



EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

QUESTION : Which of the following statements is/are true about Ecological Niche ?

- (1) A niche is a unique functional role or place of a species in an ecosystem.
- (2) Higher the number of niche in an ecosystem, more stable is the ecosystem.
- (3) Some species tend to have exact identical ecological niche in an ecosystem to maintain stability and continuity.

Codes:

- (A) 1 and 2
- (B) Only 1
- (C) Only 3
- (D) All

Answer: a

EXPLANATION : Different species may have similar niche, but not exactly identical niche.

QUESTION : Which of the following statements related to the BirdLife International is/are correct?

- (1) It is a platform for all the stakeholders engaged in genetic resource conservation and management of birds in developing nations.
- (2) BirdLife International is the official Red List Authority for birds, for the International Union for Conservation of Nature.
- (3) It publishes the scientific journal Bird Conservation International.

Codes:

- (A) 1 and 2
- (B) 2 and 3
- (C) 1 and 3
- (D) All

Answer:(B)EXPLANATION : It is a global partnership of conservation organizations that strives to conserve birds, their habitats and global biodiversity, working with people towards sustainability in the use of natural resources. It is the world's largest partnership of conservation organizations, with over 120 partner organizations. BirdLife International is the official Red List Authority for birds, for the International Union for Conservation of Nature. Publications:

- BirdLife International publishes a quarterly magazine, World Birdwatch, which contains recent news and authoritative articles about birds, their habitats, and their conservation around the world.
- It publishes the scientific journal Bird Conservation International

QUESTION : In Grasslands there is a combination of drought and fires that prevents biome from becoming more forest like. Why the grasses are able to withstand the fire?

- (A) Because they have fire resistant resin present in them.
- (B) Because they have evolved to have large deep root systems.
- (C) Because they have certain weeds attached that prevent them from burning.
- (D) None of the above

Answer: (B)EXPLANATION : The combination of drought and fires is what prevents this particular biome from becoming more forest-like. Yet the fires won't destroy the grass as they grow from the bottom of the stems. Therefore they can continue to grow even if the tops of them have been signed by the fire. Native grasses have deeper root systems that can survive fires, but invasive plants tend to have shallower roots and succumb to fires.

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QUESTION : Which of the following depict the Behavioral adaptations done by plants and animals?

- (1) Being primarily active at night rather than during daylight hours.
- (2) Having striped fur for camouflage.
- (3) Living underground to get protection from roaming predator.
- (4) Prevention of water loss from body (plants and animals) by reducing surface area.

Codes:

- (A) 1 and 3
- (B) 2, 3 and 4
- (C) 1, 3 and 4
- (D) All

Answer: . (A)EXPLANATION : Prevention of water loss from body (plants and animals) by reducing surface area is a form of physical adaptation. An adaptation is "the appearance or behaviour or structure or mode of life of an organism that allows it to survive in a particular environment". Some adaptations are structural. Structural adaptations are physical features of an organism like the bill on a bird or the fur on a bear. Other adaptations are behavioral. Behavioral adaptations are the things organisms do to survive such as migration, hibernation, camouflage, etc.

QUESTION : Consider the following statements about the Sloth Bear:

- (1) It is a nocturnal (hunting at night) bear species that feeds chiefly on insects.
- (2) It is listed in Schedule I of Indian Wildlife Protection Act, 1972.
- (3) The forest department gives compensation for bear attacks if there is a death or injury.

(4) Rajasthan government has launched the Sloth Bear Habitat project to provide better habitat by restoring the ecology of Jessore Wildlife Sanctuary.

Which of the above statements is/are correct?

- (A) 1, 2 and 3
- (B) 2 and 3
- (C) 1, 3 and 4
- (D) 2, 3 and 4

Answer: . (A)EXPLANATION : The sloth bear is a nocturnal (hunting at night) bear species that feeds chiefly on insects, found wild within the Indian Subcontinent. IUCN estimates that less than 20,000 sloth bears survive in the wilds of the Indian subcontinent and Sri Lanka. IUCN classifies it as vulnerable. It is listed in Schedule I of Indian Wildlife Protection Act, 1972, which provides Legal protection. International trade is prohibited as it is listed in Appendix I of the Convention on International Trade in Endangered Species. Gujarat government has launched the Sloth Bear Habitat project to provide better habitat by restoring the ecology of Jessore wildlife sanctuary, where more trees will be planted and unwanted vegetation removed.

QUESTION : What were the objectives of setting up of Nilgiri Biosphere Reserve?

- (1) To conserve the in-situ genetic diversity of species.
- (2) To restore degraded ecosystems to their natural conditions.
- (3) To provide baseline data for ecological and environmental research and education.
- (4) To function as an alternate model for sustainable development.

Select the correct answer from the below-given Codes:

- (A) Only 1
- (B) 1 and 2

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- (C) 2, 3 and 4
(D) All

Answer: . (D) EXPLANATION : Nilgiri biosphere was the 1st biosphere reserve established in India. It is located in the Western Ghats and includes 2 of the 10 biogeographical provinces of India. Wide ranges of ecosystems and species diversity are founded in this region. The Nilgiri Biosphere Reserve was established mainly to fulfil the following objectives:

- To conserve in situ genetic diversity of species.
- To restore degraded ecosystems to their natural conditions.
- To provide baseline data for ecological and environmental research and education.
- To function as an alternate model for sustainable development.

QUESTION : Which of the following definitions related to the different kinds of species is/are correct?

- (1) Foundation species play a major role in creating or maintaining a habitat that supports other species.
- (2) Cosmopolitan species are that whose range extends across all or most of the world in appropriate habitats.
- (3) Indicator species are popular, charismatic species that serve as symbols and rallying points to stimulate conservation awareness and action.

Codes:

- (A)1 and 2
(B)1 and 3
(C) Only 1
(D) All

Answer: . (A)EXPLANATION : Flagship species are popular, charismatic species that serve as symbols and rallying points to stimulate conservation awareness and action. Examples of flagship species include the Bengal tiger, the giant panda, Asian elephant (*Elephas maximus*), etc. Flagship species can represent an environmental feature (e.g. a species or ecosystem), cause (e.g. climate change or ocean acidification), organization (e.g. NGO or government department) or geographic region (e.g. state or protected area). Indicator species can signal a change in the biological condition of a particular ecosystem, and thus may be used as a proxy to diagnose the health of an ecosystem.

QUESTION : Which of the following pairs is/are correct?

(1) Olive Ridley Turtle : It is found mostly in Gahirmatha, Andhra Pradesh.

(2) Gangetic River dolphin : It is declared as city animal of Guwahati.

(3) White Tiger : Safari is opened at Madhya Pradesh.

Codes:

- (A)1 and 2
(B)2 and 3
(C) Only 3
(D) All

Answer: . (D) EXPLANATION : Olive Ridley Turtles- They are smallest and most abundant of all the sea turtle species. They are Omnivores. They are found only in warmer waters, including the southern Atlantic, Pacific and Indian Oceans. Gahirmatha located in the Bhitarkanika Wildlife Sanctuary, Odisha houses the world largest mass nesting site of these turtles. Past few years, Sandy stretches of Hope Island of the Coringa Wildlife Sanctuary, Andhra Pradesh has also emerged as a breeding ground for these turtles. Gangetic River dolphin is declared as

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city animal of Guwahati The world's maiden 'White Tiger Safari is opened' at Mukundpur in Satna district in the State's Vindhya region.

QUESTION : Which of the following statements is/are true about Grasslands?

- (1) These are formed over the regions of high temperature and high rainfall.
- (2) Regular fires promote the growth of native grasses but limit the growth of trees.
- (3) Grasslands are important for maintaining the richness and size of livestock population.
- (4) The grasses found here can either be tall or short depending on the location of the grassland and the amount of rain they receive.

Codes:

- (A) 1, 2 and 3
- (B) 2, 3 and 4
- (C) 1, 3 and 4
- (D) All

Answer: b

EXPLANATION : These are formed over the regions of moderate temperature and moderate rainfall. It is an intermediate between a forest ecosystem and a desert ecosystem.

QUESTION : With reference to 'Eco-Sensitive Zone', which of the following statements is/are correct?

- (1) It act as a buffer for further protection around Protected Areas (PAs) such as National Parks and Wildlife sanctuaries.
- (2) It is notified under Environment (Protection) Act, 1986.

(3) The purpose of the declaration of ecosensitive zones is to prohibit all kinds of human activities, in those zones except agriculture.

Select the correct answer using the code given below.

- (A) Only 1
- (B) 1 and 2
- (C) 2 and 3
- (D) All

Answer: (B) **EXPLANATION :** It is created to act as a buffer for further protection around Protected Areas (PAs) such as National Parks and Wildlife sanctuaries. Activities around such areas are regulated and managed so as to protect the environment. ESZ is notified under Section 3 of the Environment (Protection) Act, 1986 by the Union Ministry of Environment and Forest. ESZ Guidelines classify activities under three categories: Prohibited: Commercial Mining, Setting of Saw Mill, Setting of industries causing pollution, establishment of major hydroelectric projects etc Regulated: Felling of Trees, Establishment of hotels and resorts, erection of electrical cables, drastic change of agricultural systems etc Permitted: Ongoing agriculture and horticulture practices by local communities, rain water harvesting, organic farming etc Sanjay Gandhi National Park in Mumbai has been notified as Eco-sensitive zone.

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

- (1) Bejjur Forest Reserve : Telangana
- (2) Coringa Wildlife Sanctuary : Nagaland
- (3) Daroji Sloth Bear Sanctuary : Sikkim

Codes:

- (A) Only 1
- (B) 2 and 3
- (C) 1 and 3

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(D) All

Answer: (A) EXPLANATION : The match is as follows:

- Bejjur Forest Reserve - Telengana.
- Coringa Wildlife Sanctuary - Andhra Pradsh.
- Daroji Sloth Bear Sanctuary - Karnatka.
- Ranganathittu Bird Sanctuary - Karnatka.
- Kali Tiger Reserves - Karnatka.
- Idukki Wildlife Sanctuary - Kerala.

QUESTION : Which of the following statements is/are true about Hibernation?

(1) Hibernation is a state of inactivity and metabolic depression in endotherms.

(2) Electrical activity in the brain almost completely ceases during hibernation, just response to external stimuli occurs.

(3) The main purpose is to conserve energy during a period when sufficient food is unavailable.

Codes:

- (A) 1 and 3
- (B) 2 and 3
- (C) Only 3
- (D) All

Answer: . (D) EXPLANATION : Hibernation is a state of inactivity, in which an animal's heart rate, body temperature, and breathing rate are decreased in order to conserve energy through the cold months of winter. Electrical activity in the brain almost completely ceases during hibernation, although some areas remain active. These areas are those that respond to external stimuli such as light, temperature, and noise. Thus, the hibernating animal can be aroused under extreme conditions.

Reducing metabolic rate and lowering body temperature enables survival through cold periods when food is scarce or has little energy value. Hibernating species usually work hard to build up large fat reserves before they bed down, and subsist on this during their torpor. They might wake up at intervals to defecate or top up on food.

QUESTION : Which of the following statements define the natural and cultural significance of Khangchendzonga National Park?

(1) It is home to a sacred site of Tibetan Buddhism.

(2) Presence of indigenous religious and cultural practices of the Lepcha for environmental conservation.

(3) It lies within the Himalaya global biodiversity hotspot and is home to a significant number of endemic, rare and threatened plant and animal species.

Codes:

- (A) 1 and 3
- (B) 2 and 3
- (C) All
- (D) None

Answer: (C) EXPLANATION : Khangchendzonga National Park (KNP) in Sikkim has been inscribed as India's first mixed (cultural as well as natural) heritage site on the Unesco World Heritage List. KNP lies within the Himalaya global biodiversity hotspot and is home to a significant number of endemic, rare and threatened plant and animal species. The cultural significance of KNP is portrayed by three main different facets:

- Firstly, the notion of beyul or hidden sacred land, which extends to all of Sikkim, but has its heart in the territory of Khangchendzonga National Park, is important in Tibetan Buddhism, not only intrinsic to Sikkim, but



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in the neighbouring countries and beyond - that is to say, KNP is home to a sacred site of one of the world's leading religious traditions;

- Secondly, the multi-layered sacred landscape of Khangchendzonga and the cultural and religious relevance of the hidden land (beyul in Tibetan Buddhism and Mayel Lyang, in Lepcha tradition) is specific to Sikkim and is a unique example of co-existence and exchange between different religious traditions and people; and

- Thirdly, the indigenous religious and cultural practices of the Lepcha with regard to the ecology and the specific properties of local plants, which stand as an outstanding example of traditional knowledge and environmental preservation.

QUESTION : Which of the following statements is/are true about Taiga forest ecosystem?

- (1) It is characterized by coniferous forest having spruce and pines.
- (2) It is the world's largest biome apart from the oceans.
- (3) Its soil is old in age and thus rich in nutrients.

Codes:

- (A) 1 and 2
- (B) 2 and 3
- (C) Only 3
- (D) All

Answer: . (A) EXPLANATION : Taiga soil tends to be young and poor in nutrients. It lacks the deep, organically enriched profile. The thinness of the soil is due largely to the cold, which hinders the development of soil and the ease with which plants can use its nutrients.

QUESTION : Carbon Audit is a means of measuring and recording the CO₂ (Carbon Dioxide) emissions of an organization. Which of the following parameters are added in the Carbon Audit?

- (1) Direct power usage from fuel-powered sources.

- (2) Waste and recycling policy.

- (3) Carbon saving arrangements with supply chain partners.

- (4) Paper used (quantity and type).

- (5) Commuting distance and type for all employees.

