

**Correct Answer: D**

**Explanation:**

Some Principles of Sustainable Development:

- Respect and care for all forms of life
- Improve the quality of human life
- Conserve the earth's vitality and diversity
- Minimise the depletion of natural resources
- Change personal attitude and practices towards the environment
- Enable communities to care for their own environment.

44. With reference to population pyramid, consider the following statements:

1. The numbers of children are shown at the bottom.
2. In a country low birth rates make the pyramid narrow at the base.
3. In India, the pyramid is broad in the younger age groups.

Which of the statements given above is/are correct?

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

**Correct Answer: D**

**Explanation:**

In countries where death rates (especially amongst the very young) are decreasing, the pyramid is broad in the younger age groups, because more infants survive to adulthood. This can be seen in the pyramid for India. The numbers of children (below 15 years) are shown at the bottom and reflect the level of births. In countries like Japan, low birth rates make the pyramid narrow at the base.

45. The thin layer of grainy substance covering the surface of the earth is called soil. Consider the following statements about soil formation

1. Parent rock determines the color, texture, chemical properties and mineral content of the soil
2. Sub-soil below the top layer is rich in humus content
3. Temperature and rainfall play a crucial role in determining rate of weathering and humus formation

Which among the above statements is/are correct?

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

**Correct Answer: C**

**Explanation:**

It is the Top Soil which is rich in Humus.

46. The organic waste is decomposed by bacteria in bio-gas digesters to emit biogas, which is essentially a mixture of?

- a) Methane and Ethane
- b) Methane and Oxygen
- c) Methane and Hydrogen
- d) Methane and Carbon Dioxide

**Correct Answer: D**

**Explanation:**

Organic waste such as dead plant and animal material, animal dung and kitchen waste can be converted into a gaseous fuel called biogas. The organic waste is decomposed by bacteria in biogas digesters to emit biogas which is essentially a mixture of methane and carbon dioxide.

47. Consider the following statements:

- 1. Millets can be grown on less fertile and sandy soils.
- 2. Maize requires high temperature and high rainfall.
- 3. Cotton grows well in black and alluvial soil.

Which any the above statements is/are correct?

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

**Correct Answer: D**

**Explanation:**

Maize requires moderate temperature, rainfall and lots of sunshine. It needs well-drained fertile soils.

48. Nuclear energy is dependent on the availability of naturally occurring radioactive elements like uranium and thorium. Consider the following statements in this context:

- 1. In India, Rajasthan and Jharkhand have large deposits of Thorium.
- 2. Uranium is found in large quantities in the Monazite sands of Kerala.

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

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

**Correct Answer: D**

**Explanation:**

In India Rajasthan and Jharkhand have large deposits of Uranium. Thorium is found in large quantities in the Monozite sands of Kerala.

49. Which of the following places in India houses both Mangroves and Tropical Evergreen forests?

1. Andaman and Nicobar Islands
2. Sunderbans
3. Bhitarkanika
4. Pichavaram
5. Gulf of Kutchh

Select the correct answer using the codes below:

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

**Correct Answer: A**

**Explanation:**

Except Andaman and Nicobar all other places mentioned have mangroves but not evergreen tropical forests

50. Which of the following fresh water reserve is available and fit for human consumption?

1. Glaciers
2. Ice-sheets
3. Water in rivers and lake
4. Water vapor
5. Ground water

Code:

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

**Correct Answer: D**

**Explanation:**

The ocean water is however saline and not fit for human consumption. Fresh water accounts for only about 2.7 per cent. Nearly 70 per cent of this occurs as ice sheets and glaciers in Antarctica, Greenland and mountain regions. Due to their location they are inaccessible. Only 1 per cent of freshwater is available and fit for human use. It is found as ground water, as surface water in rivers and lakes and as water vapour in the atmosphere.

51. On the basis of the development and use, the natural resources are classified into the following groups:

1. Actual and potential resources
2. Abiotic and biotic resources
3. Domestic and commercial resources

Select the correct answer using the codes given below:

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

**Correct Answer: A**

**Explanation:**

Natural resources are classified into different groups depending upon their level of development and use, origin, stock and distribution.

On the basis of their:

Development and use- actual and potential resources.

Origin- abiotic and biotic

Stock- renewable and nonrenewable

Distribution- ubiquitous and localised

52. Which of the following are mitigation techniques of landslide?

1. Mapping of the areas prone to landslides.
2. Construction of retention wall.
3. Increasing the vegetation cover.

Select the correct answer using the codes given:

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

**Correct Answer: D**

**Explanation:**

All of the above are techniques to mitigate landslides.

53. Equator receives comparatively less insolation than the tropics. Why?

- (a) Because of more cloudiness at the equators
- (b) Because of the heat transfer by trade winds from equator to tropics
- (c) Because of the presence of more vegetation at equators
- (d) None of the above

**Correct Answer: A**

**Explanation:**

Maximum insolation is received over the sub tropical deserts, where the cloudiness is the least. Equator receives comparatively less insolation than the tropics

54. Consider the following statements:

1. Metallic minerals are found generally in the sedimentary rock formations.
2. Non metallic minerals are found generally in the igneous rock formations.
3. Mineral fuels are found generally in metamorphic rock formations.

Select the correct answer using the codes given below?

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

**Correct Answer: D**

**Explanation:**

Minerals occur in different types of rocks:

Generally, Metallic minerals are found in igneous and metamorphic rock formations.

Sedimentary rocks formations of plains and young fold mountains contain non metallic minerals.e.g. limestone phosphate etc

Mineral fuels such as coal and petroleum are also found in the sedimentary strata.

55. Africa is the largest producer of which of the following minerals in the world?

1. Gold
2. Diamond
3. Platinum
4. Oil

Select the correct answer using the codes given below:

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

**Correct Answer: C**

**Explanation:**

Africa is rich in mineral resources. But the required technology could not be developed to harness the full potential of these resources.

It is the world's largest producer of diamond, gold and platinum.

South Africa is also leading producer of diamond.

Oil is found in Nigeria Angola and Libya.

