

Q.1) Consider the following statements

1. When actual maximum temperature remains 45°C or more irrespective of normal maximum temperature, heat wave should be declared.
2. When a coastal station satisfies both the Heat Wave and Hot Day criteria, then Heat Wave should be given higher priority and be declared.
3. Heat wave need not be considered till maximum temperature of a station reaches at least 40°C for Plains and at least 30°C for Hilly regions.

Which of the above statements is/are correct?

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

Q.1) Solution (d)

Frost is classified as a **natural disaster (atmospheric)**.

Criteria for Heat Wave:

Heat wave need not be considered till maximum temperature of a station reaches at least 40°C for Plains and at least 30°C for Hilly regions. (Hence statement 3 is correct)

a) When normal maximum temperature of a station is less than or equal to 40°C

- Heat Wave Departure from normal is 5°C to 6°C
- Severe Heat Wave Departure from normal is 7°C or more

b) When normal maximum temperature of a station is more than 40°C

- Heat Wave Departure from normal is 4°C to 5°C
- Severe Heat Wave Departure from normal is 6°C or more

c) When actual maximum temperature remains 45°C or more irrespective of normal maximum temperature, heat wave should be declared. (Hence statement 1 is correct)

In the northern plains of the country, dust in suspension occurs in many years for several days, bringing minimum temperature much higher than normal and keeping the maximum temperature around or slightly above normal. Sometimes increase in humidity also adds to this discomfort. Nights do not get cooled and become uncomfortable. To cover this situation, hot day concept has been introduced.

When a station satisfies both the Heat Wave and Hot Day criteria, then Heat Wave should be given higher priority and be declared.

Hence statement 2 is correct.

Q.2) Consider the following statements

1. Asphyxiants are substances that interfere with the transport of an adequate supply of oxygen to the vital organs of the body.
2. Allergens are substances which cause an adverse reaction by the immune system.
3. Irritants are noncorrosive chemicals that cause reversible inflammatory effects on living tissue by chemical action at the site of contact.

Which of the above statements is/are correct?

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

Q.2) Solution (d)

Four categories of common **chemical hazards** are corrosives, flammables, oxidizers/reactive, and toxins.

Types of Toxins:

Asphyxiants are substances that interfere with the transport of an adequate supply of oxygen to the vital organs of the body. They can do this by either displacing oxygen from the air or by combining with hemoglobin and thus reducing the blood's ability to transport oxygen. Examples - nitrogen, argon, helium, methane, propane, carbon dioxide.

Hence statement 1 is correct.

Allergens are substances which cause an adverse reaction by the immune system. As these reactions result from previous sensitization from the substance or similar substance, chemical allergens will be different for each person. Example – Formaldehyde resins, Cleaners etc.

Hence statement 2 is correct.

Irritants are noncorrosive chemicals that cause reversible inflammatory effects (swelling and redness) on living tissue by chemical action at the site of contact. Because a wide variety of organic and inorganic chemicals are irritants, skin and eye contact with all chemicals in the laboratory should be avoided.

Example – Epoxy resin, Solvents, Adhesives etc.

Hence statement 3 is correct.

Additional Information:

Corrosive substances are solids, liquids, and gases that cause destruction of living tissue by chemical action at the site of contact.

Examples – Sulphuric Acid, Nitric Acid, Hydrochloric Acid etc.

Neurotoxins induce an adverse effect on the structure or function of the central and/or peripheral nervous system. These effects can be permanent or reversible. Examples - Drugs of abuse (like methamphetamine).

Q.3) Consider the following statements

1. Fog is a phenomenon of small droplets suspended in air and the visibility is one kilometer or less.
2. Frost occurs when the temperature of the air in contact with the ground, or at thermometer-screen level, is below the freezing-point of water.
3. Haze is traditionally an atmospheric phenomenon where dust, smoke and other dry particles obscure the clarity of the sky.

Which of the above statements is/are correct?

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

Q.3) Solution (d)

Fog is a phenomenon of small droplets suspended in air and the visibility is one kilometer or less.

Hence statement 1 is correct.

Frost occurs when the temperature of the air in contact with the ground, or at thermometer-screen level, is below the freezing-point of water ('ground frost' or 'air frost', respectively). The term is also used of the icy deposits which may form on the ground and on objects in such temperature conditions (glaze, hoar-frost).

Frost is classified as a **natural disaster (atmospheric)**.

Hence statement 2 is correct.

Haze is traditionally an atmospheric phenomenon where dust, smoke and other dry particles obscure the clarity of the sky.

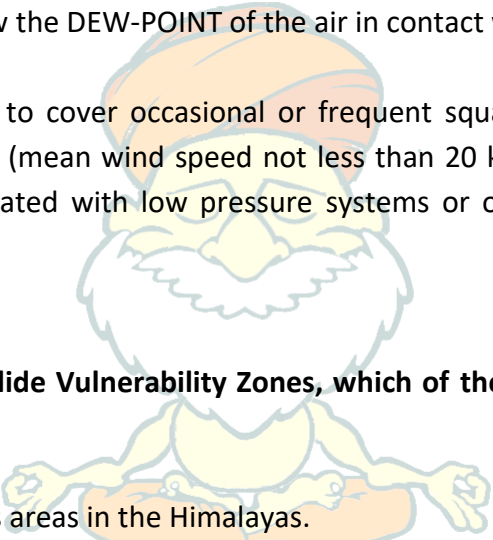
Hence statement 3 is correct.

