Educrat IAS Academy

UPSC Prelims Mock Test: 11

Answer Key

1. Consider the following statements Nominal Gross Domestic Product:

- 1. It is a measurement of economic output that doesn't adjust for inflation.
- 2. As per First Advance Estimates of National Income released by National Statistical Office, the nominal GDP of India is estimated to have positive annual growth during 2020-21.

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. Nominal gross domestic product is gross domestic product (GDP) evaluated at current market prices. It is a measurement of economic output that doesn't adjust for inflation. GDP is the monetary value of all the goods and services produced in a country.

Nominal GDP differs from real GDP in that it does not account for the effects of inflation or deflation.

Statement 2 is incorrect. The National Statistical Office (NSO), Ministry of Statistics and Programme Implementation has released the First Advance Estimates of National Income at both Constant (2011-12) and Current Prices, for the financial year 2020-21.

Nominal GDP or GDP at Current Prices in the year 2020-21 is likely to attain a level of Rs 194.82 lakh crore, as against the Provisional Estimate of GDP for the year 2019-20 of Rs 203.40 lakh crore, released on 31st May 2020. The growth in nominal GDP during 2020-21 is estimated at -4.2 per cent.

2. Consider the following statements regarding the Wholesale Price Index (WPI):

- 1. It is a monthly price index released by the National Statistical Office.
- 2. Services sector is not covered under the WPI.
- 3. Manufactured Products has highest weightage in the WPI.

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) 3 only

Correct Answer: B

Explanation:Statement 1 is incorrect. Wholesale Price Index (WPI) measures the average change in the prices of commodities for bulk sale at the level of early stage of transactions. It is released by Office of the Economic Adviser on 14th of every month (or next working day) with a time lag of two weeks of the reference month and compiled with data received from institutional sources and selected manufacturing units across the country.

Statement 2 is correct. The Wholesale Price Index (WPI) is an index covering prices of products/commodities only pertaining to four sectors comprising agriculture, mining, manufacturing and electricity. The other sectors of GDP, in particular, services sector are not covered under WPI.

Statement 3 is correct. The weight of manufactured products is highest in WPI (2004-05) at 64.2%. The weight of the Primary Article is to 22.6% and the weight of Fuel & Power is 13.2%.

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

Kalapani – Uttarakhand
 Susta – Uttar Pradesh

Select the correct answer using the code given below:

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

Correct Answer: A

Explanation:Option 1 is correctly matched. The Kalapani territory is an area part of Pithoragarh district in the Uttarakhand state, but is also claimed by Nepal.

Option 2 is incorrectly matched. Susta is a disputed territory between Nepal and India. It is administered by India as part of West Champaran district of Bihar.



4. What was the mandate of the P J Nayak Committee?

- a) Review Governance of Boards of Banks in India
- b) Review of Payments and Settlements System of India
- c) Instruction of Small Banks and Payments Bank in India
- d) Review of Monetary policy framework of RBI

Correct Answer: A

Explanation:The Committee to Review Governance of Boards of Banks in India chaired by P J Nayak, the former CEO and Chairman of Axis Bank, was constituted by the RBI Governor in 2014.

Recent reports suggest that the upcoming budget may include proposals for a Bank Investment Company (BIC), anchoring the government's shareholding in its banks. It was proposed by the P J Nayak Committee constituted by the RBI in 2014 to examine governance at public and private sector banks.

The committee had recommended that the Government should set up a Bank Investment Company (BIC) to hold equity stakes in banks which are presently held by the Government. BIC should be incorporated under the Companies Act, necessitating the repeal of statutes under which these banks are constituted, and the transfer of powers from the Government to BIC through a suitable shareholder agreement and relevant memorandum and articles of association.

5. What is the utility of the LiDAR technology?

- a) Measuring distances
- b) Absorbing solar radiation
- c) Measuring pollutants in ambient air
- d) Measuring the luminosity

Correct Answer: A

Explanation:Light Detection and Ranging (LiDAR), is a remote sensing method that uses light in the form of a pulsed laser to measure ranges (variable distances) to the Earth. These light pulses—combined with other data recorded by the airborne system — generate precise, three-dimensional information about the shape of the Earth and its surface characteristics.

A lidar instrument principally consists of a laser, a scanner, and a specialized GPS receiver. Airplanes and helicopters are the most commonly used platforms for acquiring lidar data over broad areas. Two types of lidar are topographic and bathymetric. Topographic lidar typically uses a near-infrared laser to map the land, while bathymetric lidar uses water-penetrating green light to also measure seafloor and riverbed elevations.

6. Wallacea is a bioregion in which of the following country?

- a) Indonesia
- b) Japan
- c) Australia
- d) Denmark

Correct Answer: A

Explanation: Wallacea is a distinct biogeographic realm characterized by thousands of oceanic islands harboring a highly endemic faunal assemblage. Wallacea is a transition zone between the great Indo-Malayan and Australasian biogeographical realms.

It's called Wallacea, named after Alfred Russel Wallace, the 19th century English explorer and naturalist. He noticed that the islands of Kalimantan and Sulawesi as well as Bali and Lombok have very distinct animals even though the islands are next to each other.

He proposed an invisible line runs between Kalimantan and Sulawesi and Bali and Lombok separating the faunas. It is now known as Wallace's Line and the region between it and the island of New Guinea has come to be called Wallacea.

Wallacea includes the large Indonesian island of Sulawesi, the Mollucas – the various small to medium-sized islands to the east of Sulawesi and the "Banda Arc" islands – and the Lesser

Sangihe Morotai PACIFIC

Borneo Sulawesi

Halmahera

Togean Is.

Banggai Is.

Sulu Is.

Buru

Ceram

Flores

Timor

EAST

TIMOR

Sumbawa

Flores

Sumbawa

Flores

Sumbawa

Flores

Sumbawa

Flores

Sumbawa

Flores

Flores

Kilometers

Sundas or Nusa Tenggara, south of Sulawesi and the Moluccas.

Wallacea Hotspot

@ CI 2005

7. Which of the following is/are potential advantages of crop diversification?

J 20

- 1. Reduced economic uncertainty for cultivators
- 2. Makes crops more resistant to pests/diseases
- 3. Reduces the environmental degradation

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:Crop diversification refers to the addition of new crops or cropping systems to agricultural production on a particular farm.

- As crop prices become less stable and growing conditions become more difficult, many farmers struggle to ensure their financial security. However, farmers can reduce economic uncertainty by cultivating more than one type of crop.
- Single crop farming results in entire fields being susceptible to the same hazard, be it a pest or disease. Diversifying crops means that no one pest or disease can destroy a farm's entire harvest.

— Planting a variety of crops makes the soil healthier, which in turn reduces the need to use excessive amounts of fertilizer. In addition, diversification ensures that crops are more resistant to disease and therefore require fewer pesticides.

8. Arrange the following from East to West.

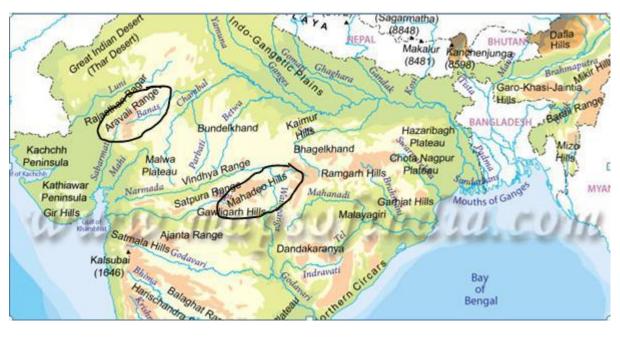
- 1. Mahadeo Hills
- 2. Malwa Plateau
- 3. Aravalli range

Select the correct answer using the codes below.

- a) 312
- b) 321
- c) 123
- d) 132

Correct Answer: C

Explanation:



9. Acidification of ocean can have a beneficial effect on

- 1. Photosynthetic algae
- 2. Seagrasses
- 3. Deep sea corals

Select the correct answer code:

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

Correct Answer: B

Explanation:Ocean acidification is the ongoing decrease in the pH of the Earth's oceans, caused by the uptake of carbon dioxide (CO2) from the atmosphere.

Ocean acidification is expected to impact ocean species to varying degrees. Photosynthetic algae and seagrasses may benefit from higher CO2 conditions in the ocean, as they require CO2 to live just like plants on land.

On the other hand, studies have shown that a more acidic environment has a dramatic effect on some calcifying species, including oysters, clams, sea urchins, shallow water corals, deep sea corals, and calcareous plankton.

10. Consider the following features in a drainage system.

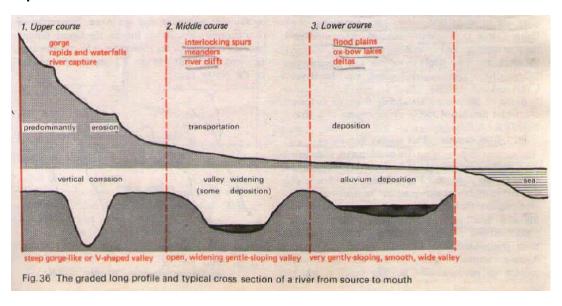
- 1. Interlocking spurs
- 2. Ox-bow lakes
- 3. River cliffs
- 4. Rapids and waterfalls

Which of the above will be found in the middle course of the river system?

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

Correct Answer: D

Explanation:



11. Consider the following statements regarding Atmosphere.

- 1. 99% of earth's atmosphere is confined to the height of 320 km from earth's surface.
- 2. Hydrogen and Oxygen were the major constituents of early atmosphere.

Which of the above statements is/are incorrect?

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

Correct Answer: C

Explanation:The air is an integral part of the earth's mass and 99 percent of the total mass of the atmosphere is confined to the height of 32 km from the earth's surface.

Oxygen was absent in the early atmosphere. Atmospheric levels of oxygen did not rise until oxygenic photosynthesis was well established.

12. Consider the following statements.

- 1. Maize requires moderate temperature, rainfall and lots of sunshine.
- 2. Cotton requires high temperature, light rainfall, and less than hundred frost-free days and bright sunshine for its growth.
- 3. Jute grows well on alluvial soil and requires high temperature, heavy rainfall and humid climate.

Which of the above statements is/are correct?

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

Correct Answer: C

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

Cotton requires high temperature, light rainfall, two hundred and ten frost-free days and bright sunshine for its growth. It grows best on black and alluvial soils.