56. Which of the following are correctly matched?

- |                        |                 |
|------------------------|-----------------|
| 1. Sardar Sarovar Dam  | : Narmada river |
| 2. Bhakhra Nangal Dam  | : Sutlej river  |
| 3. Indira Sagar Dam    | : Tapti river   |
| 4. Nagarjuna Sagar Dam | : Kaveri river  |

Select the correct answer using the codes given below?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 3 and 4 only
- d) All of the above

**Correct Answer: A**

**Explanation:**

Indira Sagar dam: Narmada river

Nagarjuna Sagar dam: Krishna river

57. Consider the following statements:

- 1. Organic manure and natural pesticides are used in the organic farming.
- 2. In organic farming, genetic modification is done to increase the yield.

Select the correct answer using the codes below:

- a) 1 only
- b) 2 only
- c) Both
- d) None

**Correct Answer: A**

**Explanation:**

Organic Farming: In this type of farming, organic manure and natural pesticides are used instead of chemicals. No genetic modification is done to increase the yield of the crop.

58. Consider the following statements:

- 1. Intensive subsistence agriculture includes shifting cultivation and nomadic herding.
- 2. In primitive subsistence agriculture the farmers cultivate small plot of land using simple tools and more labor to cultivate more than one crop annually.

Select the correct answer using the codes given below:

- a) 1 only
- b) 2 only
- c) Both
- d) None

**Correct Answer: D**

**Explanation:**

Primitive subsistence agriculture includes shifting cultivation and nomadic herding. In intensive subsistence agriculture the farmers cultivate small plots of land using simple tools and more labour is the most optimal and round the year. It is prevalent in the thickly populated areas of monsoon regions of south, southeast, and East Asia.

59. Which of the following are the specific conditions for jute cultivation?

1. Alluvial soils
2. High temperature
3. More than 210 Frost free days
4. Heavy rainfall

Select the correct answer using the codes given below:

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 2 and 4 only
- d) All of the above

**Correct Answer: C**

**Explanation:**

At least 210 Frost free days are suitable condition for the cotton cultivation and not jute.

60. Which of the following are small scale industries?

1. Handicraft industries
2. Silk weaving industries
3. Pig iron industries

Select the correct answer using the codes given below?

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

**Correct Answer: A**

**Explanation:**

Based on size, industries can be classified into small scale and large scale industries. Cottage or household industries are a type of small scale industry where the products are manufactured by hand, by the artisans. Basket weaving, pottery and other handicrafts are examples of cottage industry. Small scale industries use lesser amount of capital and technology as compared to large scale industries.

Silk weaving and food processing industries are small scale industries

61. With reference to the National Register of Citizens (NRC), which of the following is/are correct?

1. NRC is a citizen register, containing the names of every citizen of India.
2. It has been prepared only once after the Census of 1951.

Choose the correct answer from the codes given below:

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

**Correct Answer: C**

**Explanation:**

National Register of Citizens (NRC) is a citizen register, in which names of every citizen of India is recorded. Hence, statement 1 is correct.

It has been mentioned in The Citizenship Act of 1955.

The only time that a National Register of Citizens (NRC) was prepared was in 1951 after the Census of 1951 in Assam. Hence, statement 2 is correct.

62. Which of the following was determined by the Gadgil-Mukherjee Formula?

- a) Distribution of Central Plan Assistance to States
- b) Poverty Line estimation
- c) Fiscal Responsibility and Budget Management parameters
- d) External commercial borrowing limits

**Correct Answer: A**

**Explanation:**

The Gadgil-Mukherjee Formula for allocation of Central Plan Assistance to states was adopted by the National Development Council (NDC) meeting held in 1990.

On the demand of State Governments for a revision, a Committee under Shri Pranab Mukherjee, then Deputy Chairman, Planning Commission was constituted to evolve a suitable formula. The suggestions made by the Committee were considered by NDC in December 1991, where following a consensus, the Gadgil-Mukherjee Formula was adopted.

It was made the basis for allocation post 8th FYP (1992-97). After setting apart funds required for (a) Externally Aided Projects and (b) Special Area Programme, 30% of the balance of Central Assistance for State Plans is provided to the Special Category States. The remaining amount is distributed among the non-Special Category States, as per Gadgil-Mukherjee Formula.

63. Consider the following statements regarding the PM- Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM):

1. Renewable power plants will be setup by individual farmers, cooperatives, panchayats, farmer producer organisations (FPO) on their barren or cultivable lands.
2. Individual farmers will be supported to install standalone solar pumps.

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

**Correct Answer: C**

**Explanation:**

Both statements are correct.

The PM KUSUM scheme aims to add solar and other renewable capacity of 25,750 MW by 2022.

The Scheme consists of three components:

Component A: 10,000 MW of Decentralized Ground Mounted Grid Connected Renewable Power Plants of individual plant size up to 2 MW.

-Renewable power plants of capacity 500 KW to 2 MW will be set up by individual farmers/cooperatives/panchayats /farmer producer organisations (FPO) on their barren or cultivable lands. The power generated will be purchased by the DISCOMs at Feed in tariffs determined by respective SERC.

Component B: Installation of 17.50 lakh standalone Solar Powered Agriculture Pumps of individual pump.

-Individual farmers will be supported to install standalone solar Agriculture pumps of capacity up to 7.5 HP.

Component C: Solarisation of 10 Lakh Grid-connected Agriculture Pumps of individual pump capacity up to 7.5 HP.

-Individual farmers will be supported to solarise pumps of capacity up to 7.5 HP.

For both Component-B and Component-C, central financial assistance (CFA) of 30% of the benchmark cost or the tender cost, whichever is lower, will be provided. The State Government will give a subsidy of 30%; and the remaining 40% will be provided by the farmer.

64. In which of the following tiger reserves the world's largest and oldest teak tree named Kannimara is located?

- a) Dandeli Tiger Reserve
- b) Bandipur Tiger Reserve
- c) Nagarhole Tiger Reserve
- d) Parambikulam Tiger Reserve

**Correct Answer: D**

**Explanation:**

Parambikulam Tiger Reserve is a well protected ecological portion in the Nelliampathy - Anamalai landscape of the Southern Western Ghats in India.

It is located in the Palakkad District of Kerala.

It was declared as Tiger Reserve during 2008-09.

The reserve is credited with the first scientifically managed teak plantation in the world which was later merged with the forest land.

It has the world's largest and oldest teak tree. Named "Kannimara" (corrupt version of Irish name Connemara), the tree is believed to be 350 years old and has a height of 40m and girth of 6.4m. Hence, option D is correct.