Codes:

- (A) 1, 2 and 3
- (B) 2, 3 and 4
- (C) 1, 2, 3 and 4
- (D) All

Answer: . (D) EXPLANATION : It includes: • Direct power usage (from fuel-powered sources). • Fuel-powered transport (haulage & travel). • Waste and recycling policy. • Carbon saving arrangements with supply chain partners. • Carbon saving arrangements with employees. • Materials (waste and recycling). • Paper used (quantity & type). • Materials sent to recycling (quantity & type). • Waste not recycled (mixed, by weight). • Detailed energy usage by supplier. • Detailed air & road travel (vehicle class and mileages). • Commuting: distance and type for all employees

QUESTION : Which of the following role is/are played by Wildlife corridor in biodiversity preservation?

- (1) It allows an exchange of individuals between populations, which may help prevent the negative effects of inbreeding and reduced genetic diversity.

- (2) It may facilitate the re-establishment of populations that have been reduced or eliminated due to random events such as fires or disease.

Codes:

- (A) Only 1
- (B) Only 2
- (C) Both

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(D) None

Answer: (C) **EXPLANATION :** Wildlife corridors: It is an area of habitat connecting wildlife populations separated by human activities or structures (such as roads, development, or logging). This allows an exchange of individuals between populations, which may help prevent the negative effects of inbreeding and reduced genetic diversity (via genetic drift) that often occur within isolated populations. Corridors may also help facilitate the re-establishment of populations that have been reduced or eliminated due to random events (such as fires or disease)

QUESTION : Which of the following factors lead to formation of Algal Bloom?

- (1) Presence of nutrients promote and support the growth of algae.
- (2) High temperature and intermittently exposed to high light intensities.
- (3) Stable water conditions with low flows.
- (4) Presence of light winds.

Codes:

- (A) Only 1
- (B) 1 and 3
- (C) 2, 3 and 4
- (D) All

Answer: . (D) **EXPLANATION :** Algal bloom is initiated by a combination of: • Natural factors (e.g. light intensity, temperature, salinity, nutrients, trace elements, water flow and motility of algal cells). • Anthropogenic factors (e.g. discharge of organic or nutrient-enriched matters) that encourage the rapid and massive growth of algae.

QUESTION : Total Organic Carbon (TOC) is the carbon (C) stored in soil organic matter (SOM). Which of the following is/are the benefits of this stored carbon?

- (1) It influences the nutrient holding capacity of the soil.
- (2) It is the main source of energy for soil microorganisms.
- (3) It reduces nutrient availability through mineralization thus reduces soil pollution.

Codes:

- (A) Only 1
- (B) 2 and 3
- (C) 1 and 2
- (D) All

Answer: (C) **EXPLANATION :** Total organic carbon is a measure of the carbon contained within soil organic matter. Total organic carbon influences many soil characteristics including colour, nutrient holding capacity (cation and anion exchange capacity), nutrient turnover and stability, which in turn influence water relations, aeration and workability.

In soils with high clay content, the contribution to cation exchange from the organic fraction is generally small compared to that from clay. In sandier soils, the relative contribution of the organic fraction is higher because there is less clay, even though the amount of total organic carbon present may be similar or less to that in clays. By providing a food source for microorganisms, organic carbon can help improve soil stability by micro-organisms binding soil particles together into aggregates or 'peds'. Bacteria excretions, root exudates, fungal hyphae and plant roots can all contribute to better soil structure. It increases the nutrient availability through mineralisation.

QUESTION : Which of the following statement is true regarding Environmental Sensitivity Index?

- (A) It is used to identify sensitive shoreline resources that could be at risk in the event of an oil spill.

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(B) It is used to identify floral and faunal endemicity struggling to survive in the rapidly shrinking ecosystem.

(C) It is used to compare air pollution level in cities which are more sensitive due to high population.

(D) None.

Answer: (A) **EXPLANATION :** Environmental Sensitivity Index (ESI) maps provide a concise summary of coastal resources that are at risk if an oil spill occurs nearby. When an oil spill occurs, ESI maps can help responders meet one of the main responses. Objectives: reducing the environmental consequences of the spill and cleanup efforts. Additionally, ESI maps can be used by planners-before a spill happens-to identify vulnerable locations, establish protection priorities, and identify cleanup strategies.

QUESTION : Which of the following statement related to the Living Planet Index is correct?

(A) It is an indicator of the state of global biological diversity, based on trends in vertebrate populations of species from around the world.

(B) It provides information mainly on trends in the abundance of the world's vertebrates which are covered under CITES.

(C) It is an indicator of state of global species that help policy-makers and scientists to design strategies for conservation.

(D) It provides information mainly on trends in the abundance of the world's species which are covered under Conn convention.

Answer: . (A) **EXPLANATION :** The Living Planet Index (LPI) is an indicator of the state of global biological diversity, based on trends in vertebrate populations of species from around the world.

The Living Planet Report is published every two years by the World Wide Fund for Nature since 1998. It is based on the Living Planet Index and ecological footprint calculations. The report is compiled with data from

the Zoological Society of London (ZSL) to measure the abundance of biodiversity. The index tracks 14,200 populations of 3700 species of vertebrates. Biodiversity population is expected to fall 67 percent by 2020, if the current situation persists. Moreover, the report warns that increased human pressure could trigger human-nature conflicts. It can increase the risk of water and food insecurity and competition over natural resources. It states that food production to meet the complex demands of an expanding human population is the primary factor responsible for the destruction of habitats and overexploitation of wildlife. At present, agriculture occupies about one-third of the Earth's total land area and accounts for almost 70 % of water use.

QUESTION : Stubble burning is the deliberate setting fire of the straw stubble that remains after wheat and other grains have been harvested. Consider the following statements related to the Stubble burning:

(1) It helps in clearing kills weeds.

(2) It kills slugs and other pests.

(3) It damages electrical and electronic equipment from floating threads of conducting waste.

(4) It fertilizes the soil and increases carbon capture in the soil.

Which of the above statements are correct?

(A) 1, 2 and 3

(B) 2, 3 and 4

(C) 1, 3 and 4

(D) All

Answer: . (A) **EXPLANATION :** The burning of stubble, contrasted with alternatives such as ploughing the stubble back into the ground has a number of consequences and effects on the environment. Stubble burning: • Quickly clears the field and is cheap. • Kills weeds, including those resistant to herbicide. • Kills slugs and other pests. • Can reduce



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nitrogen tie-up However, it has a number of harmful effects on the environment: • Loss of nutrients. • Pollution from smoke. • Damage to electrical and electronic equipment from floating threads of conducting waste. • Risk of fires spreading out of control.

QUESTION : Which of the following statements is/are true regarding Kigali agreement?

- (1) It aims to phase out Chloro fluorocarbons (CFC) by the late 2040s.
- (2) It is non-binding agreement similar to Paris agreement.
- (3) It has provisions for penalties for noncompliance.
- (4) Under it developed countries will provide funding support globally.

Codes:

- (A) 1 and 2
- (B) 3 and 4
- (C) 1, 3 and 4
- (D) 2, 3 and 4

Answer: (B) EXPLANATION : A global climate deal was reached in Kigali, Rwanda at the Twenty-Eighth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer (MOP28). The Kigali Agreement amends the 1987 Montreal Protocol that aims to phase out Hydro fluorocarbons (HFCs), a family of potent greenhouse gases by the late 2040s. Around 197 countries, including India, China and the USA, agreed at Kigali to reduce the use of HFCs. The Kigali Agreement will be binding on countries from 2019. The Paris agreement which will come into force by 2020 is not legally binding on countries to cut their emissions. It also has provisions for penalties for noncompliance. Under it, developed countries will provide funding support globally. The Kigali Amendment is considered absolutely vital for reaching the Paris Agreement target of keeping global temperature rise to below 2-degree Celsius compared to pre-industrial times.

QUESTION : Which of the following statements is/are true about the invasive species?

- (1) Exotic species became invasive in nature when the area does not have its natural predator.
- (2) Invasive species have rapid reproduction and high dispersal ability.
- (3) Invasive species can change the food web in an ecosystem by destroying or replacing native food sources.

Codes:

- (A) 1 and 2
- (B) Only 2
- (C) Only 3
- (D) All

Answer: . (D) EXPLANATION : Invasive species will lead to extinction of many of the indigenous species, hence it's threat to the ecological stability of that area. The indirect threats of invasive species: • Changing food webs: Invasive species can change the food web in an ecosystem by destroying or replacing native food sources. The invasive species may provide little to no food value for wildlife. • Decreasing biodiversity: Invasive species can alter the abundance or diversity of species that are important habitat for native wildlife. Aggressive plant species like kudzu can quickly replace a diverse ecosystem with a monoculture of just kudzu. • Altering ecosystem conditions: Some invasive species are capable of changing the conditions in an ecosystem, such as changing soil chemistry or the intensity of wildfires.

QUESTION : With reference to 'accumulation of Aerosols in atmosphere', which of the following statements is/are correct?

- (1) The accumulation of aerosols in the atmosphere can help in mitigating climate change.
- (2) They modify the size of existing cloud particles in the atmosphere.



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(3) They change how the clouds reflect and absorb sunlight.

(4) Ozone concentrated in the stratosphere play a major role in formation of Aerosols in the atmosphere. Select the correct answer using the code given below.

(A) 1 and 2

(B) 1, 2 and 3

(C) 2, 3 and 4

(D) All

Answer: (B) **EXPLANATION :** Aerosols are tiny particles made from superfine solid particles and liquid droplets carried in the atmosphere .They often act as 'cloud condensation nuclei' around which cloud droplets are formed. Aerosols can also modify the size of existing cloud particles, and change how the clouds reflect and absorb sunlight, leading to haze and much redder sunrises and sunsets. The accumulation of aerosols in the troposphere is thought to have a cooling effect, as clouds reflect the sun's energy. It may provide an alternative way to mitigate the human-induced effects of climate change. Ammonia concentrated in the upper layer of the troposphere play a major role for the formation of Aerosols in the atmosphere. Such concentration of ammonia in troposphere is due to high agricultural emission from livestock farming and fertilization.

QUESTION : Which among the following environmental factors determine the occurrence and spread of forest fires?

(1) Rising instances of El-Nino.

(2) Wind speed and direction.

(3) Level of moisture in soil.

(4) Presence of Chir-pine needles in forest.

(5) Change in precipitation patterns.

Select the correct answer using the code given below.

(A) 1, 2, 3 and 4

(B) 1, 4 and 5

(C) 2, 3, 4 and 5

(D) All

Answer: (D) **EXPLANATION :** Frequency of forest fires across Central Indian forests and the Himalayan has increased in recent years. The States of Odisha, Chhattisgarh, and Madhya Pradesh accounted for 1/3rd of the forest fires in 2016. Chir pine needles are a prominent factor in occurring and spreading of forest fires. Besides, climatic conditions such as temperature, wind speed and direction, level of moisture in soil and atmosphere and duration of dry spells. Other natural causes are the friction of bamboos swaying due to high wind velocity and rolling stones that result in sparks setting off fires in highly inflammable leaf litter on the forest floor. The changing pattern in terms of global warming, rising instances of El-Nino etc are also affecting forest fires; this is due to the cumulative effect of rising temperature, change in precipitation patterns and air moisture, increasing heat waves, drier soil etc.

QUESTION : Government eases rules for clearance of nonpolluting industrial projects. Which of the following statements related to it is/are correct?

(1) "White category Industries" can get consent automatically if they submit an undertaking on the expected date of start of production.

(2) "Green category Industries" do not need to obtain consent certificate under the air and water pollution control laws.

(3) There is no need to obtain 'consent to establish' for building/construction, area development and township projects if they get 'environment clearance'.

Select the correct answer using the codes given below:

(A) Only 3

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- (B) 2 and 3
- (C) 1 and 3
- (D) All

Answer: A

EXPLANATION : CPCB modifies mechanism for the grant of consent to various categories of industries and construction projects under Water (Prevention and Control of Pollution) Act and Air (Prevention and Control of Pollution) Act.

- No need to obtain consent for 'white' category of industries (White category of industries pertains to those industries which are practically non-polluting).
- Consent can automatically be issued to 'green' category of industries if they submit an undertaking on the expected date of start of production (Green category of industries are less polluting).
- No need to obtain 'consent to establish' for building/ construction, area development and township projects if they get 'environment clearance.
- All other projects, requiring 'environment clearance' either from state authority or from the ministry of environment, will be exempted from obtaining 'consent to establish'.

QUESTION : Consider the following pairs: Biosphere Reserve Located in

- (1) DibruSaikhowa : Dafla hills
- (2) Pachmarhi : Satpura range
- (3) Nokrek : Khasi hills

Which of the pairs given above is/are not correctly matched?

- (A) 1 and 3 only
- (B) 1, 2 and 3
- (C) 2 and 3 only
- (D) 2 only

Answer: A

The Pachmarhi Biosphere Reserve is located in the biogeographical region of the Deccan Peninsula and the Biotic Province of Central India. The Satpura mountain ranges cross India from west to east and Pachmarhi lies directly in its centre. The highest peak is the Dhoopgarh, which reaches 1,352 metres above sea level, while the Pachmarhi hills are characterized by steep slopes in the northern regions. The eastern boundary of the biosphere reserve lies along a road with cultivation farms, close to the Dudhi River, while the southern boundary borders the Tawa plateau. Pachmarhi comprises three protection sites: the Bori Sanctuary, Satpura National Park and Pachmarhi Sanctuary. Hence, pair 2 is correctly matched. The Nokrek Biosphere Reserve is located in the northeast of India on the Tura Range, which forms part of the Meghalaya Plateau. The entire area is mountainous and Nokrek is the highest peak of the Garo hills, rising up 1,412 metres. The biosphere reserve contains major rivers and streams that form a perennial catchment system. Examples include the Ganol, Dareng and Simsang rivers, of which the latter is the longest and largest. The Simsang originates in the north of the Biosphere Reserve, the Dareng from the southern peaks, and the Ganol flows westward into the Brahmaputra River. Hence, pair 3 is not correctly matched. Dibru-Saikhowa is a National Park as well as a Biosphere Reserve situated in the south bank of the river Brahmaputra in the extreme east of Assam state in India. Hence, it does not lie in Dafla hills. The forest type of Dibru-Saikhowa comprises of semi-evergreen forests, deciduous forests, littoral and swamp forests and patches of wet evergreen forests. Hence, pair 1 is not correctly matched.