Jute was also known as the 'Golden Fibre'. It grows well on alluvial soil and requires high temperature, heavy rainfall and humid climate. This crop is grown in the tropical areas. India and Bangladesh are the leading producers of jute.

13. Consider the following statements.

- 1. Deltas are formed in low tide regions, whereas Estuaries are formed in high tide region with rift valleys.
- 2. Estuaries are usually more fertile than delta regions.
- 3. Delta region continuously interacts with the ocean unlike estuaries which does not.

Which of the above statements is/are correct?

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

Correct Answer: A

Explanation:Deltas are practically wetlands that are normally formed when a fast-moving river empties its sediments before joining a slow-moving water body such as a sea or an ocean or a lake. On the other hand, estuaries are semi-enclosed water bodies that constitute of salty water. It is normally an area where a river merges with a sea.

Deltas are normally shaped like a bird's foot or fan-shaped, whereas, estuaries are fjord estuaries or tectonic estuaries.

Deltas are extremely fertile by nature that makes it suitable for agriculture and estuaries are not fertile and thus, not suitable for agriculture.

Deltas are formed in regions that experience coastal plants and low tides, whereas, estuaries are formed in regions that experience rift valleys and high tides.

14. Consider the following statements regarding Ocean Currents.

- 1. Ocean currents are not greatly influenced by Coriolis force.
- 2. The oceanic circulation pattern roughly corresponds to the earth's atmospheric circulation pattern.
- 3. In the southern hemisphere, the air circulation over the oceans in the middle latitudes is mainly cyclonic.

Which of the above statements is/are incorrect?

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

Correct Answer: D

Explanation: Major ocean currents are greatly influenced by the stresses exerted by the prevailing winds and coriolis force. The oceanic circulation pattern roughly corresponds to the earth's atmospheric

circulation pattern. The air circulation over the oceans in the middle latitudes is mainly anticyclonic (more pronounced in the southern hemisphere than in the northern hemisphere).

15. High concentration of Teak and Sal forest are found in which topographic region

- a) Western Ghats
- b) Eastern Ghats
- c) Central Highland
- d) Aravalli

Correct Answer: C

Explanation: Sal and teak forests are best grown in central highlands. Teak and sal are tropical deciduous trees. Suitable topographical and climatic conditions of central highlands are suitable for growth of teak and sal.

16. Consider the following statements:

- 1. Roaring forties are the westerlies, lies between 40° and 50° latitude in Southern hemisphere.
- 2. Horse latitudes are the low pressure and low temperature zone in 25-35 north and south latitude.

Which of 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:The Roaring Forties are extremely powerful westerly winds that blow in the Southern Hemisphere between latitudes 40° and 50°.

Horse latitudes are high temperature and high-pressure belts.

17. Consider the following statements.

- 1. They are found in hills of the northeastern region and the Andaman and Nicobar Islands.
- 2. These forests are well stratified.
- 3. Species found in these forests include rosewood, mahogony, aini and ebony.

The above statements refer to

- a) Montane Forests
- b) Littoral and Swamp Forests
- c) Moist Deciduous Forests
- d) Tropical Evergreen Forests

Correct Answer: D

Explanation:Tropical Evergreen forests are found in the western slope of the Western Ghats, hills of the northeastern region and the Andaman and Nicobar Islands.

They are found in warm and humid areas with an annual precipitation of over 200 cm and mean annual temperature above 220

Tropical evergreen forests are well stratified, with layers closer to the ground and are covered with shrubs and creepers, with short structured trees followed by tall variety of trees.

In these forests, trees reach great heights up to 60 m or above. There is no definite time for trees to shed their leaves, flowering and fruition. As such these forests appear green all the year round. Species found in these forests include rosewood, mahogony, aini, ebony, etc.

18. Which of the following are the examples of footloose industries?

- 1. Mobile manufacturing
- 2. Diamond processing
- 3. Iron and Steel Industry
- 4. Computer chips industries
- 5. Cement industry

Select the correct answer code:

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

Correct Answer: B

Explanation: Footloose industry is a general term for an industry that can be placed and located at any location without effect from factors of production such as resources, land, labour, and capital.

These industries often have spatially fixed costs, which means that the costs of the products do not change despite where the product is assembled. Diamonds, computer chips, and mobile manufacturing are some examples of footloose industries.

Non-footloose industries generally require raw material availability within a time limit to make products. Sugar industry, jute industry and tea industry are the examples of non-footloose industries.

Location of Cotton textiles, Cement industry and, Iron and Steel industries largely depend upon location of the raw materials. Thus, cannot be considered under the category of the Footloose industries.

19.Brahmaputra River is often flooded in India, but not in Tibet. What can be the possible causes for it?

- 1. In India it passes through a region of high rainfall, while Tibet is a dry cold area.
- 2. Brahmaputra is marked by huge deposits of silt on its bed causing the river bed to rise.

Select the correct answer code:

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

Correct Answer: C

Explanation:In Tibet the river carries a smaller volume of water and less silt as it is a cold and a dry area. In India it passes through a region of high rainfall. Here the river carries a large volume of water and considerable amount of silt.

Every year during the rainy season, the river overflows its banks, causing widespread devastation due to floods in Assam and Bangladesh. Unlike other north Indian rivers the Brahmaputra is marked by huge deposits of silt on its bed causing the river bed to rise. The river also shifts its channel frequently.

20.'Podzolization' leading to podzolic soils is a phenomenon most noticed in which of these forest types?

- a) Equatorial Moist Evergreen Forest
- b) Mediterranean Forests
- c) Boreal forests
- d) Tundra vegetation

Correct Answer: C

Explanation:Most of the soils in Boreal forests are strongly leached as a result of centuries of leaching and somewhat impoverished parent materials. The soils are generally strongly acid and the main soil process under this dominantly leaching climate is 'podzolisation' leading to podsolic soils. The extreme climate coupled with the strong soil acidity means that relatively few organisms exist in the soil and the turnover of organic matter is slow.

21. Consider the following statements regarding Alluvial soils.

- 1. Alluvial soils are suitable for the growth of sugarcane, paddy and pulse crops.
- 2. Alluvial soils contain adequate proportion of potash, phosphoric acid and lime.

Which of the above statements is/are incorrect?

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

Correct Answer: D

Explanation:Alluvial soils as a whole are very fertile. Mostly these soils contain adequate proportion of potash, phosphoric acid and lime which are ideal for the growth of sugarcane, paddy, wheat and other cereal and pulse crops. Due to its high fertility, regions of alluvial soils are intensively cultivated and densely populated.

22.If the elliptical orbit of earth around the Sun changes to a circular orbit, which one among the following may result in that situation?

- a) It would not make any difference to earth, its atmosphere and temperature.
- b) All gases on earth will escape.
- c) The Earth will suddenly become very cold and uninhabitable.
- d) The difference between seasons may be changed.

Correct Answer: D

Explanation:Earth's tilted axis causes the seasons. Throughout the year, different parts of Earth receive the Sun's most direct rays. So, when the North Pole tilts toward the Sun, it's summer in the Northern Hemisphere. And when the South Pole tilts toward the Sun, it's winter in the Northern Hemisphere.

23. Consider the following statements regarding 'Savanna Climate'.

- 1. It is characterized by an alternate hot, rainy season and cool, dry season.
- 2. Majority of the areas have lateritic soils which support good crops.
- 3. The Hausa tribes are found here.

Which of the above statements is/are correct?

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

Correct Answer: B

Explanation:Savannah climate:

This type of climate has alternate wet and dry seasons. There are Only two seasons – winter and summer. Rains occur in summer. Due to distinct wet and dry periods, many Savanna areas have poor lateritic soils which are incapable of supporting good crops.

Many tribes live in savanna region. Tribes like the Masai tribes of the East African plateau are pastoralists whereas Hausa of northern Nigeria are settled cultivators.

24. Consider the following statements regarding Peninsular Rivers.

- 1. The Peninsular rivers have shorter and shallower courses as compared to their Himalayan counterparts.
- 2. A large number of the Peninsular rivers are seasonal.
- 3. Peninsular rivers carry much larger silt as compared to Himalayan rivers which carry fresh water.

Which of the above statements is/are correct?

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

Correct Answer: A

Explanation: The Peninsular rivers have shorter and shallower courses as compared to their Himalayan counterparts. Most of them come from Western Ghats, however, some of them originate in the central highlands and flow towards the west. Rest of them all flow to the east in the Bay of Bengal.

A large number of the Peninsular rivers are seasonal, as their flow is dependent on rainfall. During the dry season, even the large rivers have reduced flow of water in their channels.

Moreover, due to flowing on hard terrain and short courses, they carry much lesser silt as compared to Himalayan rivers.

25. Consider the following matches of rivers with their origin locations.

1. Sabarmati: Amarkantak

2. Brahmaputra: Kailash Range

3. Krishna: Mahabaleshwar

4. Godavari: Trimbakeshwar

Which of the above is/are correctly matched?

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

Correct Answer: C

Explanation: The Sabarmati river is one of the major west-flowing rivers in India. It originates in the Aravalli Range.

Brahmaputra river originates from the Kailash ranges of Himalayas.

Krishna river's source is at Mahabaleshwar.

The Godavari River rises from Trimbakeshwar in the Nashik district of Maharashtra.

26. Which of the following rivers drain into Bay of Bengal?

- 1. Mahi
- 2. Penner
- 3. Subarnarekha
- 4. Tapti

Select the correct answer code:

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

Correct Answer: B

Explanation: Usually, large Rivers flowing on the peninsular plateau have their origin in the Western Ghats and discharge their waters in the Bay of Bengal.

Indus, Tapti, Mahi, Narmada and Sabarmati drain in the Arabian Sea. Subarnrekha, Penner and others drain in the Bay of Bengal.

27. Which of the following are Tropical Grasslands?

- 1. Savanna
- 2. Campos
- 3. Prairie
- 4. Llanos
- 5. Steppe

Select the correct answer code:

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

Correct Answer: B

Explanation: Grasslands are known by different names in different regions.