65. Which of the following country(s) has/have recently proposed a Supply Chain Resilience in Indo-Pacific initiative?

- 1. United States of America
- 2. Japan
- 3. Australia

Select the correct answer using the code given below:

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

**Correct Answer: B**

**Explanation:**

Australia-India-Japan Economic Ministers trilateral meeting proposed an initiative for Supply chain resilience in the Indo- Pacific.

The joint statement reads "In light of the COVID-19 crisis and the recent global-scale changes in the economic and technological landscape, the Ministers underscored the necessity and potential to enhance the resiliency of supply chains in the Indo-Pacific region.

Recognizing the pressing need for regional cooperation on supply chain resilience in the Indo-Pacific, the Ministers shared their intention to work toward the launch of a new initiative to achieve the objective through cooperation. They instructed their officials to promptly work out the details of the new initiative for its launch later this year. The Ministers noted the important role of business and academia in realizing the objective."

66. With reference to the Question Hour, consider the following statements:

1. Question Hour in Rajya Sabha is held only on alternative days of the session.
2. There is no Question Hour on the day the President addresses MPs from both Houses in the Central Hall.

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

**Correct Answer: B**

**Explanation:**

The Lok Sabha and Rajya Sabha secretariats notified that there will be no Question Hour during the Monsoon Session of Parliament, which has been truncated to September 14-October 1 in view of the Covid-19 pandemic, and that Zero Hour will be restricted in both Houses. Opposition MPs have criticised the move, saying they will lose the right to question the government.

It is during Question Hour that Members of Parliament ask questions of ministers and hold them accountable for the functioning of their ministries. The questions that MPs ask are designed to elicit information and trigger suitable action by ministries.

Prior to Independence, the first question asked of government was in 1893. It was on the burden cast on village shopkeepers who had to provide supplies to touring government officers.

Parliament has comprehensive rules for dealing with every aspect of Question Hour. And the presiding officers of the two houses are the final authority with respect to the conduct of Question Hour.

Question Hour in both Houses is held on all days of the session. But there are two days when an exception is made.

There is no Question Hour on the day the President addresses MPs from both Houses in the Central Hall.

Question Hour is not scheduled either on the day the Finance Minister presents the Budget. Hence only statement 2 is correct.

67. With reference to the Merchandise Exports from India Scheme consider the following statements:

1. It is introduced under New Import Export Code (IEC).
2. It seeks to provide duty benefits to exporters.

Which of the statements given above is/are correct?

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

**Correct Answer: B**

**Explanation:**

The Merchandise Exports from India Scheme (MEIS) was introduced in the Foreign Trade Policy (FTP) 2015-20 w.e.f. 1st April 2015. Hence, statement 1 is not correct.

The new Import Export Code (IEC) obtained on or after 1st September will be ineligible to submit any MEIS claim for exports.

Import Export Code: It is issued by the DGFT (Director General of Foreign Trade - Ministry of Commerce and Industry).

IEC is a 10-digit code which has a lifetime validity.

Predominantly importers cannot import goods without the Import Export Code and similarly, the exporter merchant cannot avail benefits from DGFT for the export scheme, etc. without IEC.

The objective of this scheme is the government provides duty benefits depending on product and country. Hence, statement 2 is correct.

This is done by offsetting infrastructural inefficiencies and associated costs involved in exporting goods/products which are produced/manufactured in India including products produced/manufactured by MSME Sector.

68. With reference to UNSC Resolution 1267 Sanctions Committee, consider the following statements:

1. The committee under resolutions 1267 can designate a person as global terrorists.
2. It is one of the most important and active UN subsidiary bodies working on efforts to combat terrorism.
3. Even a permanent five (P-5) member of UNSC cannot use Veto against the decision of this committee.

Which of the statements given above is/are correct?

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

**Correct Answer: B**

**Explanation:**

UNSC Resolution 1267 Sanctions Committee oversees the implementation of sanctions pursuant to UNSC resolutions 1267.

The committee under resolutions 1267 can designate a person as global terrorists. Jaish-e-Mohammed chief Masood Azhar was listed as a global terrorist under the same resolution. Hence, statement 1 is correct.

It was adopted unanimously on 15th October 1999.

It is one of the most important and active UN subsidiary bodies working on efforts to combat terrorism, particularly in relation to Al Qaeda, Taliban and the Islamic State group. It prepares a consolidated list of people associated with these organizations. Hence, statement 2 is correct.

It discusses UN efforts to limit the movement of terrorists, especially those related to travel bans, the freezing of assets and arms embargoes for terrorism.

In 2019, Pakistan moved a proposal to declare four Indians working in Afghanistan as terrorists with links to Tehreek-e-Taliban Pakistan (TTP) and Jamaat-UI-Ahrar (JuA).

This proposal received a veto from the USA in UNSC. Veto power exists. Hence, statement 3 is not correct.

69. Consider the following statements regarding the National Initiative for Developing and Harnessing Innovations (NIDHI):

1. It is an umbrella programme of Department of Science and Technology (DST) for nurturing ideas and innovations.
2. Entrepreneurs-in-Residence (EIR) Programme under NIDHI provides subsistence grant to entrepreneurs for pursuing a promising technology business idea.

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

**Correct Answer: C**

**Explanation:**

Statement 1 is correct. The National Initiative for Developing and Harnessing Innovations (NIDHI) is an umbrella programme developed by the Innovation & Entrepreneurship division, Department of Science & Technology for nurturing ideas and innovations (knowledge-based and technology-driven) into successful startups.

NIDHI has following program components:

- Technology Business Incubator (TBI) – Converting Innovations to start-ups
- Accelerator – Fast tracking a start-up through focused intervention;
- Seed Support System (NIDHI-SSS)- Providing early stage investment;
- Centers of Excellence (NIDHI-CoE) – A World class facility to help startups go global;
- Promotion and Acceleration of Young and Aspiring technology entrepreneurs (NIDHI-PRAYAS)
- Support from Idea to Prototype
- Entrepreneur-In-Residence (EIR)

Statement 2 is correct. Entrepreneurs-in-Residence (EIR) Programme under NIDHI supports aspiring entrepreneur of considerable potential for pursuing a promising technology business idea over a period up to 18 months with a subsistence grant up to Rs 30000 per month with a maximum cap for total support of Rs 3.6 lakh to each EIR over a maximum of 18 months.