QUESTION : Which of the following components are looked into during the Environment Impact Assessment (EIA) process?

- (1) Estimation of quantities of air emissions from the proposed project.

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(2) Identification of impacts due to any anticipated rise in noise levels on the surrounding environment.

(3) Existing ground and surface water resources, their quality and quantity within the zone.

(4) Impact on historical monuments and heritage site.

Select the correct answer using the code given below.

(A) 1 and 2 only

(B) 1, 2, 3 and 4

(C) 2 and 4 only

(D) 1 and 3 only

Answer: B

Depending on nature, location and scale of the project EIA report should contain all or some of the following components.

Air Environment

- o Determination of impact zone (through a screening model) and developing a monitoring network
- o Monitoring the existing status of ambient air quality within the impacted region (7-10 km from the periphery) of the proposed project site
- o Monitoring the site-specific meteorological data, viz. wind speed and direction, humidity, ambient temperature and environmental lapse rate
- o Estimation of quantities of air emissions including fugitive emissions from the proposed project
- o Identification, quantification and evaluation of other potential emissions (including those of vehicular traffic) within the impact zone and estimation of cumulative of all the emissions/impacts
- o Prediction of changes in the ambient air quality due to point, line and areas source emissions through appropriate air quality models
- o Evaluation of the adequacy of the proposed pollution control devices to meet gaseous emission and ambient air quality standards
- o Delineation of mitigation measures at source, path ways and receptor

Noise Environment

- o Monitoring the present status of noise levels within the impact zone, and prediction of future noise levels resulting from the proposed project and related activities including increase in vehicular movement
- o Identification of impacts due to any anticipated rise in noise levels on the surrounding environment
- o Recommendations on mitigation measures for noise pollution

Water Environment

- Study of existing ground and surface water resources with respect to quantity and quality within the impact zone of the proposed project
- o Prediction of impacts on water resources due to the proposed water use/pumping on account of the project.
- Quantification and characterisation of waste water including toxic organic, from the proposed activity
- Evaluation of the proposed pollution prevention and wastewater treatment system and suggestions on modification, if required
- ✓ Prediction of impacts of effluent discharge on the quality of the receiving water body using appropriate mathematical/simulation models.
- ✓ Assessment of the feasibility of water recycling and reuse and delineation of detailed plan in this regard

Biological Environment

- Survey of flora and fauna clearly delineating season and duration.
- o Assessment of flora and fauna present within the impact zone of the project
- o Assessment of potential damage to terrestrial and aquatic flora and fauna due to discharge of effluents and gaseous emissions from the project
- o Assessment of damage to terrestrial flora and fauna due to air pollution, and land use and landscape changes
- o Assessment of damage to aquatic and marine flora and

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fauna (including commercial fishing) due to physical disturbances and alterations
o Prediction of biological stresses within the impact zone of the proposed project
o Delineation of mitigation measures to prevent and / or reduce the damage.

Land Environment

- Studies on soil characteristics, existing land use and topography, landscape and drainage patterns within the impact zone
o Estimation of impacts of project on land use, landscape, topography, drainage and hydrology
o Identification of potential utility of treated effluent in land application and subsequent impacts
o Estimation and Characterisation of solid wastes and delineation of management options for minimisation of waste and environmentally compatible disposal

Socio-economic and Health Environment

- Collection of demographic and related socio-economic data
o Collection of epidemiological data, including studies on prominent endemic diseases (e.g. fluorosis, malaria, filaria, malnutrition) and morbidity rates among the population within the impact zone
- Projection of anticipated changes in the socio-economic and health due to the project and related activities including traffic congestion and delineation of measures to minimise adverse impacts
o Assessment of impact on significant historical, cultural and archaeological sites/places in the area
- Assessment of economic benefits arising out of the project
- Assessment of rehabilitation requirements with special emphasis on scheduled areas, if any.

Risk Assessment

- Hazard identification taking recourse to hazard indices, inventory analysis, dam break probability, Natural Hazard Probability etc.
- Maximum Credible Accident (MCA) analysis to identify potential hazardous scenarios
- Consequence analysis of failures and accidents resulting in fire, explosion, hazardous releases and dam breaks etc.
- Hazard & Operability (HAZOP) studies Assessment of risk on the basis of the above evaluations
- Preparation of an onsite and off-site (project affected area) Disaster Management Plan

Environment Management Plan

- Delineation of mitigation measures including prevention and control for each environmental component and rehabilitation and resettlement plan
- Delineation of monitoring scheme for compliance of conditions
- Delineation of implementation plan including scheduling and resource allocation

QUESTION : With regard to the Ecosystem Service Improvement Project (ESIP), consider the following statements:

- (1) Its objective is to enhance forest ecosystem services and improve the livelihoods of forest dependent communities in Central Indian Highlands.
- (2) It is implemented under the National Mission for Green India.
- (3) It is entirely financed by the World Bank.

Which of the statements given above is/are correct?

- (A) 1 and 2 only
- (B) 2 only
- (C) 1 and 3 only
- (D) 1, 2 and 3

Answer: D

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Statement 1 is correct: Its objective is to strengthen the institutional capacity of the Departments of Forestry and Community Organisations to enhance forest ecosystem services and improve the livelihoods of forest dependent communities in Central Indian Highlands. The project will improve forest quality, land management and non-timber forest produce (NTFP) such as nuts, mushrooms, and game animals to benefit forest dependent communities across the states of Madhya Pradesh and Chhattisgarh. Statement 2 is correct: Ministry of Environment, Forest and Climate Change (MoEF&CC) will implement the Ecosystem Service Improvement Project in the States of Chhattisgarh and Madhya Pradesh through Indian Council of Forestry Research & Education under the National Mission for Green India. Statement 3 is correct: The size of the project is USD 24.64 million which entirely will be financed by the World Bank out of its GEF Trust Fund. The project's duration as of now is 5 years.

QUESTION : Which of the following statements is/are correct regarding the 'Sea Turtle Conservation Project' of Ministry of Environment, Forest and Climate Change?

- (1) It is being implemented in collaboration with United Nations Environment Programme (UNEP).
- (2) It covers only the coast of Odisha and Andhra 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

Answer: .D

o A significant proportion of world's Olive Ridley Turtle population migrate every winter to Indian coastal waters for nesting mainly at eastern coast. o Statement 1 is not correct: With the objective of

conservation of olive ridley turtles and other endangered marine turtles, Ministry of Environment & Forests initiated the Sea Turtle Conservation Project in collaboration of United Nations Development Programme (UNDP) in November, 1999 with Wildlife Institute of India, Dehradun as the Implementing Agency. o Statement 2 is not correct: The project is being implemented in 10 coastal States of the country with special emphasis in State of Orissa.

QUESTION : With reference to the Convention on Biological Diversity, consider the following statements:

- (1) It is a legally binding multilateral environmental agreement.
- (2) It provides for equitable sharing of benefits arising from the utilization of traditional knowledge.
- (3) It recognizes the Biosphere reserves established by the member countries.

Which of the statements given above are correct?

- (A) 1 and 2 only
- (B) 2 and 3 only
- (C) 1 and 3 only
- (D) 1, 2 and 3

Answer: .A

The Convention on Biological Diversity (CBD) is a legally binding multilateral environmental agreement that has 194 contracting Parties (Countries) as its members with three objectives – conservation of biological diversity, sustainable use of the diversity and ensuring fair and equitable sharing of benefits of such use. It has entered into force on 29th December 1993. Hence, statement 1 is correct. The CBD provides sovereign rights over their biological resources, and requests countries would facilitate access to the genetic resources by other parties subject to national legislation and on mutually agreed terms. The CBD also

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provides for equitable sharing of benefits arising from the utilization of traditional knowledge, and practices, with holders of such knowledge. This has made it necessary for a legislation to be put in place, which lays down the framework for providing access, for determining the terms of such access and for ensuring the equitable sharing of benefits. Hence, statement 2 is correct. Biosphere reserves are sites established by countries and recognized under UNESCO's Man and the Biosphere (MAB) Programme to promote sustainable development based on local community efforts and sound science. Hence, statement 3 is not correct.

QUESTION : Which among the following are the responsibilities of the Biodiversity Management committees (BMCs)?

- (1) Documentation of biological diversity
- (2) Preservation of habitats
- (3) Approval of bio-utilization of any biological resource

Select the correct answer using the code given below.

- (A) 1 and 2 only
- (B) 2 and 3 only
- (C) 1 and 3 only
- (D) 1, 2 and 3

Answer: .A The Local Level Biodiversity Management committees (BMCs) are responsible for promoting conservation, sustainable use and documentation of biological diversity including preservation of habitats, conservation of land races, folk varieties and cultivators, domesticated stocks and breeds of animals and microorganisms besides chronicling of knowledge relating to biological diversity. Hence, statements 1 and 2 are correct. The State Biodiversity Board (SBBs) also regulate by granting of approvals or otherwise upon requests for commercial utilization or bio-survey and bio-utilization of any biological resource by the Indians. Hence, statement 3 is correct

QUESTION : Which of the following are the objectives laid under the National Forest Policy, 1988?

- (1) It proposes to have 33% of geographical area under forest or tree cover by 2030.
- (2) It aims at checking siltation of reservoirs for mitigating floods.
- (3) It seeks to meet the minor forest produce requirement of rural and tribal population.

Select the correct answer using the code given below.

- (A) 1 and 2 only
- (B) 2 and 3 only
- (C) 1 and 3 only
- (D) 1, 2 and 3

Answer: .B

As per the existing National Forest Policy, 1988, the national goal is to have a minimum of one-third of the total land area of the country under forest or tree cover. However, no time limit has been prescribed to achieve this target. Hence, statement 1 is not correct. This policy was the harbinger of the green movement in the country. It also proposed that 60% of the land in the hills and 20% in the plains and in all 33% of the total geographical area should be under forest/tree cover. The serious depletion of forest resources due to biotic and industrial pressure and other reasons made the policy makers review the situation in the late eighties and evolve a new strategy for conservation of forests. The National Forest Policy revised in 1988, envisaged community involvement in the protection and regeneration of forests. It accorded highest priority to sustainable management of the forest resource. The basic objectives that govern the 1988 National Forest Policy are:

- Maintenance of environmental stability through preservation and, where necessary, restoration of the ecological balance that

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has been adversely disturbed by serious depletion of forests of the country.

- Conserving the natural heritage of the country by preserving the remaining natural forests with the vast variety of flora and fauna, which represents the remarkable biological diversity and genetic resources of the country.
- Checking soil erosion and denudation in the catchment areas of rivers, lakes, reservoirs in the interest of soil and water conservation, for mitigating floods and droughts and for the retardation of siltation of reservoirs. Also checking the extension of sand dunes. Hence, statement 2 is correct.
- Increasing substantially the forest/tree cover in the country through massive afforestation and social forestry programmes, especially on all denuded, degraded and unproductive lands.
- Meeting the requirements of fuelwood, fodder, minor forest produce and small timber of the rural and tribal population. Increasing the productivity of forests to meet essential national needs. Hence, statement 3 is correct.
- Encouraging efficient utilisation of forest produce and maximising substitution of wood. o
- Creating a massive people's movement with the involvement of women, for achieving these objectives and to minimise pressure on existing forests.

QUESTION : Water hyacinth, Palmyra and Sleeping Grass are common flora species found in India. Which among the following traits is common in all of them?

- (A) All of them are invasive species which are threats to native species and ecosystems.
- (B) All of them are endemic species found in Western Ghats.

(C) All of them are medicinal herbs used to cure diabetes.

(D) All of them are insectivorous plants which are specialized in trapping insects.

Answer: A

An invasive species is a non-native species that does not naturally occur in a specific area and whose introduction does or is likely to cause economic or environmental harm or harm to human health. Invasive species include all taxa of organisms, ranging from microscopic insects to large mammals, and can invade any ecosystem. Some Invasive Alien Flora of India

Needle Bush, Black Wattle, Goat weed, Alternanthera paronychioides, Prickly Poppy or Blumea eriandra, Palmyra, Toddy Palm, Calotropis / Madar, Swallowwort, Datura, Mad Plant, Thorn Apple, Water Hyacinth, Touch-Me-Not/ Sleeping Grass.

QUESTION : With reference to the Cartagena Protocol on Biosafety, consider the following statements:

1. It is an additional agreement to the Convention on Biological Diversity (CBD).
2. The protocol establishes procedures for regulating the import and export of living modified organism from one country to another.

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

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

Answer: c

Explanation: Both statements are correct.

Cartagena Protocol on Biosafety to the Convention on Biological Diversity

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- Protection in the field of the safe transfer handling use of living modified organism (LMO)

The convention clearly recognizes these twin aspects of modern biotechnology:

- Access to and transfer of technologies.
- Appropriate procedures to enhance the safety of biotechnology technologies.
- The protocol establishes procedures for regulating the import and export of living modified organism from one country to another.

QUESTION : Decomposers or detritus organisms play an important role in all ecosystems by getting rid of decaying organic matter left behind by other organisms. With reference to this, consider the following statements:

1. Decomposition rate is faster if the detritus is rich in nitrogen.
2. Decomposition is largely an oxygen requiring process.
3. Decomposition is controlled by the chemical composition of detritus alone.

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

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

Answer:b

Explanation: Statement 1 and 2 is correct.

The detritus food chain (DFC) begins with dead organic matter. Decomposition is largely an oxygen requiring process.