Tropical Grasslands are:

- East Africa- Savanna
- Brazil- Campos
- Venezuela- Llanos

Temperate Grasslands are:

- Argentina- Pampas
- America- Prairie
- Africa- Veld
- Asia- Steppe
- Australia- Down

28. The Agreement on Trade-Related Investment Measures (TRIMs), is related to

- a) Current Account Convertibility
- b) Domestic regulations a country applies to foreign investors
- c) Most-favoured Nation principle
- d) Duty free International market access to developing countries

Correct Answer: B

Explanation:The Agreement on Trade-Related Investment Measures (TRIMs) are rules that are applicable to the domestic regulations a country applies to foreign investors, often as part of an industrial policy. The agreement, concluded in 1994, was negotiated under the WTO's predecessor, the General Agreement on Tariffs and Trade (GATT), and came into force in 1995. The agreement was agreed upon by all members of the World Trade Organization. Trade-Related Investment Measures is one of the four principal legal agreements of the WTO trade treaty.

TRIMs are rules that restrict preference of domestic firms and thereby enable international firms to operate more easily within foreign markets. Policies such as local content requirements and trade balancing rules that have traditionally been used to both promote the interests of domestic industries and combat restrictive business practices are now banned.

29. Consider the following statements regarding Special Drawing Right (SDR).

- 1. The SDR is an international reserve asset, created by the IMF to supplement its member countries' official reserves.
- 2. The value of the SDR is based on a basket of currencies of developed countries.

Which of 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:The SDR is an international reserve asset, created by the IMF in 1969 to supplement its member countries' official reserves. The value of the SDR is based on a basket of five currencies—the U.S. dollar, the euro, the Chinese renminbi, the Japanese yen, and the British pound sterling.

30. Which of the following may lead to Inflation

- 1. A reduction in the total productive capacity of the economy even as more and more people are employed
- 2. Oversupply of goods in the economy.

Select the correct answer code:

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

Correct Answer: A

Explanation:Inflation is basically too much money chasing too few goods, or excess demand chasing limited supply. If income rises faster, demand for goods and services will also rise. On the other hand, if the economy is unable to satisfy the increased demand, for e.g. due to poor infrastructure, lack of production etc, the higher income will spiral the prices upwards and lead to high inflation.

Excess supply is likely to bring prices down.

31. Consider the following statements regarding revenue receipts and capital receipts of the government.

- 1. Capital receipts are always debt creating unlike revenue receipts.
- 2. Capital receipts are non-redeemable unlike revenue receipts.

Which of the above statements is/are incorrect?

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

Correct Answer: C

Explanation:The main difference between revenue receipts and capital receipts is that in the case of revenue receipts, government is under no future obligation to return the amount, i.e., they are non-redeemable. But in case of capital receipts which are borrowings, government is under obligation to return the amount along with Interest.

Capital receipts may be debt creating or non-debt creating. Examples of debt creating receipts are—Net borrowing by government at home, loans received from foreign governments, borrowing from RBI. Examples of non-debt capital receipts are—Recovery of

loans, proceeds from sale of public enterprises (i.e., disinvestment), etc. These do not give rise to debt.

32. Consider the following statements regarding Cash Reserve Ratio (CRR).

- 1. It is the fraction of the total Net Demand and Time Liabilities (NDTL) of a Scheduled Commercial Bank in India that has to maintain as cash deposit with the RBI.
- 2. It applies uniformly to all banks in the country irrespective of an individual bank's financial situation or size.
- 3. Banks are paid interest for parking the required cash under CRR.

Which of the above statements is/are correct?

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

Correct Answer: B

Explanation:Cash Reserve Ratio refers to the fraction of the total Net Demand and Time Liabilities (NDTL) of a Scheduled Commercial Bank held in India, that it has to maintain as cash deposit with the Reserve Bank of India (RBI). The requirement applies uniformly to all banks in the country irrespective of an individual bank's financial situation or size. In contrast, certain countries e.g. China stipulates separate reserve requirements for 'large' and 'small' banks.

As per the RBI Act 1934, all Scheduled Commercial Banks (that includes public and private sector banks, foreign banks, regional rural banks and co-operative banks) are required to maintain a cash balance on average with the RBI on a fortnightly basis to cater to the CRR requirement.

Presently, banks are not paid any interest on behalf of the RBI for parking the required cash. If a bank fails to meet its required reserve requirements, the RBI is empowered to impose a penalty by charging a penal interest rate.

33. Printing currency is usually the last resort for the government in managing its deficit. This is because

- 1. Government expenditure using this new money boosts incomes and raises private demand in the economy, thus leading to inflation.
- 2. Excess supply of rupee will cause its depreciation.

Select the correct answer code:

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

Correct Answer: C

Explanation:Government expenditure using this new money boosts incomes and raises private demand in the economy. Thus, it fuels inflation.

Easy monetary policy and high inflation are two of the leading causes of currency depreciation.

34. Hard currency is usually preferred because

- 1. It is seen as politically and economically stable.
- 2. It is widely accepted around the world as a form of payment for goods and services.
- 3. It is not likely to depreciate or appreciate suddenly.

Select the correct answer code:

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

Correct Answer: C

Explanation: Hard currency refers to money that is issued by a nation that is seen as politically and economically stable. Hard currencies are widely accepted around the world as a form of payment for goods and services and may be preferred over the domestic currency.

A hard currency is expected to remain relatively stable through a short period of time, and to be highly liquid in the forex or foreign exchange (FX) market. The most tradable currencies in the world are the U.S. dollar (USD), European euro (EUR), Japanese yen (JPY), British pound (GBP), Swiss franc (CHF), Canadian dollar (CAD) and the Australian dollar (AUD). All of these currencies have the confidence of international investors and businesses because they are not generally prone to dramatic depreciation or appreciation.

35. Consider the following statements regarding Consumer Price Index — Industrial Workers (CPI-IW).

- 1. CPI-IW is primarily used to regulate the dearness allowance of government employees and the workers in the industrial sectors.
- 2. It is also used in the determination and revision of minimum wages in scheduled employments.
- 3. The base year for CPI-IW is 2016.

Which of the above statements is/are correct?

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

Correct Answer: D

Explanation:The government recently launched a new series for Consumer Price Index — Industrial Workers (CPI-IW) changing the base year to 2016 from 2001.

The CPI-IW is primarily used to regulate the dearness allowance of government employees and the workers in the industrial sectors. It is also used in the determination and revision of minimum wages in scheduled employments.

The new series is more representative in character and reflects the latest consumption pattern of the industrial workers.

Labour Bureau, a unit of the labour ministry, has been compiling and releasing CPI-IW numbers since its inception in 1946. The base year for inflation gauges is typically changed from time to time to capture the complex churnings in the economy.

36.Consider the following statements regarding Fiscal Responsibility and Budget Management (FRBM) Act, 2003.

- 1. The Act made Central government responsible for ensuring inter-generational equity in fiscal management and long-term macro-economic stability.
- 2. The Act envisages the setting of limits on the Central government's debt and deficits.
- 3. The law contains an 'escape clause' under which Centre can exceed the annual fiscal deficit target.

Which of the above statements is/are correct?

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

Correct Answer: D

Explanation:What is the FRBM Act?

Enacted in August 2003, the legislation is aimed at making the Central government responsible for ensuring "inter-generational equity in fiscal management and long-term macro-economic stability".

To achieve this, the Act envisages the setting of limits on the Central government's debt and deficits as well as mandating greater transparency in fiscal operations of the Central government and the conduct of fiscal policy in a medium-term framework.

The rules for implementing the Act were notified in July 2004 and since then every Budget of the Union government has included a Medium Term Fiscal Policy Statement that specifies the annual revenue and fiscal deficit goals over a three-year horizon.

The States have also enacted their own respective Financial Responsibility Legislation.

37. Consider the following statements regarding Current account convertibility.

- 1. Current account convertibility means freedom to convert domestic currency into foreign currency and vice versa for trade in goods and invisibles.
- 2. Under current account convertibility for rupee, an exporter can sell the foreign currency he obtained from exporting a commodity at the market determined exchange rate in India.
- 3. There is partial Current account convertibility in India, so as to limit imports into the country.

Which of the above statements is/are correct?

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

Correct Answer: A

Explanation:Current account convertibility means freedom to convert domestic currency into foreign currency and vice versa for trade in goods and invisibles (services, transfers or income from investment). Individuals and entities can convert currencies in the foreign exchange market.

Current account convertibility is one part of currency convertibility.

When there is current account convertibility for rupee, an exporter can sell the US Dollars (or other foreign currency) he obtained from exporting a commodity at the market determined exchange rate in India. This means that there is no exchange controls (foreign exchange controls). Similarly, when an importer buys foreign currency from India's foreign exchange market by exchanging rupee, it is current account convertibility.

In India, there is full current account convertibility since August 20, 1993.

38. Which of the following best describes 'Anti-Dumping' duty?

- a) a protectionist tariff imposed on foreign imports that are priced below fair market value.
 - b) an import tax imposed on certain goods in order to prevent piracy.
 - c) tax imposed on the import of the goods pertaining to core industrial sectors.
 - d) None of the statements a, b and c are correct.

Correct Answer: A

Explanation:An anti-dumping duty is a protectionist tariff that a domestic government imposes on foreign imports that it believes are priced below fair market value. Dumping is a process where a company exports a product at a price lower than the price it normally charges in its own home market.

39. Gross Domestic Product of India does not explicitly include economic value of

- 1. Gross capital investments made during a financial year
- 2. Value of goods and services provided by NRIs

Which of the above statements is/are correct?

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

Correct Answer: B

Explanation:GDP is the value of the final goods and services produced within a country within an year.

Indian nationals living abroad do not contribute to India's GDP. They do however contribute to India's GNP.

But, the gross capital investments made during a financial year directly accounts as a part of GDP since it creates infrastructure which has an economic value, e.g. a bridge, or a tunnel or a furnace.

40. Consider the following statements regarding Cess and Tax.

- 1. Cess is charged over and above direct and indirect taxes.
- 2. Cess collected for a particular purpose cannot be used for or diverted to other purposes
- 3. While all taxes go to the Consolidated Fund of India (CFI), cess will go to Public Account of India.

Which of the above statements is/are correct?

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

Correct Answer: A

Explanation:Cess is a form of tax levied or collected by the government for the development or welfare of a particular service or sector.

It is charged over and above direct and indirect taxes.

Cess collected for a particular purpose cannot be used for or diverted to other purposes.

It is not a permanent source of revenue for the government, and it is discontinued when the purpose levying it is fulfilled.

Examples: Education Cess, Swachh Bharat Cess, Krishi Kalyan Cess etc.