70. With reference to the India Bangladesh inland waterways, consider the following statements:

1. The opening of the new river route from Daudkandi in Bangladesh to Sonamura in Tripura follows the signing of the 2nd addendum to the Protocol for Inland Water Trade & Transit (PIWTT) in May 2020 which opened two new routes.
2. The PIWTT was signed between India and Bangladesh in 1972 to connect the two countries through inland waterways.

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

**Correct Answer: C**

**Explanation:**

The trial run on new river route from Daudkandi in Bangladesh to Sonamura in Tripura started as the MV Premier sailed from Daudkandi with 50 metric tonne of cement cargo.

It is scheduled to arrive in Sonamura in Tripura after covering a distance of 93 kilometers through river Gumti.

The route will connect Tripura with Bangladesh using the inland waterways for the first time. This is yet another recent connectivity initiative with Bangladesh, which will greatly enhance connectivity between Bangladesh and the North Eastern states of India boosting bilateral trade with Bangladesh.

The opening of the new route follows the signing of the 2nd addendum to the Protocol for Inland Water Trade & Transit (PIWTT) in May 2020 which opened two new routes. The PIWTT was signed between India and Bangladesh in 1972 to connect the two countries through inland waterways.

Hence both statements are correct.

71. With reference to the Official Languages in India, consider the following statements:

1. Hindi & English are the only languages for transactions of business in parliament.
2. Part XVII of the Indian Constitution deals with the official languages.
3. English is an official language under Eighth schedule.

Which of the statements given above is/are correct?

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

**Correct Answer: B**

**Explanation:**

Article 120 (Language to be used in Parliament) provides for use of Hindi or English for transactions of parliament but gives the right to members of parliament to express themselves in their mother tongue. Hence, statement 1 is correct.

Article XVII of the Indian Constitution deals with the official languages in Articles 343 to 351. Hence, statement 2 is correct.

The Eighth Schedule recognises following 22 languages as official languages: Assamese, Bengali, Gujarati, Hindi, Kannada, Kashmiri, Konkani, Malayalam, Manipuri, Marathi, Nepali, Oriya, Punjabi, Sanskrit, Sindhi, Tamil, Telugu, Urdu, Bodo, Santhali, Maithili and Dogri.

English is not part of languages under Eighth schedule. Hence, statement 3 is not correct.

72. With reference to the draft of Data Empowerment and Protection Architecture (DEPA), which of the following is/are correct?

1. It is a draft released by the RBI which aims at empowering individuals with control over their banking data.
2. It will involve the creation of new market players known as User Consent Managers.

Choose the correct answer using the codes given below.

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

**Correct Answer: B****Explanation:**

Niti Ayog has released a draft Data Empowerment and Protection Architecture (DEPA) which aims to promote greater user control on data sharing. Hence statement 1 is not correct.

DEPA's Institutional Architecture will involve the creation of new market players known as User Consent Managers. Hence statement 2 is correct.

These will ensure that individuals can provide consent as per an innovative digital standard for every data shared.

These Consent Managers will also work to protect data rights.

73. Consider the following statements regarding the Group of Twenty or G20:

1. The G-20's primary mandate is to prevent future international financial crises and shape the global economic agenda.
2. India has proposed development of voluntary 'G-20 Principles on Coordinated Cross-Border Movement of People'.

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

**Correct Answer: C**

**Explanation:**

Statement 1 is correct. The Group of Twenty, or G20, is the premier forum for international cooperation on the most important aspects of the international economic and financial agenda.

The objectives of the G20 are:

- Policy coordination between its members in order to achieve global economic stability, sustainable growth;
- To promote financial regulations that reduce risks and prevent future financial crises; and
- To create a new international financial architecture.

Statement 2 is correct. The G20 Foreign Ministers' Extraordinary Meeting was convened by the current G20 Chair, the Kingdom of Saudi Arabia on 3rd September, 2020.

India has proposed for the development of voluntary 'G-20 Principles on Coordinated Cross-Border Movement of People' with three elements: a) Standardisation of testing procedures and universal acceptability of test results; b) Standardisation of 'Quarantine procedures'; c) Standardisation of 'movement and transit' protocols.

The G20 comprises Argentina, Australia, Brazil, Canada, China, EU, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, UK and USA.

74. With reference to the Priority Sector Lending guidelines, consider the following statements:

1. In the revised guidelines, higher weightage have been assigned to incremental priority sector credit in identified districts where priority sector credit flow is comparatively low.
2. Loan limits for renewable energy have been decreased under the revised guidelines.

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

**Correct Answer: A**

**Explanation:**

Reserve Bank of India has revised Priority Sector Lending guidelines to address regional disparities in the flow of priority sector credit.

In the revised guidelines, higher weightage have been assigned to incremental priority sector credit in identified districts where priority sector credit flow is comparatively low. Bank finance to start-ups up to 50 crore rupees, loans to farmers for installation of solar power plants for solarisation of grid connected agriculture pumps and loans for setting up Compressed Bio Gas (CBG) plants have been included as fresh categories eligible for finance under priority sector.

The targets prescribed for “small and marginal farmers” and “weaker sections” are being increased in a phased manner.

Loan limits for renewable energy have been increased under the revised guidelines.

For improvement of health infrastructure, credit limit for health infrastructure (including those under ‘Ayushman Bharat’) has been doubled, the RBI said.

Priority sector loans refer to loans that banks need to mandatorily lend to economically weaker sections of the society.

Hence, option (a) is the correct answer.

75. With reference to the Indo-Pacific club, consider the following statements:

1. Germany has joined the Indo-Pacific club.
2. Germany will be the first European nation to formally adopt a strategy for the Indo-Pacific region.

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

**Correct Answer: A**

**Explanation:**

Germany has joined the Indo-Pacific club. The move is aimed at securing the trade routes from aggressive China.

Germany has drafted a 40-page guidelines as it formally adopts a strategy for the Indo-Pacific region.

The move makes it the second European nation after France to formally adopt a strategy for the Indo-Pacific region.

The strategy is designed to allow Germany to make an active contribution to shaping the international order in the Indo-Pacific.

The move by Germany augurs well for the Quad which is constituted by the United States, Japan, Australia, and India.

Hence only statement 1 is correct.

76. ‘Nord Stream 2’ is a gas pipeline between which of the following two countries?

- a) Russia and France
- b) Russia and Germany
- c) Germany and Sweden
- d) Sweden and Poland

**Correct Answer: B**

**Explanation:**

Nord Stream 2 is a nearly constructed 1,200-kilometre pipeline from Russia to Germany via the Baltic Sea.