In a particular climatic condition decomposition rate is slower if detritus is rich in lignin and chitin. It is quicker if detritus is rich in nitrogen and water soluble substances like sugars.

Statement 3 is incorrect. The rate of decomposition is controlled by chemical composition of detritus and climatic factors.

QUESTION : The Conservation International (CI) adopted the British biologist Norman Myers's term "biodiversity hotspot" to describe exceptional levels of plant endemism and by serious levels of habitat loss. In order to qualify as a hotspot a region must

1. Contain at least 1,500 species of vascular plants (> 0.5% of the world's total) as endemics.
2. It has to have lost at least 75% of its original habitat.

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

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

Answer:a

Explanation: According to CI (Conservation International), to qualify as a hotspot a region must meet two strict criteria: it must contain at least 1,500 species of vascular plants (> 0.5% of the world's total) as endemics, and it has to have lost at least 70% of its original habitat.

QUESTION : With reference to the Aichi Biodiversity Targets, consider the following statements:

1. It aims to bring pollution, including from excess nutrients to levels that are not detrimental to ecosystem function and biodiversity.
2. It aims to control or eradicate invasive alien species on priority basis.

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

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

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d) Neither 1 nor 2

Answer:c

Explanation: Both the statements are correct.

The Strategic Goal B of the Aichi Biodiversity Targets aim to reduce the direct pressures on biodiversity and promote sustainable use. They are as follows:

1. By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.
2. By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.
3. By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.
4. By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.
5. By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment
6. By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

QUESTION : Why the Aeroponics cultivation is beneficial to us?

- 1.Produces more food with less effort.
- 2.It conserves water.
- 3.Crops are easier to harvest.
- 4.It reduces risk of disease and pest infestation.
- 5.Can be combined with hydroponics.

Select the correct answer using the codes given below.

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

Answer:d

Explanation: All are benefits of Aeroponic cultivation.

Though aeroponic technology was initialized in the 1930's it hasn't gained popular awareness until recent years. In fact, aeroponic technology is now seen as a major advantage in the movement for large-scale urban food production. More and more facilities are opting to go with aeroponic growing methods as opposed to regular hydroponic or aquaponic hybrid methods. With ongoing advancements in soilless growing technology and plant sciences it's no wonder growers are seeking to understand the benefits of aeroponic growing methods.

Here are 15 important benefits of aeroponic growing:

- 1.Delivers nutrients directly to the plant roots
- 2.Completely programmable technology conserves energy
- 3.Closed-loop system conserves water
- 4.Conserves water through runoff absorption into roots
- 5.Moisture control for better plant growth
- 6.Can be combined with hydroponics
- 7.Crops are easier to harvest in the absence of soil



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- 8.Higher density crops optimizes output
- 9.Reduce labour cost through automation
- 10.Produces higher quality food in a controlled environment
- 11.Reduced risk of disease and pest infestation in a controlled environment
- 12.No need to immerse roots in water which offers more control
- 13.Roots are provided with better exposure to oxygen
- 14.Scalable systems can range from commercial level to apartment-sized gardens
- 15.Produces more food with less effort.

QUESTION : With reference to the Sacred Groves of India, consider the following statements:

1. They are patches of forests usually dedicated to a local deity.
2. The decline of sacred groves can be attributed to the change in social values and religious beliefs.
3. The Sacred Groves in Andaman and Nicobar Island are locally known as Law Kytangs.

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

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

Answer:a

Explanation: Statement 3 is incorrect. The Sacred Groves in Meghalaya are known as Law Kytang.

Statement 1 and 2 is correct.

QUESTION : Seaweeds are macroscopic Algae. Which of the following benefits can come from growing extensive sea weeds in the ocean?

1. It reduces coastal eutrophication.
2. It is a food for marine organism.
3. It can be used as fertilizer for plants.

Select the correct answer using the codes given below:

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

Answer: D

Explanation: All the mentioned benefits can be derived from Seaweeds. Marine macroalgae, or seaweeds, are plant-like organisms that generally live attached to rock or other hard substrata in coastal areas. They belong to three different groups, empirically distinguished since the mid-nineteenth century on the basis of their colour.

QUESTION : What would happen if phytoplankton of an ocean is completely destroyed for some reason?

1. The ocean as a carbon sink would be adversely affected.
2. The food chains in the ocean would be adversely affected.
3. The density of ocean water would drastically decrease.

Select the correct answer using the codes given below:

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

Answer:a

Explanation: Statement 3 is incorrect. If phytoplankton of an ocean is completely destroyed for some reason, then ocean would not act as carbon sink. Phytoplankton helps to dissolve the oxygen in the ocean.

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But, if phytoplankton would not be there the density of ocean would not get drastically decrease, might be little affected.

QUESTION : With reference to acid rain, consider the following statements:

1. Burning of Sulphur containing coal can contribute to acid rain.
2. Acid rain does not react with building made from limestone.
3. Flue Gas Desulphurisation is an effective measure to control it.

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

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

Answer:a

Explanation: Statement 1 is correct. Acid rain describes any form of precipitation with high levels of nitric and sulfuric acids. It can also occur in the form of snow, fog, and tiny bits of dry material that settle to Earth. Statement 2 is incorrect. Acid rain reacts with building made from limestone.

Statement 3 is correct. Flue Gas desulfurization (FGD) is a set of technologies used to remove sulfur dioxide (SO₂) from exhaust flue gases of fossil-fuel power plants, and from the emissions of other sulfur oxide emitting processes.

Acid rain also damages forests, especially those at higher elevations. It robs the soil of essential nutrients and releases aluminum in the soil, which makes it hard for trees to take up water. Trees' leaves and needles are also harmed by acids.

The effects of acid rain, combined with other environmental stressors, leave trees and plants less able to withstand cold temperatures, insects, and disease. The pollutants may also inhibit trees' ability to reproduce.

Some soils are better able to neutralize acids than others. In areas, the harmful effects of acid rain are much greater.

The only way to fight acid rain is by curbing the release of the pollutants that cause it. This means burning fewer fossil fuels. Many governments have tried to curb emissions by cleaning up industry smokestacks and promoting alternative fuel sources. These efforts have met with mixed results.

QUESTION : Consider the following statements:

1. Tropics harbour more species than temperate or polar areas.
2. Along the mountain gradients, bio- diversity is normally greater in the lower altitudes as compared to the higher altitudes.

Which of the statements given above is/are correct?

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

Answer: A

Explanation: Biodiversity is defined as the variability among living organisms from all sources, including terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystem.

Biodiversity as we have today is the result of 2.5-3.5 billion years of evolution. The number of species globally varies from 2 million to 100 million, with 10 million being the best estimate. Biodiversity is not found evenly on the earth. It is consistently richer in the tropics. Tropical forests are very rich in bio-diversity. As one approaches the Polar Regions, one finds larger and larger populations of fewer and fewer species.

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What is so special about tropics that might account for their greater biological diversity?

Speciation is generally a function of time, unlike temperate regions subjected to frequent glaciations in the past, tropical latitudes have remained relatively undisturbed for millions of years and thus, had a long evolutionary time for species diversification.

Tropical environments, unlike temperate ones, are less seasonal, relatively more constant and predictable. Such constant environments promote niche specialisation and lead to a greater species diversity.

There is more solar energy available in the tropics, which contributes to higher productivity; this in turn might contribute indirectly to greater diversity.

In general, species diversity decreases as we move away from the equator towards the poles.

With very few exceptions, tropics (latitudinal range of 23.5° N to 23.5° S) harbour more species than temperate or polar areas. Forest in a tropical region like Ecuador has up to 10 times as many species of vascular plants as a forest of equal area in a temperate region like the Midwest of the USA. Decline in richness with latitude may be faster in the Northern than in the Southern Hemisphere and the peaks in richness may not lie actually at the Equator itself but some distance away.

QUESTION : Which one of the following is the best description of the term 'standing crop'?

- a) It is the mass of living material at a particular time in each trophic level.
- b) It is the total amount of energy produced in a food chain.
- c) It is the amount of biomass of a forest.
- d) It is the number of primary producers in an ecosystem.

Answer:a

Explanation: Each trophic level has a certain mass of living material at a particular time called as the standing crop. The standing crop is measured as the mass of living organisms (biomass) or the number in a unit area. The biomass of a species is expressed in terms of fresh or dry weight. Organisms occupy a place in the natural surroundings or in a community according to their feeding relationship with other organisms. Based on the source of their nutrition or food, organisms occupy a specific place in the food chain that is known as their trophic level.

QUESTION : Which of the following wetland is represented by as many as three protected areas, namely a National Park, Wildlife Sanctuary and Marine Sanctuary?

- a) Vembanad Lake
- b) Nalsarovar
- c) Kolleru
- d) Bhitarkanika

Answer:d

Explanation: Bhitarkanika wetland is represented by as many as three protected areas, namely a National Park, Wildlife Sanctuary and Marine Sanctuary.

QUESTION : Interspecific interactions arise from the interaction of populations of two different species. With reference to this, the relationship between Water buffalo and cattle egret is an example of

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

Answer: A



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Explanation: Interspecific interactions could be beneficial, detrimental or neutral (neither harm nor benefit) to one of the species or both.

1. **Competition:** Competition is most typically considered the interaction of individuals that vie for a common resource that is in limited supply, but more generally can be defined as the direct or indirect interaction of organisms that leads to a change in fitness when the organisms share the same resource. The outcome usually has negative effects on the weaker competitors.

For example: the Abingdon tortoise in Galapagos Islands became extinct within a decade after goats were introduced on the island, apparently due to the greater browsing efficiency of the goats.

2. **Parasitism:** A parasite feeds on the host, but they generally do not destroy it. Parasites are usually smaller than the host. Parasites may have more than one host during its life cycle. The host evolved some defense mechanisms against the parasites; the most important is the immune responses such as cellular defenses. Also, parasites can substantially decrease the host population sizes. The relationship between the parasites and the hosts is

known as Parasitism. Tapeworms, blood sucking leeches and tape worms are typical examples of parasites.

3. **Commensalism:** Commensalism is an interspecific relationship between two organisms in the ecosystem where one species benefits while the other species remains unaffected. In this association, usually a commensal can obtain nutrients from the host species for their shelter, growth, and locomotion. The host remains unaffected. The host is larger and unmodified, while the commensal is smaller with some modified structural adaptations with its habitats. For example: The cattle egret and grazing cattle.

4. **Mutualism:** Mutualism is an interspecific interaction between two organisms in the ecosystem with benefit to both the associating members in the interaction. During this interaction, populations of each interacting species grow survive and reproduce at a higher rate in the presence of the other interacting species. Pollination is a good example to explain mutualism, where the plant gets benefit from the dispersal of pollen the pollinator obtaining a meal of nectar from the flower. For example: Lichens. Lichens represent an intimate mutualistic relationship between a fungus and photosynthesizing algae or cyanobacteria.

5. **Predation and parasitism:** Once species benefits, the other is harmed.

Example: Predation- Big fish eats the smaller fish.

Parasitism: Tick gains benefit by sucking blood; host is harmed by losing blood.

6. **Amensalism:** one species is harmed, the other is unaffected. For example: A large tree shades a small plant, retarding the growth of the small plant. The small plant has no effect on the large tree.

QUESTION : With reference to the International Day of Non-Violence 2020, consider the following statements:

(1) International Day of Non-Violence 2020 is being observed on 2nd October.

(2) It commemorates the birthday of Mahatma Gandhi, leader of the Indian independence movement and pioneer of the philosophy and strategy of non-violence.

Which of the statements given above is/are correct?

(A) 1 only

(B) 2 only

(C) Both 1 and 2

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(D) Neither 1 nor 2

Answer: C

Explanation :

International Day of Non-Violence 2020 is being observed on 2nd October.

- The International Day of Non-Violence is observed on 2 October, the birthday of Mahatma Gandhi, leader of the Indian independence movement and pioneer of the philosophy and strategy of non-violence.
- According to General Assembly resolution of 15 June 2007, which established the commemoration, the International Day is an occasion to "disseminate the message of non-violence, including through education and public awareness"
- There are three main categories of non-violence action:
 - o protest and persuasion, including marches and vigils;
 - o non-cooperation; and
 - o non-violent intervention, such as blockades and occupations.
- Hence both statements are correct.

QUESTION : With reference to the Pakur Honey, consider the following statements:

(1) Pakur Honey is 100% natural honey which is Multi Floral and Forest Fresh.

(2) It is gathered by Naga tribes.

Which of the statements given above is/are correct?

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

Answer: A

Explanation :

Minister of Tribal Affairs Arjun Munda will launch Pakur Honey on the occasion of Gandhi Jayanti.

- Pakur Honey is 100% natural honey which is Multi Floral and Forest Fresh.
- It is gathered by Santhal Tribals and Vulnerable Pahadhiya tribes from Pakur, Jharkhand.
- Natural Multiflora honey is a good source of anti-oxidants and antiseptic vitamins, nutrients, enzymes and other herbal properties that no other super-food can provide.
- Hence only statement 1 is correct.

QUESTION : With reference to the Decade of Healthy Ageing (2020-2030), consider the following statements:

(1) By the end of the Decade of Healthy Ageing (2020–2030), the number of people aged 60 years and older will be 34% higher, increasing from 1 billion in 2019 to 1.4 billion.

(2) By 2050, the global population of older people will have more than doubled, to 2.1 billion.

Which of the statements given above is/are correct?

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

Answer: C

Explanation :

Union Minister for Health & Family Welfare launched Decade of Healthy Ageing (2020-2030) in India on International Day for Older Persons.

- The Decade of Healthy Ageing (2020-2030) is an opportunity to bring together governments, civil society etc. for ten years of concerted action to improve the lives of older people.

EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

- Healthy Ageing is developing and maintaining the functional ability that enables well-being in older age.
- Following the 146th WHO Executive Board's recommendation made in February 2020, the 73rd World Health Assembly have endorsed the proposal for a Decade of Healthy Ageing (2020-2030).
- By the end of the Decade of Healthy Ageing (2020–2030), the number of people aged 60 years and older will be 34% higher, increasing from 1 billion in 2019 to (1) 4 billion. By 2050, the global population of older people will have more than doubled, to (2) 1 billion.
- Hence both statements are correct.

QUESTION : With reference to the Defence Acquisition Procedure 2020, consider the following statements:

(1) The government has decided to remove the clause for offsets if the equipment is being bought either through deals or agreements between two countries, or through an ab initio single-vendor deal.

(2) The offset is an obligation by an international player to boost India's domestic defence industry if India is buying defence equipment from it.

Which of the statements given above is/are correct?

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

Answer: C

Explanation :

The Defence Ministry came up with its latest Defence Acquisition Procedure 2020 (DAP 2020), which comes into effect from Thursday, October (1)

- Changing a 15-year old policy, the government has decided to remove the clause for offsets if the equipment is being bought either through deals or agreements between two countries, or through an ab initio single-vendor deal.
- The offset is an obligation by an international player to boost India's domestic defence industry if India is buying defence equipment from it.
- Since defence contracts are costly, the government wants part of that money either to benefit the Indian industry, or to allow the country to gain in terms of technology.
- Offsets is a "mechanism generally established with the triple objectives of:
 - o partially compensating for a significant outflow of a buyer country's resources in a large purchase of foreign goods,
 - o facilitating induction of technology and
 - o adding capacities and capabilities of domestic industry".
- An offset provision in a contract makes it obligatory on the supplier to either "reverse purchase, execute export orders or invest in local industry or in research and development" in the buyer's domestic industry, according to CAG.
- The policy was adopted on the recommendations of the Vijay Kelkar Committee in 2005. The first offset contract was signed in 2007.
- Hence both statements are correct.

QUESTION : Muga Silk recently in news is from which among the following states?

- (A) Sikkim
- (B) Arunachal Pradesh
- (C) Tamil Nadu
- (D) Assam

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Answer: D

Explanation :

Prime Minister Narendra Modi addressed an international webinar on textile traditions organized by ICCR.

- The Indian Council for Cultural Relations (ICCR) and Uttar Pradesh Institute of Design organized the webinar on the theme "Weaving Relations: Textile Traditions."
- The diversity in our textiles shows the richness of our culture.
- If Andhra Pradesh has the Kalamkari, Muga Silk is Assam's pride.
- Kashmir is home to the Pashmina, Phulakri's add pride to Punjab's culture.
- If Gujarat is famous for Patolas, Banaras has made a mark for its Saris.
- There is Chanderi fabric in Madhya Pradesh and vibrant Sambalpuri Fabric in Odisha.

Hence option (d) is the correct answer

QUESTION : With reference to the "Graduated Return to Play" (GRTP), consider the following statements:

- (1) The SOP has been divided into three categories, based on an athlete's virus load
- (2) Covid-19 positive and prolonged course (regional/systemic symptoms for more than 10 days) or severe symptoms that required hospitalisation are included under category 3.

Which of the statements given above is/are correct?

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

Answer: A

Explanation :

Sports Authority of India (SAI) released the Standard Operating Procedure (SOP) for highperformance athletes who had tested positive for Covid-19 and are currently training at different SAI centres.

About Graduated Return to Play" (GRTP)

- According to the new SOP, which has been defined as "Graduated Return to Play" (GRTP), all SAI officials and centres have been asked to monitor the progression of athletes tested positive for Covid and are undergoing training at the national camps.
 - The SOP has been divided into three categories, based on an athlete's virus load:
 - o Category One: Covid-19 positive and asymptomatic (mild localized symptoms that resolve within 10 days)
 - o Category Two: Covid-19 positive and prolonged course (regional/systemic symptoms for more than 10 days) or severe symptoms that required hospitalisation.
 - o Category Three: Covid-19 positive and symptoms during GRTP progression (post recovery complications).
 - Under the new SOP, SAI officials have been tasked to identify medical and paramedical experts to designate at each centres to ensure clinical assessment of Covid-19 infection on the athletes and implementation of the guidelines stated within the SOP.
- Hence only statement 1 is correct
- QUESTION :** With reference to the Supersonic Missile Assisted Release of Torpedo (SMART), consider the following statements:
- (1) SMART is a missile assisted release of lightweight Anti-Submarine Torpedo System for Anti-Submarine Warfare (ASW) operations far beyond Torpedo range.

EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

(2) It has been successfully flight tested from Wheeler Island off the coast of Odisha.

Which of the statements given above is/are correct?

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

Answer: C

Explanation :

Supersonic Missile Assisted Release of Torpedo (SMART) has been successfully flight tested from Wheeler Island off the coast of Odisha.

- SMART is a missile assisted release of lightweight Anti-Submarine Torpedo System for Anti-Submarine Warfare (ASW) operations far beyond Torpedo range.
- This launch and demonstration is significant in establishing Anti-Submarine warfare capabilities.
- A number of DRDO laboratories including DRDL, RCI Hyderabad, ADRDE Agra, NSTL Visakhapatnam have developed the technologies required for SMART.
- Hence both statements are correct.

QUESTION : With reference to a report “Economic valuation of ecosystem services, National Zoological Park, New Delhi”, consider the following statements:

- (1) It highlights the importance of habitats such as zoos to human wellbeing and the need of replication across India.
- (2) It was released by Centre for Science and Environment.

Which of the statements given above is/are correct?

- (A) 1 only
- (B) 2 only

- (C) Both 1 and 2
- (D) Neither 1 nor 2

Answer: A

Explanation :

Union Minister of Environment launched a report of the CZA-TERI titled “Economic valuation of ecosystem services, National Zoological Park, New Delhi ‘.

- The report by Central Zoo Authority (CZA) and TERI highlights the importance of habitats such as zoos to human wellbeing and the need of replication across India.
- The study first of its kind in India and perhaps the entire World, pegs the total annual economic value of the ecosystem services (biodiversity conservation, employment generation, carbon sequestration, education and research, recreational and cultural) at around 423 crore (2019-20).
- The total value of the one-time cost of services such as carbon storage and land value provided by the zoo is estimated to be around 55,000 crore.

Hence, option (a) is the correct answer.

QUESTION : With reference to the emission norms for tractors, consider the following statements:

- (1) It will be applicable from October 2021 and for Construction Equipment Vehicles, the norms will be applicable from April 2021.
- (2) The amendment to Central Motor Vehicle Rules 1989 includes separate emission norms for agricultural machinery (agricultural tractors, power tillers and combined harvesters) and construction equipment vehicles.

Which of the statements given above is/are correct?

- (A) 1 only



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- (B) 2 only
- (C) Both 1 and 2
- (D) Neither 1 nor 2

Answer: C

Explanation :

Ministry of Road Transport and Highways has said that emission norms for tractors will be applicable from October 2021 and for Construction Equipment Vehicles, the norms will be applicable from April 202 (1)

- The Ministry has notified amendment to Central Motor Vehicle Rules 1989 on 30th September, 2020 deferring the applicability date for implementing the next stage of emission norms for tractors and Construction Equipment Vehicles.
- The amendment includes separate emission norms for agricultural machinery (agricultural tractors, power tillers and combined harvesters) and construction equipment vehicles.
- There is also change in the nomenclature of emission norms from Bharat Stage (CEV/TREM)IV and Bharat Stage (CEV/TREM)V to TREM Stage-IV and TREM Stage-V for agricultural tractors and other equipment.
- The Ministry had received the request in this regard from the Ministry of Agriculture, Tractor Manufacturers and agriculture associations.
- Hence both statements are correct.

QUESTION : With reference to education for deaf children, consider the following statements:

(1) Recently a MoU signed between Indian Sign Language Research and Training Center (ISLRTC) and NCERT to make education materials accessible for Deaf children in their preferred format of communication.

(2) The Indian Sign Language Research and Training Center (ISLRTC), Delhi is a Society under the Department of Empowerment of Persons with Disabilities, the Ministry of Social Justice and Empowerment.

Which of the statements given above is/are correct?

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

Answer: C

Explanation :

A historic MoU will be signed on October 6, 2020 between Indian Sign Language Research and Training Center (ISLRTC) and NCERT to make education materials accessible for Deaf children in their preferred format of communication.

- As part of this MoU, educational print materials including NCERT Textbooks, Teachers Handbook and other Supplementary materials and resources of Class I-XII of all subjects of both Hindi and English Medium will be converted into Indian Sign Language in Digital format.
- The signing of this MoU is seen as a historic step as availability of NCERT textbooks in Indian Sign Language will ensure that Deaf children can also now access educational resources in Indian Sign Language.
- This will also ensure educational standardization of Indian Sign Language as mandated in the New Education Policy, 2020.
- The Indian Sign Language Research and Training Center (ISLRTC), Delhi is a Society under the Department of Empowerment of Persons with Disabilities, the Ministry of Social Justice and Empowerment.
- Hence both statements are correct.

QUESTION : With reference to Cotton, consider the following statements:

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(1) India is the 2nd largest cotton producer and the largest consumer of cotton in the world.

(2) India produces about 51% of the total organic cotton production of the world, which demonstrates India's effort towards sustainability.

Which of the statements given above is/are correct?

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

Answer: C

Explanation :

Union Minister of Textiles launched the 1st ever Brand & Logo for Indian Cotton on 2nd World Cotton Day on 7th October.

- Now India's premium Cotton would be known as 'Kasturi Cotton' in the world cotton Trade.
- The Kasturi Cotton brand will represent Whiteness, Brightness, Softness, Purity, Luster, Uniqueness and Indianness.
- Cotton is one of the principal commercial crops of India and it provides livelihood to about 6 million cotton farmers.
- India is the 2nd largest cotton producer and the largest consumer of cotton in the world.
- India produces about 6.00 Million tons of cotton every year which is about 23% of the world cotton.
- India produces about 51% of the total organic cotton production of the world, which demonstrates India's effort towards sustainability.
- A mobile app, "Cott-Ally" has been developed by Cotton Corporation of India (CCI) for providing latest news regarding weather condition, Crop situation and best farm practices.
- Hence both statements are correct.

News: <https://pib.gov.in/PressReleaselframePage.aspx?PRID=1662480>

QUESTION : 'Poverty and Shared Prosperity 2020: Reversals of Fortune' is published by:

- (A) World Economic Forum
- (B) World Bank
- (C) IMF
- (D) None of the above

Answer: B

Explanation :

Global extreme poverty is expected to rise for the first time in 20 years because of the disruption caused by COVID-19, the World Bank said in its biennial Poverty and Shared Prosperity Report.

- The Poverty and Shared Prosperity series of report by World bank provides the latest and most accurate estimates on trends in global poverty and shared prosperity.
- For more than two decades, extreme poverty was steadily declining. Now, for the first time in a generation, the quest to end poverty has suffered its worst setback.
- 'Poverty and Shared Prosperity 2020: Reversals of Fortune' presents new estimates of COVID-19's impacts on global poverty and inequality.
- The pandemic may push another 88 million to 115 million into extreme poverty or having to live on less than \$ (1) 50 per day, resulting in a total of 150 million such individuals.
- Some 9.1% to 9.4% of the world will be affected by extreme poverty in 2020.
- Hence, option (b) is the correct answer.

QUESTION : With reference to the World Migratory Bird Day 2020, consider the following statements:

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- (1) World Migratory Bird Day 2020 is being organized on October 11.
(2) This year the theme of World Migratory Bird Day is “Birds Connect Our World” to highlight the importance of conserving the ecological connectivity that support the natural movements of migratory birds.

Which of the statements given above is/are correct?

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

Answer: B

Explanation :

World Migratory Bird Day 2020 is being organized on October 10.

- WMBD is an annual awareness-raising campaign highlighting the need for the protection of migratory birds and their habitats.
 - The annual day was initiated in 2006.
 - Since 2018, it is celebrated twice a year, on the second Saturday in May and in October.
 - The campaign is organized by two international wildlife treaties administered by the United Nations Environment Programme (UNEP) – the Convention on the Conservation of Migratory Species of Wild Animals (CMS), and the African-Eurasian Migratory Waterbird Agreement (AEWA) - together with Environment for the Americas (EFTA).
 - This year the theme of World Migratory Bird Day is “Birds Connect Our World” to highlight the importance of conserving the ecological connectivity that support the natural movements of migratory birds.
- Hence only statement 2 is correct.

QUESTION : With reference to the Bharatmala Pariyojana, consider the following statements:

- (1) Bharatmala Pariyojana is an umbrella program for the highways sector that focuses on optimizing efficiency of freight and passenger movement across the country.

- (2) This will be done only by development of Economic Corridors and Inter Corridors.

Which of the statements given above is/are correct?

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

Answer: A

Explanation :

A total of 322 projects in a length of 12,413 Km have been awarded under Bharatmala Pariyojana till August, 2020. Further, 2921 Km has been constructed under the Project till the same date.

- The Ministry of Road Transport and Highways has taken up detailed review of NHs network.
- It has given overall investment approval for Bharatmala Pariyojana Phase I Scheme for development of about 34,800 km (including 10,000 Km residual NHDP stretches) at an estimated outlay of Rs 5,35,000 Crore.
- Bharatmala Pariyojana is an umbrella program for the highways sector that focuses on optimizing efficiency of freight and passenger movement across the country.
- This will be done by development of Economic Corridors, Inter Corridors and Feeder Routes, National Corridor Efficiency Improvement, Border and International connectivity roads, Coastal and Port connectivity roads and Green-field expressways.

Hence, option (a) is the correct answer.

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QUESTION : With reference to the RBI's Monetary Policy Committee (MPC), consider the following statements:

(1) India's GDP would contract by 9.5 per cent in the current fiscal due to the disruptions caused by the coronavirus pandemic.