While all taxes go to the Consolidated Fund of India (CFI), cess may initially go to the CFI but has to be used for the purpose for which it was collected.

If the cess collected in a particular year goes unspent, it cannot be allocated for other purposes. The amount gets carried over to the next year and can only be used for the cause it was meant for.

41. Consider the following statements regarding indirect taxes.

- 1. Indirect tax is a tax levied by the Government on goods and services and not on the profit or revenue of an individual.
- 2. Indirect taxes are termed regressive taxing mechanism because they are charged at higher rates than direct taxes.
- 3. Cascading effect of tax is a situation wherein the end-consumer of any goods or service has to bear the burden of the tax to be paid on the previously calculated tax and as a result would suffer an increased price.

Which of the above statements is/are correct?

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

Correct Answer: B

Explanation:Indirect Tax is a tax levied by the Government on goods and services and not on the income, profit or revenue of an individual and it can be shifted from one taxpayer to another.

Indirect taxes are charged the same for all income groups.

Few indirect taxes: Customs Duty, Central Excise Duty, Service Tax, Sales Tax and Value Added Tax (VAT).

Cascading effect of tax is a situation wherein the end-consumer of any goods or service has to bear the burden of the tax to be paid on the previously calculated tax and as a result would suffer an increased or inflated price.

42. Consider the following statements about Most-favored-nation (MFN) principle.

- 1. MFN means that every time a country lowers a trade barrier or opens up a market, it has to do so for the same goods or services from all its trading partners.
- 2. Countries cannot set up a free trade agreement that applies only to goods traded within the group.
- 3. Countries can give developing countries special access to their markets.

Which of the above statements is/are correct?

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

Correct Answer: C

Explanation:MFN means that every time a country lowers a trade barrier or opens up a market, it has to do so for the same goods or services from all its trading partners — whether rich or poor, weak or strong.

Some exceptions are allowed. For example, countries can set up a free trade agreement that applies only to goods traded within the group — discriminating against goods from outside. Or they can give developing countries special access to their markets. Or a country can raise barriers against products that are considered to be traded unfairly from specific countries. And in services, countries are allowed, in limited circumstances, to discriminate. But the agreements only permit these exceptions under strict conditions.

43.Balance of Payments (BoP) consist of which of the following items?

- 1. Any borrowing of the Government of India from abroad
- 2. Trade Balance
- 3. FDI and FII received annually

Select the correct answer code:

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

Correct Answer: D

Explanation:BoP consists of current account and capital account.

Current account includes trade, invisibles, remittances etc.

Capital account includes borrowings and long-term investments/debts of residents/foreigners with India.

Capital inflows like FDI, FII help bridge the trade deficit and neutralize BoP.

44. Consider the following statements regarding Rupee Appreciation.

- 1. Rupee can appreciate because of strong foreign portfolio investments into the country.
- 2. Avoiding the appreciation of the rupee can strengthen the domestic manufacturing industry.

Which of the above statements is/are correct?

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

Correct Answer: C

Explanation:Rupee mostly appreciates against dollar due to higher flows into the market.

We need to avoid the appreciation of the rupee if we are to strengthen the domestic manufacturing industry. Any appreciation of the rupee facilitates more imports and less exports, adversely affecting domestic production.

45. When the Reserve Bank of India cuts the repo rate by 50 basis points, which of the following is likely to happen?

- a) India's GDP growth rate increases drastically
- b) Foreign Institutional Investors will bring more capital into our country
- c) Scheduled Commercial Banks may cut their lending rates
- d) It may drastically reduce the liquidity to the banking system

Correct Answer: C

Explanation:A decrease in the repo rate means the commercial banks can borrow more money from RBI at a cheaper rate, meaning lending rates for consumers may decrease.

46. Consider the following statements about Treasury Bills (T-Bills).

- 1. These are issued to meet short-term mismatches in receipts and expenditure.
- 2. These can be issued by the government as well as blue-chip companies.

Which of 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:Treasury bills or T-bills, which are money market instruments, are short term debt instruments issued by the Government of India and are presently issued in three tenors, namely, 91 day, 182 day and 364 day. Treasury bills are zero coupon securities and pay no interest. Instead, they are issued at a discount and redeemed at the face value at maturity. For example, a 91 day Treasury bill of ₹100/- (face value) may be issued at say ₹ 98.20, that is, at a discount of say, ₹1.80 and would be redeemed at the face value of ₹100/-

47. Which of the following statements about Monetary Policy Framework Agreement is correct?

- a) It is an agreement between Government and Reserve Bank of India (RBI) on the maximum tolerable inflation rate that RBI should target to achieve price stability.
- b) It is an agreement between Government and Reserve Bank of India (RBI) on the minimum inflation rate that RBI should target to achieve growth.
- c) It is an agreement between Banks and Reserve Bank of India (RBI) to ensure that the changes in the Interest rates are passed on to the customers.
 - d) Both b and c

Correct Answer: A

Explanation: Monetary Policy Framework Agreement is an agreement reached between Government and the central bank in India – The Reserve Bank of India (RBI) – on the maximum tolerable inflation rate that RBI should target to achieve price stability.

The Reserve Bank of India and Government of India signed the Monetary Policy Framework Agreement on 20 February 2015 which made inflation targeting and achieving price stability the responsibilities of RBI. Subsequently, the government, while unveiling the Union Budget for 2016-17 in the Parliament, proposed to amend the Reserve Bank of India (RBI) Act, 1934 for giving a statutory backing to the aforementioned Monetary Policy Framework Agreement and for setting up a Monetary Policy Committee (MPC).

48. Consider the following statements regarding GDP deflator.

- 1. GDP deflator is a measure of the level of prices of all new, domestically produced, final goods and services in an economy in a year.
- 2. Unlike the CPI, the GDP deflator is not based on a fixed basket of goods and services.
- 3. When GDP deflator is negative, it necessarily means that there is inflation in the economy.

Which of the above statements is/are correct?

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

Correct Answer: C

Explanation:In economics, the GDP deflator is a measure of the level of prices of all new, domestically produced, final goods and services in an economy in a year.

Like the consumer price index (CPI), the GDP deflator is a measure of price inflation/deflation with respect to a specific base year.

The GDP deflator is a more comprehensive inflation measure than the CPI index because it isn't based on a fixed basket of goods.

When GDP deflator is negative, nominal GDP is less than real DP. It means that there is deflation in the economy.

49.Tax buoyancy refers to the responsiveness of tax revenue growth to changes in GDP. If there is an output growth and the tax buoyancy is not commensurate, then it can imply

- a) There is tax evasion
- b) Growth in the non-taxed part of GDP
- c) Both a and b
- d) Neither a nor b

Correct Answer: C

Explanation: Tax buoyancy explains this relationship between the changes in government's tax revenue growth and the changes in GDP. It refers to the responsiveness of tax revenue growth to changes in GDP. When a tax is buoyant, its revenue increases without increasing the tax rate.

If the output grows and the tax buoyancy is not commensurate it means one of the following or both: There is tax evasion or growth in the non-taxed part of GDP (Eg: agriculture)

50. Match the following pairs

Term		Definitions
1.	Deflation	A. Reduction in the rate of inflation
2.	Disinflation	B. General fall in the level of prices
3.	Stagflation	C. Combination of inflation and rising unemployment due to recession
4.	Reflation	D. Attempt to raise the prices to counteract the deflationary prices.

Select the correct answer code:

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

Correct Answer: B

Explanation: Refer class notes.

51. Consider the following statements regarding Current Account Deficit (CAD).

- 1. The current account measures the flow of goods, services and investments into and out of the country.
- 2. Current Account Deficit may help a debtor nation in the short-term.
- 3. High software receipts and private transfers can lower current account deficit.

Which of the above statements is/are correct?

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

Correct Answer: C

Explanation:Current Account Deficit or CAD is the shortfall between the money flowing in on exports, and the money flowing out on imports. Current Account Deficit (or Surplus) measures the gap between the money received into and sent out of the country on the trade of goods and services and also the transfer of money from domestically-owned factors of production abroad.

The current account constitutes net income, interest and dividends and transfers such as foreign aid, remittances, donations among others.

A country with rising CAD shows that it has become uncompetitive, and investors are not willing to invest there. They may withdraw their investments.

Current Account Deficit may be a positive or negative indicator for an economy depending upon why it is running a deficit. Foreign capital is seen to have been used to finance investments in many economies. Current Account Deficit may help a debtor nation in the short-term, but it may worry in the long-term as investors begin raising concerns over adequate return on their investments.

There were number of factors which led to lowering of current account deficit. One is software receipts have gone up, and also private transfers have also gone up.

52. Consider the following statements regarding Recession.

- 1. A recessionis a macroeconomic term that refers to a significant decline in general economic activity in a designated region.
- 2. A significant fall in spending generally leads to a recession.
- 3. India had been into recession only once since independence i.e., before Liberalisation.

Which of the above statements is/are correct?

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

Correct Answer: A

Explanation:A recession is a macroeconomic term that refers to a significant decline in general economic activity in a designated region. It had been typically recognized as two consecutive quarters of economic decline, as reflected by GDP in conjunction with monthly indicators such as a rise in unemployment.

Governments usually respond to recessions by adopting expansionary macroeconomic policies, such as increasing money supply or increasing government spending and decreasing taxation.

India's fourth recession since independence, the first since liberalisation and perhaps the worst to date, is here, CRISIL said as it predicted the economy to shrink by 5 per cent in the current fiscal because of Covid-19 lockdown.

"The first quarter (April to June 2020) will suffer a staggering 25 per cent contraction," it said in its assessment of India's GDP.

In the past 69 years, India has seen a recession only thrice – as per available data – in fiscals 1958, 1966 and 1980. The reason was the same each time – a monsoon shock that hit agriculture, then a sizeable part of the economy.

53. Consider the following statements regarding Nitrogen pollution.

- 1. Since Nitrates cannot penetrate deep into the soil, they pollute only surface water and not groundwater.
- 2. Nitrogen dioxide is a greenhouse gas.
- 3. Agriculture remains the largest contributor to nitrogen emissions.

Which of the above statements is/are incorrect?

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

Correct Answer: A

Explanation: Nitrates not only affect surface water but also pollute groundwater sources.

Nitrous oxide (N2O) gas should not be confused with nitric oxide (NO) or nitrogen dioxide (NO2). Neither nitric oxide nor nitrogen dioxide are greenhouse gases. Nitrous oxide is a greenhouse gas.