It will run alongside the already constructed Nord Stream and will double the amount of gas being funneled through the Baltics to 110 billion cubic meters per year. Hence, option B is correct.

77. Recently the Yanomami Tribe has been in the news. It belongs to which of the following geographical regions?

- a) Amazon forests
- b) Naga hills
- c) Papua New Guinea
- d) Falkland Islands

**Correct Answer: A**

**Explanation:**

The Yanomami tribe has launched a global campaign to expel 20,000 gold miners from their land amid the coronavirus pandemic.

Yanomami, also called South American Indians, live in the remote forest of the Orinoco River basin in southern Venezuela and the northernmost reaches of the Amazon River basin in northern Brazil. Hence, option is A is correct.

Yanomami live in small, scattered, semi permanent villages and speak the Xirianá language. They practice hunting and slash-and-burn agriculture.

Guarani, Kaingang, Pataxó Hã Hã Hãe Tupinambá, Yanomami, Tikuna and Akuntsu are popular tribe of Amazon.

78. Consider the following statements regarding the International Covenant on Civil and Political Rights (ICCPR):

1. It forms part of the International Bill of Human Rights.
2. India has acceded to the ICCPR.

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

**Correct Answer: C**

**Explanation:**

Statement 1 is correct. The International Bill of Human Rights consists of the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights, and the International Covenant on Civil and Political Rights (ICCPR) and its two Optional Protocols.

The ICCPR obligates countries that have ratified the treaty to protect and preserve basic human rights, such as: the right to life and human dignity; equality before the law; freedom of speech, assembly, and association; religious freedom and privacy; freedom from torture, ill-treatment, and arbitrary detention; gender equality; the right to a fair trial; right family life and family unity; and minority rights.

Statement 2 is correct. India acceded to the ICCPR on 10 Apr 1979.

79. Consider the following statements regarding the Scramjet engines:

1. It operates by combustion of fuel in a stream of air compressed by the forward speed of the aircraft itself.
2. The airflow through the engine remains supersonic, or greater than the speed of sound.

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

**Correct Answer: C**

**Explanation:**

Both statements are correct.

A ramjet operates by combustion of fuel in a stream of air compressed by the forward speed of the aircraft itself, as opposed to a normal jet engine, in which the compressor section (the fan blades) compresses the air. The air flow through a ramjet engine is subsonic, or less than the speed of sound. Ramjet-propelled vehicles operate from about Mach 3 to Mach 6.

A scramjet (supersonic-combustion ramjet) is a ramjet engine in which the airflow through the engine remains supersonic, or greater than the speed of sound. Scramjet powered vehicles are envisioned to operate at speeds up to at least Mach 15.

80. Which of the following location(s) is/are in Ladakh Union Territory?

1. Chusul
2. Spanggur Lake
3. Depsang Plains

Select the correct answer using the code given below:

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

40 **Correct Answer: D**

**Explanation:**

All of the above locations are around the Line of Actual Control that separates the Indian and Chinese controlled regions in Ladakh UT.

81. With reference to recently released report 'Household Social Consumption: Education in India' as part of NSO Survey (2017-18), consider the following statements:

1. More than 50% of the households in India had internet access.
2. Gross Attendance Ratio (GAR) at primary level was nearly 100%.

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

**Correct Answer: B**

**Explanation:**

Recently, the National Statistical Organisation (NSO) released a report 'Household Social Consumption: Education in India', as part of the 75th round of National Sample Survey (July 2017 to June 2018). Some of the findings are as follows:

Nearly 4% of rural households and 23% of urban households possessed computers and 24% of the households in the country had internet access. Hence, statement 1 is not correct.

Among persons of age 15-29 years, nearly 24% in rural areas and 56% in urban areas were able to operate a computer.

Gross Attendance Ratio (GAR) at primary level was nearly 100% for both males and females in rural and urban areas. Hence, statement 2 is correct.

For each level of education, GAR is the ratio of the number of persons attending in the level of education (For eg. Class I-V) to the number of persons in the corresponding official age-group (For eg. Total Population of age group 6-10).

82. Consider the following statements regarding the 'Health in India' report recently published by the National Statistical Organisation (NSO):

1. More than 90 percent of children in India are vaccinated against tuberculosis.
2. Across the country, three-fourth of children under five years are fully immunised,

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

**Correct Answer: A**

**Explanation:**

The 'Health in India' report recently published by the National Statistical Organisation (NSO) is based on the 75th round of the National Sample Survey (July 2017-June 2018) on household social consumption related to health.

Statement 1 is correct. Almost 94 percent of the children in India are vaccinated by BCG vaccine injected in a single dose shortly after birth, which protects against a childhood attack of tuberculosis.

Statement 2 is incorrect. As per the report, only 59.2% of children under five years are fully immunised across the country. This contradicts the Centre's Health Management Information System portal data, which claimed that full immunisation coverage for 2017-18 stood at 86.7%.

Full immunisation means:

The BCG vaccine; the measles vaccine; the oral polio vaccine (OPV) whose first dose is given at birth, followed by two more doses at intervals of four weeks; and the DPT/pentavalent vaccine, which is meant to protect a child from diphtheria, pertussis or whooping cough, tetanus, Hepatitis B, and meningitis and pneumonia caused by hemophilus influenza type B.

Booster doses for OPV and DPT are also given between 16 and 24 months.

83. With reference to Jnanpith Award, consider the following statements:

1. The award is given for literary work in Indian languages only.
2. The award is open only for Indian citizens.

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

**Correct Answer: B**

**Explanation:**

Jnanpith Award has achieved the recognition of the highest literary award of the country. English along with other Indian languages is considered for the Award. Hence, statement 1 is not correct.

In 2019, author Amitav Ghosh was felicitated with 54th Jnanpith Award. He became the first English language writer to become a Jnanpith laureate.

The Award is open for only Indian citizens and is given annually. Hence, statement 2 is correct. The prize carries a cash award of Rs. 11 lakhs, a citation, and a bronze replica of Vagdevi (Saraswati), the goddess of learning.

It is sponsored by the cultural organization Bharatiya Jnanpith.

84. With reference to the Multidimensional Poverty Index (MPI), consider the following statements:

1. Department of Science and Technology is the nodal agency for the MPI.
2. The Global MPI is part of the government's decision to monitor the performance of the country on 29 select global indices.