(2) On inflation, the RBI expects a steady increase.

Which of the statements given above is/are correct?

(A) 1 only

(B) 2 only

(C) Both 1 and 2

(D) Neither 1 nor 2

Answer: A

Explanation :

The Monetary Policy Committee (MPC) of the Reserve Bank of India kept the repo rate unchanged at four per cent and decided to maintain its accommodative monetary policy stance to support growth amid the pandemic.

- RBI governor said India's GDP would contract by 9.5 per cent in the current fiscal due to the disruptions caused by the coronavirus pandemic.

- The six-member MPC met this week following the induction of three new independent members, Shashanka Bhide, Ashima Goyal and Jayanth R Varma.

- MPC is the statutory committee that fixes the key policy interest rate and monetary policy stance of the country as well as the inflation target.

Hence only statement 1 is correct.

----Must Update This Fact, if Revised.

QUESTION : With reference to the furry puss caterpillar, consider the following statements:

(1) It is widely regarded as one of the most poisonous of its kind in the United States.

(2) It is named after the far less vicious house cat, is essentially a southern flannel moth in its larva stage.

Which of the statements given above is/are correct?

(A) 1 only

(B) 2 only

(C) Both 1 and 2

(D) Neither 1 nor 2

Answer: C

Explanation :

Months after the Asian giant hornet — a vicious predatory insect popularly dubbed the 'murder hornet' — was first spotted in the US state of Washington, health officials in Virginia are now warning residents to watch out for another dangerous critter — the highly venomous furry puss caterpillar.

- The furry puss caterpillar, named after the far less vicious house cat, is essentially a southern flannel moth in its larva stage.

- According to experts, after metamorphosis, the insect no longer poses a threat.

- Closely resembling a wig or toupée, the caterpillar is widely regarded as one of the most poisonous of its kind in the United States.

- Hence both statements are correct.

QUESTION : In a major decision related to women security in the state, which of the following state government has ordered to establish women help desks in each and every police station of state?

(A) Uttar Pradesh

(B) Bihar

(C) Punjab

EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

(D) Rajasthan

Answer: A

Explanation :

In a major decision related to women security in the state, Uttar Pradesh Chief Minister has ordered to establish women help desks in each and every police station of state.

- Generally women hesitate in registering their complaints with male cops in police station.
- Keeping this in mind, Women police personnel will be given the charge of these women help desks so that every woman in state can register her complain freely and fearlessly.
- Government has directed to implement this order with immediate effect. The women police personnel deputed on helpdesk will not only listen to the complaints of women but will always be ready to help them anytime.
- Government had earlier established pink booths at various intersections of Lucknow.
- Women Cops are also deployed at major Crossings in various big cities including state capital Lucknow.
- It has also made arrangements to drop working women to their homes at odd hours.
- Hence, option (a) is the correct answer.

QUESTION : 'KAPILA' (Kalam Program for Intellectual Property Literacy and Awareness) campaign is an initiative of:

- (A) Ministry of Education
- (B) Ministry of Electronics and Information Technology
- (C) Ministry of Information and Broadcasting
- (D) Ministry of Skill Development and Entrepreneurship

Answer: A

Explanation :

Union Education Minister launched the 'KAPILA' (Kalam Program for Intellectual Property Literacy and Awareness) campaign on the 89th birth anniversary of former President and Scientist Late 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 and they will be aware of their rights.
- The Institution Innovation Council (IIC (2) 0) annual report was also presented on the occasion and the launch of IIC 3.0 was announced. It has also been decided to celebrate the week of October 15th to 23rd as 'Intellectual Property Literacy Week'. The IIC 3.0 website was also launched.
- The Institution Innovation Council was established by the Ministry of Education in 2018. So far, IICs have been established in about 1700 higher educational institutions. IIC will be established in 5000 higher educational institutions under IIC 3.0.
- Hence, option (a) is the correct answer.

News: <https://pib.gov.in/PressReleaselframePage.aspx?PRID=1664883>

QUESTION : With reference to the Gorkhaland, consider the following statements:

- (1) Gorkhaland region consists of Nepali-speaking people of Darjeeling, Kalimpong, Kurseong and other hilly districts of West Bengal.
- (2) Gorkhaland Territorial Administration (GTA) is a semi-autonomous administrative body for the Darjeeling and Kalimpong hills in West Bengal and it was created by Parliament.

Which of the statements given above is/are correct?

- (A) 1 only
- (B) 2 only

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- (C) Both 1 and 2
(D) Neither 1 nor 2

Answer: A

Explanation :

Earlier this month, the Ministry of Home Affairs (MHA) had invited the West Bengal government, the Gorkha Territorial Administration (GTA), and the Gorkha Janmukti Morcha (GJM) for a tripartite meeting to “discuss issues related to Gorkhaland”.

- Gorkhaland region consists of Nepali-speaking people of Darjeeling, Kalimpong, Kurseong and other hilly districts of West Bengal.
- The crisis in Gorkhaland has been brewing for many decades and the stems from language. The first demand for Gorkhaland was submitted in 1907 to Morley-Minto Reforms panel.
- Since then from time to time the region has witnessed various violent protests for creation of separate state.
- Gorkhaland Territorial Administration (GTA): GTA is a semi-autonomous administrative body for the Darjeeling and Kalimpong hills in West Bengal, India. It was created by West Bengal Legislative Assembly by passing a bill in 201 (1)

Hence only statement 1 is correct.

QUESTION : With reference to the SCO Startup Forum, consider the following statements:

(1) The forum will lay the foundation for multilateral cooperation and engagement among the Shanghai Cooperation Organisation (SCO) Member States to develop and hone their startup ecosystems, collectively.

(2) India is currently the largest startup ecosystem in the world.

Which of the statements given above is/are correct?

- (A) 1 only

- (B) 2 only
(C) Both 1 and 2
(D) Neither 1 nor 2

Answer: A

Explanation :

The first-ever SCO Startup Forum will be launched on 27th October 2020 ahead of the SCO trade ministers meeting on 28th October.

- The forum will lay the foundation for multilateral cooperation and engagement among the Shanghai Cooperation Organisation (SCO) Member States to develop and hone their startup ecosystems, collectively.
- The Forum shall identify areas of cooperation by launching multiple entrepreneurial activities like startup showcases through a dedicated virtual platform, mobilizing capital for startups, sharing of best practices, procuring social innovations etc.
- Innovation and Startups will be the key focus area of SCO Heads of Government meeting on 30th November 2020 to be hosted by India.
- India is currently the third-largest startup ecosystem in the world with over 35,000 startups, close to 25% of which are core technology startups operating in areas of AI, Robotics, Cloud Computing, IoT, Digital Health, Financial & Education Technology.
- The ‘Startup India’ has launched 10 bilateral bridges since its inception and has helped many technology-based startups to expand their businesses to global markets.

Hence only statement 1 is correct.

News: <http://newsonair.com/News?title=First-ever-SCO-Startup-Forum-to-be-launched-on-27th-October%2c-boost-for-%e2%80%98Startup-India%e2%80%99&id=402486>

EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

QUESTION : With reference to the Indian Academy of Highway Engineers (IAHE), consider the following statements:

(1) It was created in 1957.

(2) A committee under the chairmanship Shri Y. S. Malik was constituted to give recommendations to transform IAHE into a world-class premier institute in highway sector.

Which of the statements given above is/are correct?

(A) 1 only

(B) 2 only

(C) Both 1 and 2

(D) Neither 1 nor 2

Answer: B

Explanation :

5th General Council meeting of Indian Academy of Highway Engineers (IAHE) was held under the chairmanship of Union Minister for Road Transport and Highways.

- Created in 1983, IAHE has been providing training to highway engineers and professionals working in Central Government, State Governments, PSUs, Local Bodies, Contractors, Consultants etc.
- Need was however felt to considerably expand and improve the activities of IAHE to better contribute to highway development programmes.
- Accordingly, Ministry constituted a committee under the chairmanship Shri Y. S. Malik, former Secretary, Ministry of Road Transport & Highways (MoRTH) to give recommendations to transform IAHE into a world-class premier institute in highway sector.
- The council deliberated the recommendations of the Committee to enhance the scope of the IAHE to three distinct functions, namely
 - o Training,

- o Applied Research and Development in the Highways and Public Transport Sector, and

- o Road Safety and Regulation and decided to take further necessary action to transform IAHE into a world-class premier institute in highway sector.

Hence only statement 2 is correct.

QUESTION : With reference to the Malabar 2020 Naval exercise, consider the following statements:

(1) The Malabar series of Naval exercises started in 1992 as a bilateral Indian Navy-US Navy exercise.

(2) Japan joined the Naval exercise in 2015.

Which of the statements given above is/are correct?

(A) 1 only

(B) 2 only

(C) Both 1 and 2

(D) Neither 1 nor 2

Answer: C

Explanation :

As India seeks to increase cooperation with other countries in the maritime security domain and in the light of increased defence cooperation with Australia, Malabar 2020 will see the participation of the Australian Navy.

- The Malabar series of Naval exercises started in 1992 as a bilateral Indian Navy-US Navy exercise. Japan joined the Naval exercise in 2015.
- This annual exercise has been conducted off the coast of Guam in the Philippine Sea in 2018, off the coast of Japan in 2019 and is expected to be held in the Bay of Bengal and the Arabian Sea later this year.
- The participants of Exercise Malabar 2020 are engaging to enhance safety and security in the maritime domain. They collectively

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support free, open and inclusive Indo-Pacific and remain committed to a rules based international order.

- Hence both statements are correct.

News: <https://pib.gov.in/PressReleasePage.aspx?PRID=1665830>

QUESTION : With reference to the International Financial Services Centres Authority (IFSCA), consider the following statements:

(1) The IFSCA was established on April 27 this year with head office in Gandhinagar with an objective to develop the financial products and services in the Gujarat International Finance Tec-City International Financial Services Centre (GIFT IFSC).

(2) In December 2019, Parliament passed a Bill to set up a unified authority for regulating all financial activities at the IFSCs in the country.

Which of the statements given above is/are correct?

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

Answer: C

Explanation :

The International Financial Services Centres Authority (IFSCA) prescribed the regulatory framework for Real Estate Investment Trusts (REITs) and Infrastructure Investment Trusts (InvITs) in IFSC.

- IFSCA has permitted global participants i.e. REITs and InvITs incorporated in FATF compliant jurisdictions to list on the stock exchanges in GIFT IFSC. Additionally, InvITs have been permitted to raise funds through private placements also," an official statement said.
- The REITs and InvITs registered in International Financial Services Centre (IFSC) have been permitted to invest in real estate assets and

infrastructure projects respectively in IFSC, India and other foreign jurisdictions.

- The listing of REITs and InvITs in IFSC shall be in accordance with the requirements of the stock exchanges in IFSC.

The IFSCA was established on April 27 this year with head office in Gandhinagar with an objective to develop the financial products and services in the Gujarat International Finance Tec-City International Financial Services Centre (GIFT IFSC). In December 2019, Parliament passed a Bill to set up a unified authority for regulating all financial activities at the IFSCs in the country. Hence both statements are correct.

QUESTION : With reference to Market Intervention Scheme (MIS) for apple procurement in Jammu and Kashmir (J&K), consider the following statements:

(1) The procurement of apple will be done by Central Procuring Agency i.e. National Agricultural Cooperative Marketing Federation Ltd. (NAFED) through State Designated Agencies directly from apple farmers of J&K.

(2) National Agricultural Cooperative Marketing Federation of India Ltd (NAFED) is an apex organization of marketing cooperatives for agricultural produce in India.

Which of the statements given above is/are correct?

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

Answer: C

Explanation :

The Union Cabinet approved the extension of Market Intervention Scheme (MIS) for apple procurement in Jammu and Kashmir (J&K) for the

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current season also i.e. 2020-21 on the same terms and condition as was done in J&K during last season i.e. 2019-20.

- The procurement of apple will be done by Central Procuring Agency i.e. National Agricultural Cooperative Marketing Federation Ltd. (NAFED) through State Designated Agencies directly from apple farmers of J&K.
- The payment will be made through Direct Benefit Transfer (DBT) into Bank account of apple farmers. 12 LMT of apples can be procured under this scheme.
- National Agricultural Cooperative Marketing Federation of India Ltd (NAFED) is an apex organization of marketing cooperatives for agricultural produce in India.
- It was founded on 2 October 1958.
- It is registered under Multi State Co-operative Societies Act.
- It is Headquartered in New Delhi.

Hence both statements are correct.

QUESTION : With reference to the Financial Action Task Force (FATF), consider the following statements:

- (1) The Financial Action Task Force (FATF) decided to keep Pakistan on its "grey list".
- (2) The FATF is a global watchdog that was founded to tackle money laundering initially but its role became prominent post the 9/11 terror attacks.

Which of the statements given above is/are correct?

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

Answer: c

Explanation :

The Financial Action Task Force (FATF) decided to keep Pakistan on its "grey list", saying that the country has failed to act on six key mandates. The FATF urged Pakistan to complete an internationally agreed action plan by February 2021.

- The FATF is a global watchdog that was founded to tackle money laundering initially but its role became prominent post the 9/11 terror attacks. Following the attacks, the FATF expanded its operations and included terror financing under its purview.
- Its membership includes 39 jurisdictions.
- The FATF maintains two lists – a blacklist and a grey list. Countries on its blacklist are those that the watchdog deems non-cooperative in the global effort to curb money laundering and terror-financing.
- The grey list are officially referred to as 'Jurisdictions Under Increased Monitoring.'
- It constitutes those nations that present significant risks of money laundering and terror-financing but which have committed to working closely with the FATF in the development and implementation of action plans that address their deficiencies.
- If the country is not actively tackling money laundering or terror funding, it is then blacklisted. So far, only two countries have been blacklisted, they are Iran and North Korea.
- Hence both statements are correct.