Nitrogen particles make up the largest fraction of PM2.5, the class of pollutants closely linked to cardiovascular and respiratory illness

Though agriculture remains the largest contributor to nitrogen emissions, the non-agricultural emissions of nitrogen oxides and nitrous oxide are growing rapidly, with sewage and fossil-fuel burning — for power, transport and industry — leading the trend.

54. Which of the following best defines the Biosphere?

- a) It is the upper region of lithosphere.
- b) It is the narrow zone where land, water and air come together to contain life forms.
 - c) It is the lower atmospheric region near the hydrosphere.
 - d) It is the abiotic component of all forms on earth.

Correct Answer: B

Explanation: The solid portion of the earth on which we live is called the Lithosphere.

The gaseous layers that surround the earth, is the Atmosphere, where oxygen, nitrogen, carbon dioxide and other gases are found.

Water covers a very big area of the earth's surface and this area is called the Hydrosphere. The Hydrosphere comprises water in all its forms, that is, ice, water and water vapour.

The Biosphere is the narrow zone where we find land, water and air together, which contains all forms of life.

55. Consider the following statements regarding Mangroves for the Future (MFF).

- 1. Mangroves for the Future (MFF) is a unique partner-led initiative to promote investment in coastal ecosystem conservation for sustainable development.
- 2. MFF conservation habitats includes all types of coastal ecosystem, such as coral reefs, estuaries, lagoons, sandy beaches, sea grasses and wetlands.
- 3. It is purely research body and doesn't offer any grants to support mangrove conservation initiatives.

Which of the above statements is/are correct?

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

Correct Answer: B

Explanation: Mangroves for the Future (MFF) is a unique partner-led initiative to promote investment in coastal ecosystem conservation for sustainable development. Co-chaired by IUCN and UNDP, MFF provides a platform for collaboration among the many different agencies, sectors and countries which are addressing challenges to coastal ecosystem and livelihood issues.

Mangroves are the flagship of the initiative, but MFF is inclusive of all types of coastal ecosystem, such as coral reefs, estuaries, lagoons, sandy beaches, sea grasses and wetlands

The MFF grants facility offers small, medium and large grants to support initiatives that provide practical, hands-on demonstrations of effective coastal management in action.

56. Consider the following statements regarding Biotope.

- 1. It is an ecological area that is usually larger than an ecosystem.
- 2. It is a common practice to isolate biotopes from each other for niche biodiversity propagation.

Which of the above statements is/are correct?

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

Correct Answer: D

Explanation:Biotope is an ecological area that supports a particular range of biological communities.

Biotope is almost synonymous with the term habitat.

A biotope is generally not considered to be a large-scale phenomenon. For example, a biotope might be a neighbouring park, a back garden, even potted plants or a fish tank.

In other words, the biotope is not a macroscopic but a microscopic approach to preserving the ecosystem and biological diversity.

It is commonly emphasised that biotopes should not be isolated. Instead biotopes need to be connected to each other and other surrounding life for without these connections to life-forms such as animals and plants, biotopes would not effectively work as a place in which diverse organisms live.

So one of the most effective strategies for regenerating biotopes is to plan a stretch of biotopes, not just a point where animals and plants come and go.

57. Bio-ethanol can be derived through the process of bio-refining from

- 1. Corn
- 2. Rice straw
- 3. Coconut
- 4. Sea weeds
- 5. Water hyacinth

Select the correct answer code:

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

Correct Answer: A

Explanation:Bio-ethanol can be derived from all the sources mentioned above.

58. Consider the following statements regarding Ecological Pyramids.

- 1. Pyramid of biomass shows a sharp decrease in biomass at higher trophic levels.
- 2. Small standing crop of phytoplankton supporting large standing crop of zooplankton is an example for Inverted pyramid of biomass.
- 3. Primary producers convert only 1% of the energy in the sunlight available to them into Net Primary Productivity.

Which of the above statements is/are correct?

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

Correct Answer: D

Explanation:

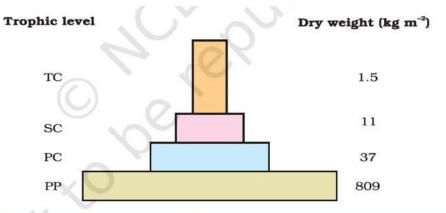
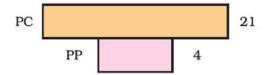


Figure 14.4 (b) Pyramid of biomass shows a sharp decrease in biomass at higher trophic levels



14.4 (c) Inverted pyramid of biomass-small standing crop of phytoplankton supports large standing crop of zooplankton

59. Consider the following statements.

- 1. It is located on the north bank of the Brahmaputra River.
- 2. It is the only stronghold of rhinoceros on the north bank of the Brahmaputra river.
- 3. It is also known as 'Mini Kaziranga National Park'.

The above statements refer to.

- a) Manas National Park
- b) Nameri National Park
- c) Orang National Park
- d) Dibru-Saikhowa National Park

Correct Answer: C

Explanation: The Orang National Park is located on the north bank of the Brahmaputra River in the Darrang and Sonitpur districts of Assam.

The park has a rich flora and fauna, including great Indian one-horned rhinoceros, pygmy hog, elephants, wild buffalo and tigers. It is the only stronghold of rhinoceros on the north bank of the Brahmaputra river.

The Orang National Park is popularly known as the "mini Kaziranga." The reason behind this is that both the parks have the same kind of climate and ecology.

60. Which of the following Ramsar site is manmade?

- a) Deepor Beel
- b) Harike Wetland
- c) Bhoj Wetland
- d) Loktak Lake

Correct Answer: C

Explanation:The Bhoj Wetland consists of two lakes located in the city of Bhopal. The two lakes are the Bhojtal and the Lower Lake. It is a manmade reservoir. Bhoj Wetland was recognized as a wetland of international importance under the Ramsar Convention of 1971 in 2002.

61.Consider the following statements.

- 1. In a terrestrial ecosystem, a much larger fraction of energy flows through the detritus food chain than through the grazing food chain (GFC).
- 2. The amount of energy decreases at successive trophic levels in an ecosystem.
- 3. Organisms at each trophic level depend on those at the lower trophic level for their energy demands.

Which of the above statements is/are correct?

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

Correct Answer: D

Explanation:In an aquatic ecosystem, grazing food chain (GFC) is the major conduit for energy flow. As against this, in a terrestrial ecosystem, a much larger fraction of energy flows through the detritus food chain than through the grazing food chain (GFC).

The important point to note is that the amount of energy decreases at successive trophic levels. When any organism dies it is converted to detritus or dead biomass that serves as an energy source for decomposers.

Organisms at each trophic level depend on those at the lower trophic level for their energy demands.

62. With reference to 'decomposition', which of the following statements is/are correct?

- 1. Humus is highly susceptible to microbial action and undergo decomposition at fast rate.
- 2. Decomposition is slower if detritus is rich in nitrogen.
- 3. Low temperature and lack of oxygen supply inhibit the decomposition.

Select the correct answer code:

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

Correct Answer: B

Explanation:Humus is less susceptible to microbial action and act as a reservoir of nutrients. Humusis highly resistant to microbial action and undergoes decomposition at an extremely slow rate.

Decomposition is largely an oxygen-requiring process. The rate of decomposition is controlled by chemical composition of detritus and climatic factors. In a particular climatic condition, decomposition rate is slower if detritus is rich in lignin and chitin, and quicker, if detritus is rich in nitrogen and water-soluble substances like sugars.

63. Which of the following are the effects of ozone layer depletion

- 1. Causes non-melanoma skin cancer
- 2. Affects the physiological and developmental processes of plants
- 3. Phytoplankton productivity is limited to the euphotic zone
- 4. Synthetic polymers are adversely affected

Select the correct code:

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

Correct Answer: D

Explanation:Ozone layer depletion increases the amount of UVB that reaches the Earth's surface. Laboratory and epidemiological studies demonstrate that UVB causes non-melanoma skin cancer and plays a major role in malignant melanoma development.

UVB radiation affects the physiological and developmental processes of plants.

Phytoplankton form the foundation of aquatic food webs. Phytoplankton productivity is limited to the euphotic zone, the upper layer of the water column in which there is sufficient sunlight to support net productivity.

Synthetic polymers, naturally occurring biopolymers, as well as some other materials of commercial interest are adversely affected by UVB radiation.

64. Consider the following statements with reference to Asiatic Lion.

- 1. For the first time, the entire genome of Asiatic lion has been sequenced by scientists from CSIR-Centre for Cellular and Molecular Biology.
- 2. At present the only home of Asiatic lion is Gir National Park and Wildlife Sanctuary with over 1000 animals present in the Gir forests.

Which of the above statements is/are correct?

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

Correct Answer: A

Explanation:For the first time, the entire genome of Asiatic lion has been sequenced by scientists from CSIR-Centre for Cellular and Molecular Biology, Hyderabad.

The objective is to understand the species at DNA level and study if there are any specific problems with regard to adaptability to environment or behaviour vis-à-vis other big cats.

About Asiatic Lion:

IUCN Red List Status: Endangered

Listed in Schedule I of Wildlife (Protection) Act 1972, in Appendix I of Convention on International Trade in Endangered Species (CITES).

At present the only home of Asiatic lion is Gir National Park and Wildlife Sanctuary in Gujarat.

The population of the endangered Asiatic lion is very low — only 523 animals are present in the Gir forests.

65. Consider the following statements regarding 'Benthic Zone' of an ocean ecosystem:

- 1. It is the region extending between high tide and low tide levels.
- 2. This is the most productive zone in ocean due to high nutrient supply.
- 3. Most of the organisms found here are luminescent.

Which of the above statements is/are correct?

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

Correct Answer: A

Explanation:Benthic zone is the lower most zone of aquatic ecosystem and it is highly unproductive due to lack of sunlight.

66. Mangroves, saltwater crocodile, Indian python, wild pigs and rhesus monkeys are found in which of the following national park?

- a) Bhitarkanika National Park
- b) Sundarbans National Park
- c) Nagarhole National Park
- d) Periyar National Park

Correct Answer: A

Explanation: Flora and Fauna of Bhitarkanika National Park

Flora: Mangrove species, casuarinas, and grasses like the indigo bush.