Additional Information:

Dew:-Condensation of water vapour on a surface whose temperature is reduced by radiational cooling to below the DEW-POINT of the air in contact with it.

Squally weather is meant to cover occasional or frequent squalls with rain or persistent type of strong gusty winds (mean wind speed not less than 20 knot) accompanied by rain. Such conditions are associated with low pressure systems or onset and strengthening of monsoon.

Q.4) With regard to Landslide Vulnerability Zones, which of the following fall under Very High Vulnerability Zones?

- 
1. Young mountainous areas in the Himalayas.
 2. Young mountainous areas in the Andaman and Nicobar.
 3. High rainfall regions with steep slopes in the Western Ghats.
 4. High rainfall regions with steep slopes in the north-eastern regions.

Select from the below codes:

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

Q.4) Solution (d)

Landslide Vulnerability Zones:

Very High Vulnerability Zone: Highly unstable, relatively young mountainous areas in the Himalayas and Andaman and Nicobar, high rainfall regions with steep slopes in the Western

Ghats and Nilgiris, the north-eastern regions, along with areas that experience frequent ground-shaking due to earthquakes, etc. and areas of intense human activities, particularly those related to construction of roads, dams, etc. are included in this zone.

High Vulnerability Zone: Areas that have almost similar conditions to those included in the very high vulnerability zone are also included in this category. The only difference between these two is the combination, intensity and frequency of the controlling factors. All the Himalayan states and the states from the north-eastern regions except the plains of Assam are included in the high vulnerability zones.

Moderate to Low Vulnerability Zone: Areas that receive less precipitation such as Trans-Himalayan areas of Ladakh and Spiti (Himachal Pradesh), undulated yet stable relief and low precipitation areas in the Aravali, rain shadow areas in the Western and Eastern Ghats and Deccan plateau also experience occasional landslides. Landslides due to mining and subsidence are most common in states like Jharkhand, Orissa, Chhattisgarh, Madhya Pradesh, Maharashtra, Andhra Pradesh, Karnataka, Tamil Nadu, Goa and Kerala.

Additional Information:

The GSI is the nodal agency for monitoring landslide activity and its mitigation.

Q.5) Consider the following statements

1. The Disaster Management Act, 2005 extends to the whole of India.
2. The members of the National Disaster Management Authority (NDMA) are nominated by the Chair Person of NDMA.

Which of the above statements is/are correct?

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

Q.5) Solution (c)

The Disaster Management Act, 2005 extends to the whole of India. Hence statement 1 is correct.

The Prime Minister of India is the Chair Person of NDMA. The members of the National Disaster Management Authority (NDMA) are nominated by the Chair Person of NDMA. Hence statement 2 is correct.

Additional Information:

The Chair Person of NDMA shall, in the case of emergency, have power to exercise all or any of the powers of the National Authority (NDMA) but exercise of such powers shall be subject to ex post facto ratification by the National Authority.

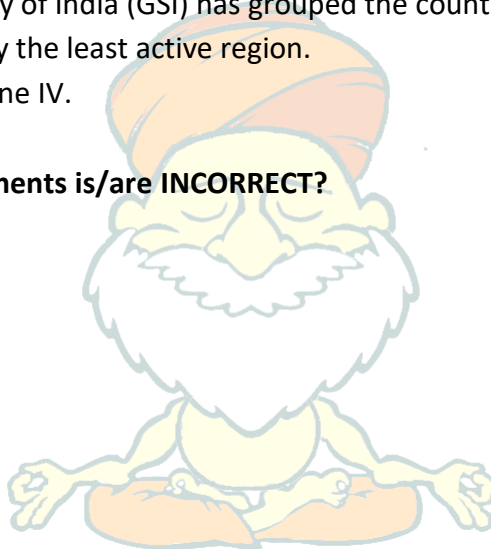
Q.6) Consider the following statements

1. Geographical Survey of India (GSI) has grouped the country into four seismic zones.
2. Zone II is seismically the least active region.
3. Delhi falls under Zone IV.

Which of the above statements is/are INCORRECT?

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

Q.6) Solution (a)



Bureau of Indian Standards (BIS), has grouped the country into four seismic zones, viz. Zone II, III, IV and V. Of these, Zone V is seismically the most active region, while **zone II is the least**.

Hence statement 1 is incorrect and 2 are correct.