QUESTION : With reference to the Employees' State Insurance (ESI) Scheme, consider the following statements:

- (1) Govt. of India has now extended the Employees' State Insurance (ESI) Scheme for the first time to Arunachal Pradesh, with effect from 1st November, 2020.

EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

(2) The ESI Scheme today stands implemented in all districts in all the States and Union Territories.

Which of the statements given above is/are correct?

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

Answer: A

Explanation :

Govt. of India has now extended the Employees' State Insurance (ESI) Scheme for the first time to Arunachal Pradesh, with effect from 1st November, 2020. All factories located in the district of Papum Pare of Arunachal Pradesh employing 10 or more persons shall become eligible for coverage under ESI Act 1948.

- The Employees' State Insurance Corporation is a pioneer Social Security organization providing comprehensive social security benefits like reasonable Medical Care and a range of Cash Benefits in times of need such as employment injury, sickness, death etc.
 - It is covering about 3.49 Crores of family units of workers and providing matchless cash benefits and reasonable medical care to its 13.56 crore beneficiaries.
 - The ESI Scheme today stands implemented in 568 districts in all the States and Union Territories, except Lakshdweep.
 - Apart from various benefits, the employees covered under ESI Scheme are also entitled to unemployment allowance. There are two unemployment allowance schemes namely
 - o Atal Beemit Vyakti Kalyan Yojna (ABVKY) and
 - o Rajiv Gandhi Shramik Kalyan Yojna (RGSKY).
- Hence only statement 1 is correct.

QUESTION : With reference to the International Labour Organization, consider the following statements:

(1) Apurva Chandra, Secretary (Labour and Employment) has been elected as the Chairperson of the Governing Body of the International Labour Organisation (ILO) for the period October 2020- June 2021.

(2) At present ILO has 199 members.

Which of the statements given above is/are correct?

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

Answer: A

Explanation :

After 35 years, India has assumed the Chairmanship of the Governing Body of International Labour Organization.

- Apurva Chandra, Secretary (Labour and Employment) has been elected as the Chairperson of the Governing Body of the International Labour Organisation (ILO) for the period October 2020- June 2021.
- Apurva Chandra belongs to the 1988 batch of the Indian Administrative Service (IAS).
- The Governing Body (GB) is the apex executive body of the ILO which decides policies, programmes, agenda, budget and elects the Director-General.
- At present ILO has 187 members.

Hence only statement 1 is correct.

QUESTION : With reference to the Flash Flood Guidance services, consider the following statements:

EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

(1) Ministry of Earth Sciences recently dedicated Flash Flood Guidance services, first of its kind for South Asian countries namely India, Bangladesh, Bhutan, Nepal and Sri Lanka.

(2) It has been developed by India Meteorological Department.

Which of the statements given above is/are correct?

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

Answer: C

Explanation :

Ministry of Earth Sciences dedicated Flash Flood Guidance services, first of its kind for South Asian countries namely India, Bangladesh, Bhutan, Nepal and Sri Lanka on 22 October 2020.

- It has been developed by India Meteorological Department.
- Under it, an automated mode of dissemination is to be established with the stakeholders along with the use of social media, so that the information reaches to concerned disaster authorities in a timely manner.
- The Guidance for flash floods in the form of Threats (6 hours in advance) and Risks (24 hours in advance) will be provided by Regional Centre to National Meteorological & Hydrological Services, National and State Disaster Management Authorities for taking mitigation measures to reduce the loss of life and property in the South Asian Region countries.
- Flash Floods are highly localized events of short duration with a very high peak and usually have less than six hours between the occurrence of the rainfall and peak flood.

- The Fifteenth WMO Congress had approved the implementation of a Flash Flood Guidance System (FFGS) project.

- World Meteorological Organization (WMO) has entrusted India with the responsibility of Regional Centre of South Asia Flash Flood Guidance System for coordination, development and its implementation.

- Hence both statements are correct.

QUESTION : Consider the following statements:

(1) Gas combustion in buildings from cookers and boilers is a major source of local air pollution and accounts for roughly 21 per cent of nitrogen oxides emissions across the Greater London area.

(2) As per the State of Global Air report 2020, which is published by the US based Health Effects Institute, India's population has the third highest exposure to PM_{2.5}, one of the most harmful pollutants for human health.

Which of the statements given above is/are correct?

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

Answer: C

Explanation :

As per a new report released by the Energy and Climate Intelligence Unit (ECIU), some areas in the UK could experience greater levels of air pollution due to large numbers of people working from home due to the pandemic this winter season.

- During the course of winter, air pollution, specifically emissions of nitrogen oxides are set to increase in the UK as a result of people spending more time working from their homes and using gas boilers for heating purposes.

EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

- These additional nitrogen oxide emissions will be roughly equivalent to cancelling out two years' of gains incurred as a result of traffic pollution measures.
- Gas combustion in buildings from cookers and boilers is a major source of local air pollution and accounts for roughly 21 per cent of nitrogen oxides emissions across the Greater London area for instance.
- As a result of this increased energy use, ECIU analysis suggests that urban air quality will worsen, with nitrogen oxide emissions increasing by approximately 12 per cent in some UK towns and cities.
- As per the State of Global Air report 2020, which is published by the US based Health Effects Institute, India's population has the third highest exposure to PM 2.5, one of the most harmful pollutants for human health.
- Hence both statements are correct.

QUESTION : Consider the following statements:

(1) Ministry of Skill Development and Entrepreneurship (MSDE) was formed in 2004 by the Government of India to focus on enhancing employability of skills.

(2) The National Council for Vocational Education and Training (NCVET) was notified by the Ministry of Skill Development and Entrepreneurship (MSDE) on 5th December 2018.

Which of the statements given above is/are correct?

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

Answer: B

Explanation :

Ministry of Skill Development & Entrepreneurship (MSDE) in collaboration with their unified regulator— National Council for Vocational Education and Training (NCVET) unveiled guidelines for the Awarding Bodies (AB) and Assessment Agencies (AA) over a digital conference.

- The guidelines and operation manuals have been developed for the recognition and regulation of these two entities, key elements of skilling ecosystem.
 - The guidelines aim at establishing quality, improved outcomes and standardizing the processes under Skill India Mission.
 - Ministry of Skill Development and Entrepreneurship (MSDE) was formed on November 9, 2014 by the Government of India to focus on enhancing employability of skills.
 - Under its flagship programme, Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 2016-2020, the Ministry has trained more than 92 lakh candidates so far.
 - The National Council for Vocational Education and Training (NCVET) was notified by the Ministry of Skill Development and Entrepreneurship (MSDE) on 5th December 2018. The NCVET acts as an overarching skills regulator which regulates the functioning of entities engaged in vocational education and training.
- Hence only statement 2 is correct.

QUESTION : Which of the following documents announced during the 3rd India-US 2+2 Ministerial Dialogue?

- (1) MoU for Technical Cooperation in Earth Observations and Earth Sciences.
- (2) Agreement for the Electronic Exchange of Customs Data between the Postal Operators.

EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

3) Arrangement extending the duration of the Memorandum of Understanding between India and the USA.

Select the correct answer using the code given below:

- (A) 1 only
- (B) 1 and 2 only
- (C) 2 and 3 only
- (D) 1, 2 and 3

Answer: D

Explanation :

External Affairs Minister S Jaishankar and Defence Minister Rajnath Singh held the third edition of the 2+2 talks with US Secretary of State Mike Pompeo and Secretary of Defense Mark Esper.(Under the tenure of Donald Trump).

Documents announced during the 3rd India-US 2+2 Ministerial Dialogue:

1. Basic Exchange and Cooperation Agreement between the Ministry of Defence, Government of India and the National Geospatial-Intelligence Agency (NGA), Department of Defence of United States of America.
2. MoU for Technical Cooperation in Earth Observations and Earth Sciences.
3. Agreement for the Electronic Exchange of Customs Data between the Postal Operators.
4. Arrangement extending the duration of the Memorandum of Understanding between India and the USA.
5. Letter of Intent between the Central Council for Research in Ayurvedic Sciences, New Delhi and the Office of Cancer Complementary and Alternative Medicine, National Cancer Institute, Government of the USA for cooperation in the field of Ayurveda and Cancer Research.

- USA is the top export destination for India which is also reflected in exchange of goods through postal channel.

- Hence, option (d) is the correct answer.

QUESTION : Consider the following statements regarding Copernicus programme:

- (1) It is a moon observation programme.
- (2) This initiative is headed by the European Commission (EC) in partnership with the European Space Agency (ESA).

3) ESA is developing a new family of satellites, called Sentinels, specifically for the operational needs of the Copernicus programme.

Correct codes:

- A) 1 and 3 only
- B) 1 and 2 only
- C) 2 and 3 only
- D) 1, 2 and 3

Ans: (C) 2 and 3 only

Copernicus is the most ambitious Earth observation programme to date. It will provide accurate, timely and easily accessible information to improve the management of the environment, understand and mitigate the effects of climate change and ensure civil security.

Copernicus is the new name for the Global Monitoring for Environment and Security programme, previously known as GMES.

This initiative is headed by the European Commission (EC) in partnership with the European Space Agency (ESA).

Data from the Sentinel-3 World Fire Atlas have been released.

Data have been recorded under the Copernicus Sentinel-3 mission.

QUESTION : Consider the following statements regarding “Swachh – Nirmal Tat Abhiyaan”:



EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

(1) It is launched by the Ministry of Environment, Forest and Climate Change (MoEF&CC).

(2) It aims to make beaches clean and create awareness amongst citizens about the importance of coastal ecosystems.

3. Society of Integrated Coastal Management (SICOM) will be responsible for its implementation.

Correct codes:

A. 1 and 2 only

B. 2 and 3 only

C. 1 and 3 only

D. 1, 2 and 3

Ans: (D) 1, 2 and 3

It is launched by Ministry of Environment, Forest and Climate Change (MoEF&CC)

It aims to make beaches clean and create awareness amongst citizens about the importance of coastal ecosystems – in Beaches across 10 states / UTs.

Environment Education Division and Society of Integrated Coastal Management (SICOM) under the Environment Ministry will be responsible for its implementation.

At the end of the drive, the best three beaches will be suitably awarded along with a certificate of appreciation for all the participating eco-clubs.

QUESTION : Choose the correct statements regarding India-Norway Marine Pollution Initiative:

(1) It is an initiative launched by The Union Ministry of Environment, Forests and Climate Change and Norwegian Ministry of Foreign Affairs.

(2) It work towards beach clean-up efforts, awareness raising campaigns and using plastic waste as fuel substitution for coal in cement production.

3. This initiative will seek to support local governments in implementing sustainable waste management practices.

Correct codes:

(A) 1 and 2 only

(B) 2 and 3 only

(C) 1 and 3 only

(D) 1,2 and 3

Ans: (d) 1,2 and 3

The Initiative will combat marine pollution, which is one of the fastest growing environmental concerns. Through a range of implementing partners, this initiative will seek to support local governments in implementing sustainable waste management practices, develop systems for collecting and analysing information about sources and scope of marine pollution.

They will also work towards beach clean-up efforts, awareness raising campaigns and pilot project using plastic waste as fuel substitution for coal in cement production.

The Union Ministry of Environment, Forests and Climate Change has signed a Letter of Intent (LoI) with the Norwegian Ministry of Foreign Affairs to launch the 'India-Norway Marine Pollution Initiative'.

QUESTION : Recently, 'Not all animals migrate by choice' was seen in news, Consider the following statements regarding it :

(1) It is launched jointly by UN Environment India and Wildlife Crime Control Bureau (WCCB) of India.

(2) The campaign complements worldwide action on illegal trade in wildlife.

3. In the first phase of the campaign, Tiger, Pangolin, Star Tortoise and Tokay Gecko have been chosen for conservation.

EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

Correct codes:

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

Ans: (d) 1,2 and 3

UN Environment India and Wildlife Crime Control Bureau (WCCB) of India have launched an awareness campaign 'Not all animals migrate by choice'.

The campaign aims at creating awareness and garnering public support for the protection and conservation of wildlife, prevention of smuggling and reduction in demand for wildlife products.

The campaign also complements worldwide action on illegal trade in wildlife through UN Environment's global campaign, Wild for Life.

In the first phase of the campaign, Tiger, Pangolin, Star Tortoise and Tokay Gecko have been chosen as they are highly endangered due to illegal trading in International markets.

QUESTION : Consider the following statements regarding Convention on the conservation of migratory species of wild animals(CMS):

- (1) It is also referred to as Bonn Convention.
- (2) It is the only global and UN-based intergovernmental organization established exclusively for conservation and management of migratory species.
3. It includes terrestrial, aquatic and avian migratory species throughout their range.

Correct codes:

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

(d) 1,2 and 3

Ans: (d) 1,2 and 3

In order to protect the migratory species throughout their range countries, a Convention on Conservation of Migratory Species (CMS), has been in force, under the aegis of United Nations Environment Programme.

Also referred to as the Bonn Convention, it provides a global platform for the conservation and sustainable use of migratory animals and their habitats

CMS is only global and UN-based intergovernmental organization established exclusively for conservation and management of terrestrial, aquatic and avian migratory species throughout their range.

The 13th Conference of Parties (COP) of the Convention on the conservation of migratory species of wild animals (CMS) is going to be hosted by India during 15th to 22nd February, 2020 at Gandhinagar in Gujarat.

India has been a Party to the CMS since 1983. The Conference of Parties (COP) is the decision-making organ of this convention.

QUESTION : Consider the following statements:

- (1) Sikkim became the first State in the world to become fully organic .
- (2) Organic farming is an agricultural process that uses biological fertilizers and pest control acquired from animal or plant waste.
3. India ranks first in the number of organic farmers in the world

Correct codes:

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

EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

(d) 1, 2 and 3

Ans: (d) 1, 2 and 3

India ranks first in number of organic farmers and ninth in terms of area under organic farming.