Fauna: The Park is home to the saltwater crocodile, Indian python, black ibis, wild boar, rhesus monkey, chital, darter, cobra, monitor lizard. Olive ridley turtles' nest on Gahirmatha and other nearby beaches. Bhitarkanika has one of the largest populations of saltwater crocodile in India.

67.Birds Following Army Ants is an example for which of the following types of symbiotic relationship between organisms?

- a) Mutualism
- b) Parasitism
- c) Commensalism
- d) Competition

Correct Answer: C

Explanation:Commensalism is a type of symbiotic relationship between organisms in which one organism benefits without harming the other.

Many birds form a commensal relationship with some species of ants like the army ants. A great number of army ants trail on the forest floor, and while moving, stir up many insects lying in their path. The birds follow these army ants and eat up the insects that try to escape from them. The birds benefit by catching their prey easily, while the army ants are totally unaffected.

68. Consider the following statements about Ramsar Convention.

- 1. It is the United Nations Convention that provides the framework for the conservation and wise use of wetlands.
- 2. Almost 90% of UN member states, have acceded to become "Contracting Parties".
- 3. It does not consider underground aquifers and human-made sites as wetlands.
- 4. Montreux Record is maintained as part of the Ramsar List.

Which of the above statements is/are incorrect?

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

Correct Answer: A

Explanation:The Convention on Wetlands, called the Ramsar Convention, is the intergovernmental treaty that provides the framework for the conservation and wise use of wetlands and their resources.

The Convention was adopted in the Iranian city of Ramsar in 1971 and came into force in 1975. Since then, almost 90% of UN member states, from all the world's geographic regions, have acceded to become "Contracting Parties".

The Convention uses a broad definition of wetlands. It includes all lakes and rivers, underground aquifers, swamps and marshes, wet grasslands, peatlands, oases, estuaries, deltas and tidal flats, mangroves and other coastal areas, coral reefs, and all human-made sites such as fish ponds, rice paddies, reservoirs and salt pans.

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

It is maintained as part of the Ramsar List.

69. Consider the following statements with reference to Ozone.

- 1. Tropospheric ozone is sometimes labeled as the "good" ozone, because of its protective role.
- 2. Concentration of ozone in the atmosphere naturally fluctuates depending on seasons and latitudes.
- 3. The ozone hole over Antarctica is slowly recovering because of the CFC phase-down.

Which of the above statements is/are correct?

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

Correct Answer: C

Explanation:Atmospheric ozone absorbs ultraviolet (UV) radiation from the sun, particularly harmful UVB-type rays. Exposure to UVB radiation is linked with increased risk of skin cancer and cataracts, as well as damage to plants and marine ecosystems. Atmospheric ozone is sometimes labeled as the "good" ozone, because of its protective role, and shouldn't be confused with tropospheric, or ground-level, "bad" ozone, a key component of air pollution that is linked with respiratory disease.

Ozone (O3) is a highly reactive gas whose molecules are comprised of three oxygen atoms. Its concentration in the atmosphere naturally fluctuates depending on seasons and latitudes, but it generally was stable when global measurements began in 1957. Groundbreaking research in the 1970s and 1980s revealed signs of trouble.

More than 30 years after the Montreal Protocol, NASA scientists documented the first direct proof that Antarctic ozone is recovering because of the CFC phase-down: Ozone depletion in the region has declined 20 percent since 2005.

70. Consider the following statements about Coral reefs.

- 1. They occur in shallow tropical areas where the sea water is clean and warm.
- 2. They are the natural protective barriers against erosion and storm surge.
- 3. In India, among the reef areas, Gulf of Mannar has very rich species diversity followed by Lakshadweep islands.

Which of the above statements is/are correct?

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

Correct Answer: B

Explanation: Among the 4 major coral reef areas of India, Andaman and Nicobar Islands are found to be very rich in species diversity followed by Lakshadweep islands, the gulf of mannar and and the gulf of Kachchh.

71. Which of the following pollutants are directly emitted from motor vehicles?

- 1. Particulate matter
- 2. Un-burnt hydrocarbons
- 3. Ozone
- 4. Carbon monoxide
- 5. Methane

Select the correct code:

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

Correct Answer: A

Explanation: The following pollutants are emitted from motor vehicles:

- Particulate matter (PM).
- Un-burnt hydrocarbons.
- Nitrogen oxides (NOx).
- Carbon monoxide (CO).
- Carbon dioxide (CO2).
- Sulphur dioxide (SO2).
- Methane

While ozone is not emitted directly from automobiles, the unstable compound is formed in the atmosphere through a complex set of chemical reactions involving hydrocarbons, oxides of nitrogen, and sunlight.

72. Which of the following were the recommendations of Gadgil Committee on Western Ghats?

- 1. It proposed that entire Western Ghats area be designated as ecologically sensitive area (ESA).
- 2. Within this area, smaller regions were to be identified as ecologically sensitive zones (ESZ) I, II or III based on their existing condition and nature of threat.
- 3. No new thermal power projects, but hydro power projects allowed with restrictions.

Select the correct code:

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

Correct Answer: A

Explanation:What did the Gadgil Committee say?

- It defined the boundaries of the Western Ghats for the purposes of ecological management. It proposed that this entire area be designated as ecologically sensitive area (ESA).
- Within this area, smaller regions were to be identified as ecologically sensitive zones (ESZ) I, II or III based on their existing condition and nature of threat.
- It proposed to divide the area into about 2,200 grids, of which 75 per cent would fall under ESZ I or II or under already existing protected areas such as wildlife sanctuaries or natural parks.
- The committee proposed a Western Ghats Ecology Authority to regulate these activities in the area.

Recommendations of Kasturirangan Committee:

- A ban on mining, quarrying and sand mining.
- No new thermal power projects, but hydro power projects allowed with restrictions.
- A ban on new polluting industries.
- Building and construction projects up to 20,000 sq m was to be allowed but townships were to be banned.
- Forest diversion could be allowed with extra safeguards.

73. Which among the following is the main constituents of Biogas?

- a) Methane and Carbon Dioxide
- b) Methane and Nitrogen
- c) Methane and Hydrogen
- d) Methane and Hydrogen Sulfide

Correct Answer: A

Explanation:Biogas comprises primarily methane (CH4) and carbon dioxide (CO2) and may have small amounts of Nitrogen, Hydrogen, hydrogen sulphide and oxygen.

74. Consider the following statements about Geothermal energy.

- 1. Geothermal fields are situated in circum-pacific margins and rift zones of East Africa.
- 2. The production of geothermal energy does not produce any greenhouse gases.
- 3. In India, the Puga valley in the Ladakh region is the potential geothermal field.

Which of the above statements is/are correct?

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

Correct Answer: C

Explanation:Geothermal energy is natural heat from the interior of the earth that can be used to generate electricity as well as to heat up buildings.

Major geothermal fields are situated in circum-pacific margins, rift zones of East Africa, North Africa, Mediterranean basin of Europe, across Asia to Pacific.

In India, exploration and study of geothermal fields started in 1970. The GSI (Geological Survey of India) has identified 350 geothermal energy locations in the country. The most promising of these is in Puga valley of Ladakh. The estimated potential for geothermal energy in India is about 10000 MW.

Geothermal Energy production releases greenhouse gases like carbon dioxide and methane.

75. Consider the following statements.

- 1. It is recognized as an Important Bird Area by Bird Life International.
- 2. It was declared as a World Heritage Site by UNESCO.
- 3. The forest region is home to world's largest population of Indian Rhinoceros.
- 4. It is also a Tiger Reserve.

The above statements are related to which National Park?

- a) Manas National Park
- b) Nameri National Park
- c) Orang National Park
- d) Kaziranga National Park

Correct Answer: D

Explanation: Along with the iconic Greater one-horned rhinoceros, the park is the breeding ground of elephants, wild water buffalo, and swamp deer. Over the time, the tiger population has also increased in Kaziranga, and that's the reason why Kaziranga was declared as Tiger Reserve in 2006. Also, the park is recognized as an Important Bird Area by BirdLife International for the conservation of avifaunal species.

The forest region of Kaziranga Park is home to world's largest population of Indian Rhinoceros. In the year 1985, the park was declared as a World Heritage Site by UNESCO.

76.Consider the following statements with respect to Atal Tunnel:

- 1. Atal Tunnel connects Solang Valley near Manali to Sissu in Lahaul and Spiti district.
- 2. It is constructed under Pir Panjal range

Which of the above statements is/are correct?

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

Correct Answer: C

Explanation:Atal Tunnel in Himachal Pradesh's Rohtang, which connects Solang Valley near Manali to Sissu in Lahaul and Spiti district.

It is the 9-km-long tunnel is constructed under the Pir Panjal range.

It has been named after former PM Atal Bihari Vajpayee and will be the world's longest highway tunnel above the altitude of 10,000 feet (3000 metres).

It was scheduled to be completed by May 2020, in a revised estimate, but the Covid-19 pandemic pushed back the completion by a few months due to lockdown conditions.

Vehicles can travel at a maximum speed of 80 km per hour. Up to 1,500 trucks and 3,000 cars are expected to use it per day when the situation gets to normal.

77. What is the name of the government programme which was launched formassive road development programme in North Earth region?

- a) SARDP-NE
- b) RASTH-NE
- c) CONNECT_NE
- d) SATH-NE

Correct Answer: A

Explanation:Government of India has undertaken massive road development programme under SARDP-NE Scheme in NE Region.

The scope of the programme has been enlarged from time to time, since September. 2005.

Under SARDP-NE (Phase –A and Arunachal Pradesh), 6418 km (5998 km actual design length) has already been identified for development at an estimated investment of about Rs. 30,450 crore, out of which 3356 km has been completed and 1961 km is under construction.

Objectives of SARDP-NE:

- Upgrade National Highways connecting State Capitals to 2/4 lan
- Upgrade National Highways connecting State Capitals to 2/4 lan
- Improve roads of strategic importance in border area.
- Improve connectivity to neighboring countries

78. Distribution of property card will be done by Govt. of India under which Scheme?

- a) SAHAY Scheme
- b) SAMVITA Scheme
- c) SVAMITVA Scheme
- d) SARVAM Scheme

Correct Answer: C

Explanation: The Prime Minister launched the distribution of Property Cards under the SVAMITVA Scheme via video conferencing.

The launch will enable around one lakh property holders to download their Property Cards through the SMS link delivered on their mobile phones.