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

**Correct Answer: B**

**Explanation:**

NITI Aayog said it is at an advanced stage for preparation of a Multidimensional Poverty Index (MPI) parameter dashboard to rank states and Union Territories, along with a State Reform Action Plan (SRAP).

As the Nodal agency for the MPI, NITI Aayog has constituted a Multidimensional Poverty Index Coordination Committee (MPICC). The MPICC, chaired by Ms Sanyukta Samaddar, Adviser (SDG) has members from relevant Line Ministries and Departments. The committee held its first meeting on September 2.

The Global MPI is part of the government's decision to monitor the performance of the country on 29 select global indices.

Global MPI is an international measure of multidimensional poverty covering 107 developing countries. It was first developed in 2010 by Oxford Poverty and Human Development Initiative and United Nations Development Programme for UNDP's Human Development Reports.

The Global MPI is released at the High-Level Political Forum (HLPF) on Sustainable Development of the United Nations in July, every year.

The dimensions of poverty range from deprivations of health facilities, education and living standards.

Global MPI is computed by scoring each surveyed household on 10 parameters based on - nutrition, child mortality, years of schooling, school attendance, cooking fuel, sanitation, drinking water, electricity, housing and household assets.

Hence only statement 2 is correct.

85. Which of the following statement correctly defines a 'Status of forces agreement' (SOFA)?

- a) Agreement to maintain status quo at border region between two nations
- b) A regional agreement to maintain nuclear-weapon-free zone
- c) Agreement of mutual defense in case of external aggression
- d) Agreement between a host country and a foreign nation for stationing military forces

**Correct Answer: D**

**Explanation:**

A status of forces agreement (SOFA) is an agreement between a host country and a foreign nation stationing military forces in that country. It establishes the rights and privileges of foreign personnel present in a host country in support of the larger security arrangement.

United States military has the largest foreign presence and therefore accounts for most SOFAs, the United Kingdom, France, Australia, Germany, Italy, Russia, Spain, and many other nations also station military forces abroad and negotiate SOFAs with their host countries.

# The US has decided to withdraw more than a third of its troops from Iraq.

86. Consider the following statements regarding the Jigyasa programme:

- 1. It is a student-scientist connect programme focusing on research laboratory-based learning.
- 2. It is being implemented by the Council of Scientific and Industrial Research (CSIR).

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

**Correct Answer: C**

**Explanation:**

Both statements are correct.

JIGYASA is a student-scientist connect programme of Council of Scientific and Industrial Research (CSIR) in collaboration with Kendriya Vidyalaya Sangathans (KVS). Its objective is to extend the classroom learning and focusing on a well-planned research laboratory-based learning.

Student Residential Programmes, scientists as teachers and teachers as scientists, lab specific activities/Onsite Experiments, visits of scientists to Schools/Outreach Programmes, science and maths Clubs, projects of National Children's Science Congress and tinkering laboratories are some of the activities included under the programme.

87. Which of the following institution has recently released the 'Ecological Threat Register' report?

- a) Institute for Economics and Peace
- b) Intergovernmental Panel on Climate Change
- c) International Union for Conservation of Nature
- d) United Nations Framework Convention on Climate Change

**Correct Answer: A**

**Explanation:**

The 2020 Ecological Threat Register (ETR) is the inaugural edition which covers 157 independent states and territories. It has been released by the Institute for Economics and Peace (IEP).

The ETR measures ecological threats that countries are currently facing and provides projections to 2050. The Ecological Threat Register analyses risk from population growth, water stress, food insecurity, droughts, floods, cyclones, rising temperatures and sea levels.

Report highlights:

-Over the next 30 years, 141 countries are exposed to at least one ecological threat by 2050.

-Country with the largest number of people at risk of mass displacements in Pakistan, followed by Ethiopia and Iran. In these countries, even small ecological threats and natural disasters could result in mass population displacement, affecting regional and global security.

-Today, 2.6 billion people experience high or extreme water stress – by 2040, this will increase to 5.4 billion people.

-So far, India received the largest amount of climate-related aid in 2018, amounting to the US \$6.5 billion dollars.

88. Which of the following is/are correctly matched?

- 1. RECOVERY trial – Coalition for Epidemic Preparedness Innovations
- 2. Solidarity trial – World Health Organization
- 3. COVAX – Gavi, the Vaccine Alliance

Select the correct answer using the code given below:

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

**Correct Answer: B**

**Explanation:**

Option 1 is incorrect. Randomised Evaluation of COVID-19 Therapy (RECOVERY Trial) is supported by a grant to the University of Oxford from United Kingdom Research and Innovation/National Institute for Health Research (NIHR).

RECOVERY Trial is currently testing some of these suggested treatments:

45 -Low-dose Dexamethasone (now only recruiting children)

-Azithromycin (a commonly used antibiotic)

-Tocilizumab (an anti-inflammatory treatment given by injection)

-Convalescent plasma (collected from donors who have recovered from COVID-19 and contains antibodies against the SARS-CoV-2 virus).

Option 2 is correct. Solidarity is an international clinical trial to help find an effective treatment for COVID-19, launched by the World Health Organization and partners.

The treatment options are: Remdesivir and Lopinavir/Ritonavir with Interferon beta-1a. On 4 July 2020, WHO accepted the recommendation from the Solidarity Trial's International Steering Committee to discontinue the trial's hydroxychloroquine and lopinavir/ritonavir arm.

Option 3 is correct. COVAX is co-led by Gavi, the Coalition for Epidemic Preparedness Innovations (CEPI) and WHO. Its aim is to accelerate the development and manufacture of COVID-19 vaccines, and to guarantee fair and equitable access for every country in the world.

COVAX is the vaccines pillar of the Access to COVID-19 Tools (ACT) Accelerator.

89. Which of the following is/are correctly matched?

1. Serathang – Arunachal Pradesh
2. Nathu La pass – Sikkim
3. Lipulekh Pass – Uttarakhand

Select the correct answer using the code given below:

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

**Correct Answer: B**

**Explanation:**

Option 1 is incorrectly matched. Sherathang is a town in Sikkim near the Nathula Pass in India. The location is the site for excise, customs and checking for trade between India and China. Ringingang is the corresponding location in China.