Sikkim became the first State in the world to become fully organic and other States including Tripura and Uttarakhand have set similar targets.

North East India has traditionally been organic and the consumption of chemicals is far less than rest of the country.

Similarly the tribal and island territories are being nurtured to continue their organic story.

The major organic exports from India have been flax seeds, sesame, soybean, tea, medicinal plants, rice and pulses.

In a world battered by the COVID pandemic, the demand for healthy and safe food is already showing an upward trend and hence this is an opportune moment to be captured for a win-win situation for our farmers, consumers and the environment.

QUESTION : Consider the following statements regarding Green – Ag Project :

(1) It is funded by the Global Environment Facility.

(2) The project seeks to integrate biodiversity, climate change and sustainable land management objectives.

3. Department of Agriculture, Cooperation, and Farmers' Welfare (DAC&FW) is the national executing agency of the project.

Correct codes:

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Ans: (d) 1, 2 and 3

The Green-Ag Project is funded by the Global Environment Facility, while the Department of Agriculture, Cooperation, and Farmers' Welfare (DAC&FW) is the national executing agency.

Other key players involved in its implementation are Food and Agriculture Organization (FAO) and the Union Ministry of Environment, Forest and Climate Change (MoEF&CC).

The project seeks to integrate biodiversity, climate change and sustainable land management objectives and practices into Indian agriculture.

The Union government on July 28, 2020, launched the Green-Ag Project in Mizoram, to reduce emissions from agriculture and ensure sustainable agricultural practices.

QUESTION : Consider the following statements regarding Mass extinction:

(1) It refers to a substantial increase in the degree of extinction or when the Earth loses more than three-quarters of its species in a geologically short period of time.

(2) These extinctions were caused by "catastrophic alterations" to the environment, such as massive volcanic eruptions, depletion of oceanic oxygen or collision with an asteroid.

3. Four mass extinction has already happened in the history of earth and the ongoing mass extinction is the fifth one.

Correct codes:

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1, 2 and 3

(d) 1 and 3 only

Ans: (a) 1 and 2 only

EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

Mass extinction refers to a substantial increase in the degree of extinction or when the Earth loses more than three-quarters of its species in a geologically short period of time.

So far, during the entire history of the Earth, there have been five mass extinctions.

The five mass extinctions that took place in the last 450 million years have led to the destruction of 70-95 per cent of the species of plants, animals and microorganisms that existed earlier.

These extinctions were caused by “catastrophic alterations” to the environment, such as massive volcanic eruptions, depletion of oceanic oxygen or collision with an asteroid.

The ongoing sixth mass extinction may be one of the most serious environmental threats to the persistence of civilisation, according to new research. The research was published in the journal Proceedings of the National Academy of Sciences of the United States of America (PNAS).

QUESTION : Consider the following statements regarding Environmental performance index:

(1) This index was developed from the Pilot Environmental Performance Index, first published in 2002.

(2) India is in the top 50 rank this year.

3. It is released by UNEP.

Correct codes:

(a) 1 and 2 only

(b) 1 and 3 only

(c) 3 only

(d) 1 only

Ans: (d) 1 only

This index was developed from the Pilot Environmental Performance Index, first published in 2002, and designed to supplement the

environmental targets set forth in the United Nations Millennium Development Goals.

The EPI was preceded by the Environmental Sustainability Index (ESI), published between 1999 and 2005. Both indices were developed by Yale University (Yale Center for Environmental Law and Policy) and Columbia University (Center for International Earth Science Information Network) in collaboration with the World Economic Forum and the Joint Research Centre of the European Commission.

India secured 168th rank. The country scored 27.6 out of 100 in the 2020 index.

India’s rank was 177 (with a score of 27.6 out of 100) in 2018.

12th edition of the biennial Environment Performance Index (EPI Index 2020) has been released.

QUESTION : Consider the following statements regarding ‘#iCommit’ initiative:

(1) It is an initiative to build an energy resilient future.

(2) It is driven by the Ministry of Environment, Forest and Climate Change

Correct codes:

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

Ans: (a) 1 only

The ‘#iCommit’ initiative is centred around the idea of building an energy resilient future.

The calls upon all stakeholders and individuals to continue moving towards energy efficiency, renewable energy, and sustainability to create a robust and resilient energy system in the future.

EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

The initiative is driven by Energy Efficiency Services Limited (EESL), under the administration of Ministry of Power.

It includes a diverse set of players such as Governments, Corporates, Multilateral and Bilateral Organisations, Think Tanks and Individuals.

QUESTION : Consider the following statements regarding Bay of Bengal Boundary Layer Experiment or BoBBLE:

- (1) It is funded by the World Bank.
- (2) It seeks to examine the impact of ocean processes in the Bay of Bengal (BoB) on the monsoon system.
3. It is a joint India-UK project.

Correct codes:

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

Ans: (b) 2 and 3 only

It is a joint India-UK project.

It seeks to examine the impact of ocean processes in the Bay of Bengal (BoB) on the monsoon system.

It is a project funded by Union Ministry of Earth Sciences and the Natural Environment Research Council of UK.

The Bay of Bengal (BoB) plays a fundamental role in controlling the weather systems that make up the South Asian summer monsoon system.

A team from Indian Institute of Science in Bengaluru and UK based University of East Anglia have created a blueprint for accurate prediction of monsoon, tropical cyclones and other weather-related forecast under the Bay of Bengal Boundary Layer Experiment or BoBBLE.

QUESTION : Consider the following statements regarding Bharat Stage Emission Standards (BSES):

- (1) It was first brought into effect in 2000 under the head “India 2000”.
- (2) The government implemented BS5 in 2016 and planning to introduce Bharat Stage VI (BS6) in 2020.
3. They are set by the Central Pollution Control Board.

Correct codes:

- (A) 2 and 3 only
- (B) 1 and 3 only
- (C) 1 only
- (D) 1 and 2 only

Ans: (b) 1 and 3 only

It is Introduced in the year 2000.

They are set by the Central Pollution Control Board under the Ministry of Environment and Climate Change.

Objective: To keep air pollutants emitted by the internal combustion engine of vehicles under control.

They are based on European (EURO) emission standards.

Bharat Stage (BS) emission norms were first brought into effect in 2000 under the head “India 2000”. This was followed by BS2 in 2001 and BS3 in 2005.

QUESTION: Consider the following statements regarding the Ranganathittu Bird Sanctuary :

- (1) It is located in Andhra Pradesh.
- (2) It is an island in the Krishna River.
- (3) The Marsh Crocodile is a common inhabitant of the riverine reed beds.

Which of the statements given above is/are correct?



EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

- (A) Only 1
- (B) Only 3
- (C) 1 and 2
- (D) 1, 2 and 3

Ans. (B) Only 3 - It is located in Karnataka.

- It is an island in the Cauvery River.

- This sanctuary welcomes the arrival of a large number of migratory birds of different flocks from as far as Siberia, North America and Australia.

QUESTION : Consider the following statements regarding the Houbara Bustard:

(1) The Houbara Bustard is regarded as the provincial bird of Balochistan.

(2) It migrates from the cold northern regions of Siberia to the warmer regions of the world, including the Indian sub-continent.

(3) The Convention of the International Trade in Endangered Species has classified it as an endangered migratory bird.

(4) The Houbara Bustard is listed in the Convention on Migratory Species of Wild Animals (The Bonn Convention).

Which of the statements given above are correct?

- (A) 1 and 2
- (B) 1 and 4
- (C) 2 and 3
- (D) 1, 2, 3 and 4

Ans: (D) The Houbara bustard, taxonomically classified as *Clamydotis undulate*, is known as "Taloor" in Sindhi language. A leading environmental group, working for the conservation of flora and fauna, had sought intervention of the External Affairs Ministry to put pressure on Pakistan to ban hunting of this rare bird, Houbara Bustard, which has

drastically reduced India's share of their annual winter migration and affected the desert's eco-system. So this question is very important.

QUESTION : Consider the following statements :

(1) The objective of the Basel Convention is to protect human health and environment against the adverse effects of hazardous wastes.

(2) The Nairobi Convention covers countries that are rich in biodiversity and natural resources. Most of the marine and coastal ecosystems are trans-boundary in nature and the impacts from human activities often extend across national boundaries.

(3) The aim of the Nairobi Convention is to stem any further degradation of the marine environment and to reverse the degradation and destruction of critical habitats.

Which of the statements given above is/are correct?

- (A) Only 1
- (B) 1 and 2
- (C) 2 and 3
- (D) 1, 2 and 3

Ans: (D)

QUESTION : Bio-prospecting refers to

- (1) exploring an area to measure its richness of diversity.
- (2) conservation of biodiversity using cryo methods.
- (3) extinction of species due to the extinction of its prey.
- (4) exploring molecular, genetic and species-level diversity for products of economic importance.

Select the correct answer from the codes given below :

- (A) 1 and 2
- (B) Only 3
- (C) 3 and 4
- (D) Only 4



EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

Ans: (D) Bio-prospecting can be defined as a systematic search for and development of new sources of chemical compounds, genes, micro-organisms, macro-organisms and other valuable products from nature. It entails the search for economically valuable genetic and biochemical resources from nature. So, in brief, bio-prospecting means looking for ways to commercialize biodiversity. Lately, exploration and research on indigenous knowledge related to the utilization and management of biological resources have also been included in the concept of bio-prospecting. Thus, bio-prospecting touches upon the conservation and sustainable use of biological resources, and the rights of local and indigenous communities.

QUESTION : Consider the following statements regarding the Sea Grasses Meadows:

(1) Sea Grasses Meadows are submerged monocotyledonous flowering plants adapted to complete their life cycle below the sea surface.

(2) They harbour rich diversity of marine flora and fauna of commercial importance, and help prevent beach erosion and siltation.

(3) In India, Sea Grass Meadows are found only in Lakshadweep.

Which of the statements given above is/are correct?

- (A) Only 1
- (B) 1 and 2
- (C) 1 and 3
- (D) 1, 2 and 3

Ans: (B) 1 and 2 In India, Sea Grass Meadows can be found on the eastern and western coast, in Lakshadweep, as well as, in the Andaman and Nicobar Islands. They are also found in the Gulf of Mannar.

QUESTION : Consider the following statements:

(1) Reef bleaching is a generalized stress response and evidence indicates that elevated temperature causes mass bleaching of corals, leading to a rapid loss of pigmentation of coral and whitening of the colony.

(2) Natural disturbances, which cause damage to coral reefs, include violent storms, flooding, high and low temperature extremes, but El Nino Southern Oscillation (ENSO) does not affect coral reefs.

(3) The recent coral reef declines are related mostly to anthropogenic impacts, like over- exploitation, over-fishing, increased sedimentation and nutrient overloading.

Which of the statements given above is/are correct?

- (A) 1 and 3
- (B) Only 2
- (C) 1 and 2
- (D) 1, 2 and 3

Ans: (A) 1 and 3 ENSO damages coral reefs. ENSO brings floods and droughts, which eventually affect coral reefs.

QUESTION : Consider the following statements regarding the Ramsar Convention:

- (1) The Convention on Wetlands was signed in Ramsar, Iraq in 1971.
- (2) It is an inter-governmental treaty which provides the framework for national action and international cooperation for the conservation, and wise use of wetlands and their resources.

(3) Ramsar Convention is the only global environment treaty dealing with a particular ecosystem.

(4) The Ramsar Convention on Wetlands was developed as a means to call international attention to the lack of understanding of their important functions, values, goods and services.

Which of the statements given above are correct?

EKLAVYA 360°PRELIMS PROGRAM – TEST 10 Explanation

- (A) 1 and 2
- (B) 3 and 4
- (C) 2, 3 and 4
- (D) 1, 2 and 3

Ans: (C) 2, 3 and 4

The Ramsar Convention on Wetlands was signed in Ramsar, Iran in 1971

QUESTION : Consider the following statements regarding the Pench National Park :

- (1) The Pench National Park lies in the Balaghat Range.
- (2) NH-12 passes through the Pench National Park.
- (3) Malabar Pied Hornbill, Grey Headed Fishing Eagle and Indian Pitta are found here.

Which of the statements given above is/are correct?

- (A) 1 and 2
- (B) Only 3
- (C) Only 2
- (D) 1, 2 and 3

Ans: (B) Only 3

- The Pench National Park lies in the Satpura Range.
- NH-7 passes through the Pench National Park.

QUESTION : Consider the following statements:-

- (1) The Cauvery Wildlife Sanctuary is located in Tamil Nadu.
- (2) It has dry deciduous forests, as well as, some patches of scrub forests.
- (3) Malabar giant squirrels are found in this sanctuary.
- (4) This sanctuary was established in 1987.

Which of the statements given above are correct?

- (A) 1 and 2
- (B) 2 and 3

- (C) 2, 3 and 4
- (D) 1, 2, 3 and 4

Ans. (C) The Cauvery Wildlife Sanctuary is located in Mysore district of Karnataka.

QUESTION : Consider the following statements :

- (1) The headquarters of the Animal Welfare Board of India is situated in Lucknow.
- (2) Article 51(g) of the Indian Constitution gives the constitutional duty of treating animals with compassion.
- (3) The Prevention of Cruelty to Animals Act extends to the whole of India, including the state of Jammu and Kashmir.

Which of the statements given above is/are correct?

- (A) 1 only
- (B) 2 only
- (C) 1 and 3
- (D) 1, 2 and 3

Ans. (B) The headquarters of the Animal Welfare Board of India is situated in Chennai. 6 The Prevention of Cruelty to Animals Act extends to the whole of India, except the state of Jammu and Kashmir. It is notable that this question is important because the Supreme Court has banned 'Jallikattu', which is a festival of Tamil Nadu and it means bulls taming. It is also notable that the Supreme Court spoke of how this uncivilised event violates the Prevention of Cruelty to Animals Act.