This would be followed by physical distribution of the Property Cards by the respective State governments.

About: SVAMITVA (Survey of Villages and Mapping with Improvised Technology in Village Areas) is a Central Sector Scheme launched on National Panchayati Raj Day, 24th April 2020.

Aims:

- To provide an integrated property validation solution for rural India.
- To provide the 'record of rights' to village household owners in rural areas and issue Property Cards.
- The demarcation of rural areas would be done using Drone Surveying technology.

Implementation:

- In a phased manner over a period of four years (2020-2024).
- Implementing Agency: Ministry of Panchayati Raj at National Level
- Revenue Department/Land Records Department in States
- Survey of India is a technology partner for implementation

79. Consider the following pairs:

Exercise :: Participating Countries

1. Indra :: India-Britain Naval Exercise

2. Naseem :: Al-Bahr India- Oman Naval Exercise

3. Varuna :: India-France

Which of the above pairs is/are correct?

a) 1 and 2

b) 2 and 3

c) 1 and 3

d) Only 2

Correct Answer: B

Explanation:

	tant Bilateral and Multilateral Defence Exercises
Indra	India-Russia Naval Exercise
Malabar	US-India-Japan Naval Exercise
Varuna	France and India Naval Exercise
Simbex	India and Republic of Singapore Naval Exercise
lbsamar	India, Brazil and South Africa Naval Exercise
Konkan	India and Britain Naval Exercise
Ausindex	India and Australia Naval Exercise
Naseem Al-Bahr	India-Oman Naval Exercise

80. Consider the following statement with respect to Kalam Program for Intellectual Property Literacy and Awareness Campaign (KAPILA):

- 1. It is Launched by Indian Ministry of Human Resource Development
- 2. Under this campaign, students pursuing education in higher educational institutions will get information about the correct system of application process for patenting their invention.

Which of the above statements is/are correct?

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

Correct Answer: B

Explanation: The Union Education Minister has launched the Kalam Program for Intellectual Property Literacy and Awareness Campaign (KAPILA) on the occasion of the 89th birth anniversary of Dr APJ Abdul Kalam.

Under this campaign, students pursuing education in higher educational institutions will get information about the correct system of application process for patenting their invention.

Students in higher education institutions of the country are innovating constantly under the guidance of their teachers but they are not aware of the system of filing its patent.

Through this campaign, students will be able to get benefits from their inventions by patenting them.

For India to become a USD 5 trillion economy by 2024-25, students and scientists have to be more aware of protecting intellectual property (IP).

The program will facilitate the colleges and institutions to encourage more and more students to file patents and everyone engaged in research and development must apply to preserve and safeguard their inventions.

81. Srisailam Hydroelectric Power Plant is constructed over which River?

- a) Godavari River
- b) Kali River
- c) Krishna River
- d) Kaveri River

Correct Answer: C

Explanation: Srisailam Hydroelectric Power Plant

Srisailam Hydroelectric Power Plant is constructed across the Krishna River located between Kurnool and Mahabubnagar districts.

The construction of the project started in 1980.

The Srisailam is a Gravity & Masonry type dam.

Recently Srisailam Hydroelectric power station started its operation after, witnessing a massive fire accident in August 2020.

82.Consider the following statements:

- 1. Earth Observation Satellite (EOS-01) is intended for applications in preventing illegal mining
- 2. India's Polar Satellite Launch Vehicle (PSLV) is the first generation launch vehicle

Which of the above statements is/are correct?

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

Correct Answer: D

Explanation: Earth Observation Satellite (EOS-01): It is an earth observation satellite and is intended for applications in agriculture, forestry and disaster management support.

Earth observation satellites are the satellites equipped with remote sensing technology. Earth observation is the gathering of information about Earth's physical, chemical and biological systems.

Many earth observation satellites have been employed on sun-synchronous orbit.

Other earth observation satellites launched by ISRO include RESOURCESAT- 2, 2A, CARTOSAT-1, 2, 2A, 2B, RISAT-1 and 2, OCEANSAT-2, Megha-Tropiques, SARAL and SCATSAT-1, INSAT-3DR, 3D, etc.

Polar Satellite Launch Vehicle

India's Polar Satellite Launch Vehicle (PSLV) is the third generation launch vehicle.

PSLV is the first launch vehicle which is equipped with liquid stages.

83. Consider the following statements with respect to Public Affairs Index:

- 1. It is developed by The Public Affairs Centre
- 2. Gujarat topped in the index as the best-governed state in the country

Which of 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: The Public Affairs Centre has developed Public Affairs Index (PAI) as a unique statistical tool to evaluate the performance of governance in the States.

It is largely based on secondary data and has been extracted from Union Government Ministries and Departments.

According to the PAC, the governance performance is analysed in the context of sustainable development defined by three pillars of equity, growth and sustainability.

It is a data driven platform to rank the 30 States of India from the lens of governance.

Kerala was adjudged the best-governed state in the country while Uttar Pradesh ended at the bottom in the large states category.

84.Baghlan and Kunduz are recently in news. These places are located in which of the following country?

- a) Syria
- b) Afghanistan
- c) Bangladesh
- d) Israel

Correct Answer: B

Explanation:



85. The country's longest motorable single lane suspension bridge is in which state or Union territory?

- a) Uttarakhand
- b) Himachal Pradesh
- c) Jammu and Kashmir
- d) Ladakh

Correct Answer: A

Explanation: Dobra-Chanthi suspension bridge in Tehri-Garhwal district of Uttarakhand

The 440-metre long Dobra Chanti bridge is India's longest motorable single lane suspension bridge.

Built over Tehri Lake, it will cut travel time between Tehri and Pratapnagar districts from 5 5 to 1.5 hours.

Benefits of the bridge

- Better connectivity within the region.
- Boost tourism potential.
- Gateway to development in the region.
- Local employment promotion.

86. Consider the following statements with respect to SITMEX-20:

- 1. It is a maritime exercise between India and Sri Lanka
- 2. SITMEX-20 concluded in the Andaman Sea.

Which of the above statements is/are correct?

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

Correct Answer: B

Explanation: The SITMEX series of exercises are conducted to enhance mutual interoperability and imbibing best practices between IN, Republic of Singapore Navy (RSN) and Royal Thai Navy (RTN).

The first edition of SITMEX, hosted by Indian Navy, was conducted off Port Blair in September 2019.

The 2020 edition of the exercise is being hosted by RSN. The second edition will be conducted from 21 to 22 November 2020 in Andaman Sea.

The maritime drill witnessed a variety of exercises including naval manoeuvres, surface warfare exercises and weapon firings.

Besides improving inter-operability, SITMEX series of exercise also aims to strengthen mutual confidence and develop common understanding and procedures towards enhancing the overall maritime security in the region.

87. Consider the following statements with respect to National Nutrition Mission:

- 1. The progress report on National Nutrition Mission is released by Ministry of Health
- 2. Its aim is to reduce stunting, undernutrition, anemia and low birth weight by 2%, 2%, 3% and 2% per annum respectively.

Which of the above statements is/are correct?

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

Correct Answer: B

Explanation: National Nutrition Mission launched in 2018, it is the Government of India's flagship programme to improve nutritional outcomes for children, pregnant women and lactating mothers.

It is backed by a National Nutrition Strategy prepared by the NITI Aayog with the goal of attaining "Kuposhan Mukt Bharat" or malnutrition-free India, by 2022.

Aims:

To reduce stunting, under-nutrition, anemia (among young children, women and adolescent girls) and low birth weight by 2%, 2%, 3% and 2% per annum respectively.

To address the problem of malnutrition in a mission-mode.

50% of the total budget comes from the World Bank or other multilateral development banks and the rest of the 50% is through Centre's budgetary support.

The Centre's budgetary support is further divided into 60:40 between the Centre and the States, 90:10 for the north-eastern region and the Himalayan States and 100% for the Union Territories (UTs) without legislature.

NITI Aayog recently released "Accelerating Progress on nutrition in India: What Will It Take", the third progress report on the National Nutrition Mission or the Poshan Abhiyaan.

The third progress report (October 2019-April 2020) takes stock of the roll-out status on the ground and implementation challenges encountered at various levels through large scale datasets.

The initial Reports I and II, focused majorly on the mission's preparedness and implementation by States and UTs, respectively.

The review report was drafted in March 2020 and does not factor worsening poverty and hunger levels since then, which are expected to have gone down further due to the Covid-19.

88. Consider the following statements with respect to BrahMos supersonic cruise missile:

- 1. It is a medium-range supersonic cruise missile which can be launched from submarines, ships, aircraft or land.
- 2. It is the world's fastest supersonic cruise missile

Which of the above statements is/are correct?

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

Correct Answer: C

Explanation:The range of the land-attack version of the BrahMos missile has been extended to 400 km from the original 290 km but its speed has been maintained at 2.8 Mach or almost three times the speed of sound.

The test was done in a "top-attack" configuration.

In top attack mode, the missile is required to climb sharply after launch, travel at a certain altitude and then fall on top of the target.

An amalgamation of the names of Brahmaputra river and Moskva river (Russia), BrahMos missiles are designed, developed and produced by BrahMos Aerospace. BrahMos Aerospace is a joint venture company set up by the Defence Research and Development Organisation (DRDO) and Mashinostroyenia of Russia.

It is a medium-range supersonic cruise missile which can be launched from submarines, ships, aircraft or land.

Cruise missiles are defined as "an unmanned self-propelled guided vehicle that sustains flight through aerodynamic lift for most of its flight path and whose primary mission is to place an ordnance or special payload on a target."

It is the world's fastest supersonic cruise missile, as well as the fastest anti-ship cruise missile in operation.

It operates on the "Fire and Forget" principle, i.e it does not require further guidance after launch.

The missile has a flight range upto 290-km. However, India's entry into the Missile Technology Control Regime (MTCR) has extended the range of the BrahMos missile to reach 450-600 km.

89. Consider the following Statements with respect to Electronic Vaccine Intelligence Network (eVIN):

- 1. eVIN is an indigenously developed technology
- 2. WHO is associating with India under this Mission

Which of 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: The Indian government is using eVIN (Electronic Vaccine Intelligence Network) in association with the United Nations Development Program (UNDP) to identify primary beneficiaries and vaccine distribution networks.

eVIN is an indigenously developed technology.

It digitises vaccine stocks and monitors the temperature of the cold chain through a smartphone application.