Option 2 is correctly matched. Lipulekh is a Himalayan pass on the border between Uttarakhand state and the Tibet region of China, near their trijunction with Nepal.

Option 3 is correctly matched. Nathu La is a mountain pass in the Himalayas in East Sikkim district. It connects the Indian state of Sikkim with China's Tibet Autonomous Region.

# Ministry of External Affairs organizes Kailash Mansarovar Yatra during June to September through two different routes – Lipulekh Pass (Uttarakhand) and Nathu La Pass (Sikkim).

90. Which of the following is/are not covered by the definition of 'foreign source' under the Foreign Contribution (Regulation) Act, 2010?

1. Government of any foreign country
2. International Monetary Fund
3. Intergovernmental Panel on Climate Change

Select the correct answer using the code given below:

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

**Correct Answer: B**

**Explanation:**

The Foreign Contribution (Regulation) Act, 2010 regulates foreign donations and ensures that such contributions do not adversely affect internal security.

Some of the Foreign Sources, as defined in Section 2(1) (j) of FCRA, 2010 include:

- the Government of any foreign country or territory and any agency of such Government;
- any international agency, not being the United Nations or any of its specialized agencies, the World Bank, International Monetary Fund or such other agency as the Central Government may notify;

Central Govt. has notified several international bodies to be not covered by the definition of 'foreign source'. The list among others includes Intergovernmental Panel on Climate Change (IPCC), Geneva.

- a trade union in any foreign country or territory;
- a foreign trust or a foreign foundation;
- a society, club or other association or individuals formed or registered outside India;
- a citizen of a foreign country.

91. Consider the following statements regarding the Solar Cycle 25:

statements regarding the Solar Cycle 25:

1. It has concluded in 2019 and the Solar Cycle 26 has begun.
2. The beginning of the solar cycle is the solar maximum, when the Sun has the most sunspots.

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

**Correct Answer: D**

**Explanation:**

The solar cycle is the cycle that the Sun's magnetic field goes through approximately every 11 years. This means that the Sun's north and south poles switch places. Then it takes about another 11 years for the Sun's north and south poles to flip back again.

Statement 1 is incorrect. Recently, scientists from NASA and the National Oceanic and Atmospheric Administration (NOAA), USA announced their predictions about the new solar cycle, called Solar Cycle 25, which they believe has begun.

The Solar Cycle 25 Prediction Panel, an international group of experts co-sponsored by NASA and NOAA, announced that solar minimum occurred in December 2019, marking the start of a new solar cycle. Because our Sun is so variable, it can take months after the fact to declare this event. Scientists use sunspots to track solar cycle progress.

Statement 2 is incorrect. The beginning of a solar cycle is a solar minimum, or when the Sun has the least sunspots. Over time, solar activity and the number of sunspots increase.

The middle of the solar cycle is the solar maximum, or when the Sun has the most sunspots. As the cycle ends, it fades back to the solar minimum and then a new cycle begins.

92. Consider the following statements regarding the Charter of the United Nations:

1. General Assembly (UNGA) elects the non-permanent members of the Security Council.
2. The UNGA cannot make recommendations on peace and security matters which are at that time being addressed by the Security Council.

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

**Correct Answer: C**

**Explanation:**

The UNGA comprises of all 193 Members of the United Nations. The Assembly meets from September to December each year (main part), and thereafter, from January to September (resumed part).

Statement 1 is correct. According to the Charter of the United Nations, decisions of the General Assembly on important questions shall be made by a two-thirds majority of the members present and voting. These questions include:

-recommendations with respect to the maintenance of international peace and security, the election of the non-permanent members of the Security Council, the election of the members of the Economic and Social Council, the election of members of the Trusteeship Council, the admission of new Members to the United Nations, the suspension of the rights and privileges of membership, the expulsion of Members.

Statement 2 is correct. Under the UN Charter, while the Security Council is exercising in respect of any dispute or situation the functions assigned to it in the present Charter, the General Assembly shall not make any recommendation with regard to that dispute or situation unless the Security Council so requests.

# Despite the UN Charter's provision limiting the General Assembly's powers with regard to peace and security matters; there may be cases when the Assembly can act.

# In accordance with the General Assembly's "Uniting for Peace" resolution of November 1950, in the case there appears to be a threat to the peace, breach of the peace or act of aggression and if the Security Council fails to act, owing to the negative vote of a permanent member, then the General Assembly may act.

# This resolution was invoked only once in UN peacekeeping history, when in 1956 the General Assembly established the First UN Emergency Force (UNEF I) in the Middle East.

93. Consider the following statements regarding the Blue Flag certification:

1. It is an eco-label awarded to beaches, marinas, and sustainable boating tourism operators.
2. The certification is accorded by UN Environment Program under Ramsar Convention.

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

**Correct Answer: A**

**Explanation:**

Statement 1 is correct. The iconic Blue Flag is one of the world's most recognized voluntary eco-labels awarded to beaches, marinas, and sustainable boating tourism operators.

In order to qualify for this prestigious award, a series of stringent environmental, educational, safety-related and access-related criteria must be met and maintained.

It has 33 stringent criteria in four major heads—environmental education and information, bathing water quality, environment management and conservation and safety and services in the beaches.

Statement 2 is incorrect. Blue Flag programme is operated under the auspices of the Foundation for Environmental Education and is headquartered in Copenhagen, Denmark.

# Eight beaches of the country have been recommended for the coveted 'Blue Flag' international eco-label: Shivrajpur in Gujarat, Ghoghla in Daman and Diu, Kasarkod and Padubidri in Karnataka, Kappad in Kerala, Rushikonda in Andhra Pradesh, Golden in Odisha and Radhanagar in Andaman and Nicobar Islands.

94. Which of the following strategic agreements has India signed with the United States of America?

1. Logistics Exchange Memorandum of Agreement
2. Communications, Compatibility and Security Agreement
3. Industrial Security Agreement

Select the correct answer using the code given below:

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

**Correct Answer: D**

**Explanation:**

The India-U.S. foundational agreement for mutual logistics support, the Logistics Exchange Memorandum of Agreement (LEMOA) was signed in 2016.

US-India concluded the third foundational agreement, Communications Compatibility and Security Agreement (COMCASA), which is meant for secure encrypted communications, in 2018.

The Industrial Security Agreement (ISA) signed in 2019 is part of the General Security of Military Information Agreement (GSOMIA).

The General Security of Military Information Agreement (GSOMIA), which is for information safety, was signed in 2002.

The last one remaining is the Basic Exchange and Cooperation Agreement for Geo-spatial Cooperation (BECA).

95. Consider the following statements regarding the CRISPR technology:

1. It is used to alter DNA sequences and modify gene function.
2. The Tata CRISPR test is the world's first diagnostic test to deploy a Cas9 protein to successfully detect the SARS-COV-2.

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

**Correct Answer: C**

**Explanation:**

Statement 1 is correct. CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats) technology is a tool for editing genomes. It allows researchers to easily alter DNA sequences and modify gene function.

CRISPRs are specialized stretches of DNA. The protein Cas9 (CRISPR-associated-9) is an enzyme that acts like a pair of molecular scissors, capable of cutting strands of DNA.

Its many potential applications include correcting genetic defects, treating and preventing the spread of diseases and improving crops.

Statement 2 is correct. The Tata CRISPR test, powered by CSIR-IGIB (Institute of Genomics and Integrative Biology) FELUDA, received regulatory approvals recently from the Drug Controller General of India (DCGI) for commercial launch.

The Tata CRISPR test is the world's first diagnostic test to deploy a specially adapted Cas9 protein to successfully detect the virus causing Covid-19.

The Tata CRISPR test achieves accuracy levels of traditional RT-PCR tests, with quicker turnaround time, less expensive equipment, and better ease of use.

# CRISPR technology was adapted from the natural defense mechanisms of bacteria and archaea (the domain of single-celled microorganisms). These organisms use CRISPR-derived RNA and various Cas proteins, including Cas9, to foil attacks by viruses and other foreign bodies. They do so primarily by chopping up and destroying the DNA of a foreign invader. When these components are transferred into other, more complex, organisms, it allows for the manipulation of genes, or "editing."

96. Which of the following is/are determinants of Minimum Support Price (MSP)?

1. Demand and supply
2. Inter-crop price parity
3. Cost of production

Select the correct answer using the code given below:

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

**Correct Answer: D**

**Explanation:**

All of the above are determinants of MSP. It is based on the recommendations of the Commission for Agricultural Costs and Prices (CACP).

The idea behind MSP is to give guaranteed prices and assured market to the farmers and save them from the price fluctuations. It insulates farmers from the unwarranted fluctuation in prices caused by the variation in supply (largely influenced by the monsoon), lack of market integration, information asymmetry and other elements of market imperfection plaguing the agricultural markets.

In formulating the recommendations in respect of the level of minimum support prices and other non-price measures, the Commission takes into account Cost of production, Changes in input prices, Input-output price parity, Trends in market prices, Demand and supply, Inter-crop price parity etc.

97. Consider the following statements regarding the membership of the UN Security Council:

1. Every member of the United Nations has at least once been member of the Security Council.
2. Ten non-permanent members of UNSC are elected for two-year terms by the General Assembly.

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

**Correct Answer: B**

**Explanation:**

Statement 1 is incorrect. More than 50 United Nations Member States have never been Members of the Security Council.

A State which is a Member of the United Nations but not of the Security Council may participate, without a vote, in its discussions when the Council considers that country's interests are affected.

Both Members and non-members of the United Nations, if they are parties to a dispute being considered by the Council, may be invited to take part, without a vote, in the Council's discussions; the Council sets the conditions for participation by a non-member State.

Statement 2 is correct. The Council is composed of 15 Members: Five permanent members: China, France, Russian Federation, the United Kingdom, and the United States, and ten non-permanent members elected for two-year terms by the General Assembly.

# India's two-year term will begin on January 1, 2021.

98. Consider the following statements regarding the South Asian Association for Regional Cooperation (SAARC):

1. China has an observer country status at SAARC.
2. South Asian University (SAU) is an international university established by the SAARC members.

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

**Correct Answer: C**

**Explanation:**

The South Asian Association for Regional Cooperation (SAARC) was established with the signing of the SAARC Charter in Dhaka on 8 December 1985. SAARC comprises of eight Member States: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. The Secretariat of the Association was set up in Kathmandu on 17 January 1987.

Statement 1 is correct. The observer countries to the SAARC are Australia, China, the European Union, Iran, Japan, Mauritius, Myanmar, South Korea and the United States..

Statement 2 is correct. The Agreement for the Establishment of South Asian University was signed by the Ministers of Foreign/External Affairs of SAARC countries during the Fourteenth SAARC Summit (New Delhi, 2007). SAU started its operations from the academic year 2010.

99. Which of the following is/are commodities under the Schedule of Essential Commodities Act?

listed as essential

1. Fertilizers
2. Petroleum and petroleum products
3. Drugs

Select the correct answer using the code given below:

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

**Correct Answer: D**

**Explanation:**

Essential Commodities listed under the Schedule of the Essential Commodities Act are:

Drugs (meaning assigned to it in clause (b) of section 3 of the Drugs and Cosmetics Act, 1940);

-fertilizer, whether inorganic, organic or mixed;

-foodstuffs, including edible oilseeds and oils;

-hank yarn made wholly from cotton;

-petroleum and petroleum products;

-raw jute HI jute textiles;

-seeds of food-crops and seeds of fruits and vegetables; seeds of cattle fodder; jute seeds and cotton seed.

# On March 13, the Union consumer affairs ministry had declared face masks and hand sanitisers as essential commodities till June 30 to boost supply and prevent hoarding of these items in its fight to check the spread of coronavirus

100. Which of the following is/are correctly matched?

report(s) and publisher(s)

1. Freedom in the World – Amnesty International
2. Human Development Report – United Nations Development Programme
3. World Happiness Report – Sustainable Development Solutions Network

Select the correct answer using the code given below:

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

**Correct Answer: B**

**Explanation:**

Freedom in the World, Freedom House's flagship publication, is the standard-setting comparative assessment of global political rights and civil liberties. Freedom House is a U.S.-based rights watchdog.

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

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

The World Happiness Report is a publication of the Sustainable Development Solutions Network, powered by data from the Gallup World Poll. India is ranked 144 out of the 153 countries evaluated in 2020 report.

The UN Sustainable Development Solutions Network (SDSN) was set up in 2012 under the auspices of the UN Secretary-General. SDSN mobilizes global scientific and technological expertise to promote practical solutions for sustainable development, including the implementation of the Sustainable Development Goals (SDGs) and the Paris Climate Agreement.