The innovative eVIN was first launched across 12 states in 2015 to support better vaccine logistics management at cold chain points.

eVIN supports the central government's Universal Immunization Programme by providing real-time information on vaccine stocks and flows, and storage temperatures across all cold chain points across states and UTs.

90. Consider the following statements Blue Tide:

- 1. It occurs when phytoplankton produce light through chemical reactions in proteins.
- 2. Waves disturb these unicellular microorganisms and make them release blue light.

Which of the above statements is/are correct?

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

Correct Answer: C

Explanation:Beaches in Maharashtra have witnessed the fluorescent bluish glow when the waves hit the shoreline. The phenomenon is called 'blue tide'.

It appears when luminescent marine life makes the sea appear a deep shade of blue.

It occurs when phytoplankton (microscopic marine plants), commonly known as dinoflagellates, produce light through chemical reactions in proteins.

Waves disturb these unicellular microorganisms and make them release blue light.

91. Consider the following statements with respect to houbara bustard:

- 1. It lives in arid climates
- 2. IUCN Red List Status of this species is Vulnerable

Which of the above statements is/are correct?

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

Correct Answer: C

Explanation:

The houbara bustard

It lives in arid climates.

It comes in two distinct species as recognised by the IUCN.

One species resides in North Africa (Chlamydotis undulata) and the other in Asia (Chlamydotis macqueenii) which is commonly known as MacQueen's bustard.

The population of the Asian houbara bustards extends from northeast Asia, across central Asia, the Middle East, and the Arabian Peninsula to reach the Sinai desert.

According to the International Fund for Houbara Conservation (IFHC), roughly 33,000 Asian houbara bustards remain today.

After breeding in the spring, the Asian bustards migrate south to spend the winter in Pakistan, the Arabian Peninsula and nearby Southwest Asia.

Some Asian houbara bustards live and breed in the southern part of their ranges including parts of Iran, Pakistan and Turkmenistan.

IUCN Red List Status: Vulnerable

92. Which statement is true with reference to recently launched PM-WANI scheme?

- a) It aims to enhance the women and neonatal intensive care units in the country
- b) It aims to elevate wireless internet connectivity in the country
- c) It aims to improve the perspective for regional trade and investment in West African Nations
- d) It aims to improve the perspective for regional trade and investment in West Asian countries

Correct Answer: B

Explanation: The Central government has recently launched Prime Minister Wi-Fi Access Network Interface (PM-WANI) and is associated with the establishment of public Wi-Fi networks across the country.

Prime Minister Wi-Fi Access Network Interface (PM-WANI) is being seen as an attempt by the government to elevate wireless internet connectivity in the country.

93.Beresheet 2 mission to the Moon, which is often seen in news, is associated with which country?

- a) China
- b) USA
- c) Russia
- d) Israel

Correct Answer: D

Explanation:Israel launched the Beresheet 2 project (Beresheet means "Genesis").

This project will be made up of three adjacent spacecrafts.

It aims at landing an unmanned craft on the moon in 2024, after a previous such mission had crashed into the lunar surface.

The original Beresheet was a spacecraft built by Israeli NGO SpaceIL and state-owned Israel Aerospace Industries.

It had reached the moon in April 2019, but suffered an engine failure as it prepared to land.

Israel would become the fourth nation to land on the moon, only after Russia, the US and China

Do you know?

Other Missions to Moon:

India has planned a new moon mission named Chandrayaan-3. It is likely to be launched in early 2021.

The United Arab Emirates (UAE) has decided to send an unmanned spacecraft to the moon in 2024.

Artemis is a crewed spaceflight program of the National Aeronautics and Space Administration (NASA) that has the goal of landing "the first woman and the next man" on the Moon, specifically at the lunar south pole region by 2024.

94. Consider the following statements with respect to ease of doing business Index:

- 1. The report is released by the IMF.
- 2. India's position is increased by 14 positions in 2020 from the previous year position.

Which of the above statements is/are correct?

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

Correct Answer: B

Explanation:In news: Ease of doing business report is recently released.

- The report is released by the World Bank.
- In August, the World Bank had decided to pause the publication the report due to irregularities in the data.
- As per new report, China's slipped from 85th rank to 78th rank.
- The rankings of three other countries Saudi Arabia, United Arab Emirates and Azerbaijan have also changed.
- As per 2020 report, India is placed at 63rd position among 190 countries, jumped by 14 positions from the previous year position.
- India's rank remains unchanged after adjusting irregularities in the data.

The ranking is based 10 indices:

- Starting a business.
- Dealing with construction permits.
- Getting electricity.
- Registering property.
- Getting credit.
- Protecting investors.
- Paying taxes.
- Trading across borders.
- Enforcing contracts.
- Resolving Insolvency.

95.Consider the following statements with respect to Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) scheme:

- 1. It is a central sector scheme and implemented by ministry of finance.
- 2. Under the scheme, the Centre transfers an amount of Rs. 6,000 per year directly into the bank accounts of the all-landholding farmers.

Which of the above statements is/are correct?

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

Correct Answer: B

Explanation:In news: Recently, the Prime Minister has virtually released the next installment of financial benefit under Pradhan Mantri Kisan Samman Nidhi (PM-KISAN).

Pradhan Mantri Kisan Samman Nidhi:

Launched in February 2019, it is a Central Sector Scheme, which is being implemented by the Ministry of Agriculture and Farmers Welfare.

On its first anniversary, the PM-KISAN Mobile App developed and designed by the National Informatics Centre (NIC) in collaboration with the Ministry of Electronics and Information Technology was launched.

Under the scheme, the Centre transfers an amount of Rs. 6,000 per year, in three equal installments, directly into the bank accounts of the all landholding farmers irrespective of the size of their landholdings.

The entire responsibility of identification of beneficiary farmer families rests with the State/UT Governments.

It aims to:

- Reduce the input cost of the farmers.
- Ensure a fair price for the crop.
- Open new markets for the farmers to sell their crop.
- Supplement the financial needs of the Small and Marginal Farmers (SMFs)

96. Consider the following statements with respect to Chandrayan-2:

- 1. It consists of an Orbiter of the Moon, Vikram- the lander and Pragyan- the rover.
- 2. The Chandrayaan-2 was India's first attempt to land on Moon's South Polar Region.

Which of the above statements is/are correct?

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

Correct Answer: C

Explanation:

Chandrayaan-2

- It is an integrated 3-in-1 spacecraft of around 3,877 kg consisting of an Orbiter of the Moon, Vikram (after Vikram Sarabhai) the lander and Pragyan (wisdom) the rover, all equipped with scientific instruments to study the moon.
- The Chandrayaan-2 was India's first attempt to land on the lunar surface.
- ISRO had planned the landing on the South Pole of the lunar surface. However, the lander Vikram hard-landed in September last year. Its orbiter, which is still in the lunar orbit, has a mission life of seven years.

Objective:

- Try and build on the evidence of water molecules shown by Chandrayaan-1 and study the extent and distribution of water on the Moon.
- Study topography, seismography, composition of lunar surface and the lunar atmosphere.
- The study of ancient rocks and craters can offer indications of origin and evolution of the Moon.
- The South Pole region of the Moon also contains clues to the fossil records of early solar systems. Thus, it can improve our understanding of the early solar system as well.

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

- 1. Kambala Andhra Pradesh
- 2. Jalikattu Tamil Nadu
- 3. Aanaval Pidi Kerala

Select the correct code:

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

Correct Answer: B

Explanation:Correct pairs:

Kambala - Karnataka

Jalikattu - Tamil Nadu

Aanaval Pidi (Catching elephant's tail) - Kerala

Kambala is an annual buffalo race which is a tradition in the Karnataka's Dakshina Kannada and Udupi districts' farming community. This area is called Tulunadu (Land of Tulu Language).

A pair of buffaloes are tied to the plough and one person anchors it, beating the buffaloes with a stick to run faster. There are two parallel muddy tracks, on which two competing pairs of buffaloes run. Fastest team wins.

98. Fordow, Natanz and Arak, which are quite often in news, are associated with -

- a) Uranium/Nuclear Enrichment Facilities in Iran
- b) Newly developed missiles by Russia
- c) Mountain ranges in Armenia
- d) ISIS stronghold in Syria

Correct Answer: A

Explanation:Iran has told the United Nations nuclear watchdog it plans to enrich uranium to 20% purity, a level it achieved before its 2015 accord, at its Fordow site buried inside a mountain.

The Arak area has several industrial complexes, some with ties to the nuclear program, in particular the IR-40 reactor under construction and a heavy water production plant, both near Arak.

99. Which of the following statements is/are correct regarding the Dedicated Freight Corridors (DFC) project by Indian Railways?

- 1. The project aims to reduce the unit cost of transportation and speed up the freight train in India.
- 2. The Eastern DFC is funded by Japan while the Western DFC is funded by World Bank.
- 3. The freight trains in DFC will run completely on electricity, reducing the emission of Greenhouse gases.

Select the correct answer using the code given below:

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

Correct Answer: C

Explanation:The primary aim of the project is to reduce the unit transportation cost and speed up the freight trains resulting in higher productivity.

The Eastern DFC extends from Dankuni near Kolkata to Ludhiana in Punjab, while the Western DFC extends from the Jawahar Lal Nehru Port (JNPT) in Mumbai to Dadri near Delhi.

The Western DFC is being funded by the Japan International Cooperation Agency (JICA) up to 77 per cent of the total cost.

The Ludhiana to Mughalsarai section (1183 km) of the Eastern DFC is being funded by the World Bank up to 66 per cent of the project cost.

The trains will run completely on electricty and thus reduces the green house gas emissions. Once implemented DFC will make Indian freight transport cheapest in the world as they run on a Broad-gauage with double-stack using electric locomotives, which no other country has achieved.

100.Dzukou valley is a popular trekking destination known for its exotic flowers, is spread across which of the following states?

- 1. Assam
- 2. Nagaland
- 3. Manipur

Select the correct answer using the codes given below:

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

Correct Answer: C

Explanation: The Dzüko Valley is a valley located at the borders of the states of Nagaland and Manipur in Northeast India. This valley is well known for its natural environment, seasonal flowers and flora & fauna.

It is situated at an altitude of 2452 m above sea level. The valley is famous for its wide range of flowers in every season but the most famous one is the Dzüko Lily and it is found only in this valley.