Broadly, **Zone - V** comprises entire north-eastern India, parts of Jammu and Kashmir, Himachal Pradesh, Uttaranchal, Rann of Kutch in Gujarat, part of North Bihar and Andaman & Nicobar Islands. **Zone - IV** covers remaining parts of Jammu and Kashmir and Himachal Pradesh, **National Capital Territory (NCT) of Delhi**, Sikkim, Northern Parts of Uttar Pradesh, Bihar and West Bengal, parts of Gujarat and small portions of Maharashtra near the west coast and Rajasthan.

Hence statement 3 is correct.

Additional Information:

Town	State/UT	Zone
Delhi	Delhi	IV
Hyderabad	Telangana	II
Bangalore	Karnataka	II
Chennai	Tamil Nadu	III
Mumbai	Maharashtra	III

Q.7) Consider the following statements

1. Subhash Chandra Bose Aapda Prabandhan Puraskar is related to the field of Disaster Management.
2. Subhash Chandra Bose Aapda Prabandhan Puraskar can be awarded to all Indian Citizens and organizations.

Which of the above statements is/are correct?

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

Q.7) Solution (c)

Government has instituted an annual award titled Subhash Chandra Bose Aapda Prabandhan Puraskar. The award is to be announced every year on 23rd January on the birth anniversary of Netaji Subhash Chandra Bose.

All Indian Citizens and organizations, who have excelled in areas of **Disaster Management**; like Prevention, Mitigation, Preparedness, Rescue, Response, Relief, Rehabilitation, Research/ Innovations or Early Warning are eligible for the Subhash Chandra Bose Aapda Prabandhan Puraskar.

Hence statement 1 and 2 are correct.

Additional Information:

For the year 2019, 8th Battalion of National Disaster Response Force (NDRF) located at Ghaziabad has been selected for the Subhash Chandra Bose Aapda Prabandhan Puraskar for its commendable work in Disaster Management.

The 8th Battalion of NDRF was raised in 2006 and is a highly specialised Rescue and Response Force with large area of responsibility covering National Capital Region (NCR), Uttarakhand, Western UP & Haryana.

Q.8) Consider the following statements about World Sustainable Development Summit (WSDS)

1. World Sustainable Development Summit 2019 is organized by the UN Sustainable Development Solutions Network.
2. The theme of 2019 edition is “Creating Partnerships for a Resilient Planet”.

Which of the above statements is/are correct?

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

Q.8) Solution (d)

The World Sustainable Development Summit (WSDS) is the annual flagship event of The Energy and Resources Institute (TERI).

Hence statement 1 is incorrect.

The theme of the **2019 edition** of the Summit is 'Attaining the 2030 Agenda: Delivering on Our Promise'.

The theme of **2018 edition** is “Creating Partnerships for a Resilient Planet”.

Hence statement 2 is incorrect.

The WSDS has continued the legacy of the Delhi Sustainable Development Summit (DSDS) which was initiated in 2001 with the aim of making ‘sustainable development’ a globally shared goal.

Q.9) Consider the following statements

1. Phytoextraction refers to the ability of plants to take up contaminants into the roots and translocate them to the above ground shoots or leaves.
2. Phytostabilization refers to the holding of contaminated soils and sediments in place by vegetation, and to immobilizing toxic contaminants in soils.
3. Phytodegradation refers to the uptake of contaminants with the subsequent breakdown, mineralization, or metabolism by the plant itself through various internal enzymatic reactions and metabolic processes.

Which of the above statements is/are correct?

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

Q.9) Solution (d)

Phytodegradation, also called “phytotransformation,” refers to the uptake of contaminants with the subsequent breakdown, mineralization, or metabolism by the plant itself through various internal enzymatic reactions and metabolic processes.

Hence statement 3 is correct.

Phytostabilization refers to the holding of contaminated soils and sediments in place by vegetation, and to immobilizing toxic contaminants in soils.

Hence statement 2 is correct.

Phytoextraction refers to the ability of plants to take up contaminants into the roots and translocate them to the above ground shoots or leaves.

Hence statement 1 is correct.

Additional Information:

Phytovolatilization is the volatilization of contaminants from the plant either from the leaf stomata or from plant stems.

Rhizofiltration can be defined as the use of plant roots to absorb, concentrate, and/or precipitate hazardous compounds, particularly heavy metals or radionuclides, from aqueous solutions.

Q.10) Government of India has partnership with which of the following International Agencies in the field of Disaster Management?

1. Global Platform for Disaster Risk Reduction (GPDRR)
2. United Nations Disaster Assessment and Coordination (UNDAC)
3. International Search and Rescue Advisory Group (INSARAG)
4. United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA)

Select from the given codes:

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

Q.10) Solution (d)

Government of India has partnership with various International Agencies in the field of Disaster Management such as United Nations Office for Disaster Risk Reduction (UNISDR), The World Conference on Disaster Risk Reduction (WCDRR), Global Platform for Disaster Risk Reduction (**GPDRR**), Asian Ministerial Conference for Disaster Risk Reduction (AMCDRR), United Nations Office for the Coordination of Humanitarian Affairs (**UNOCHA**), United Nations Disaster Assessment and Coordination (**UNDAC**), International Search and Rescue Advisory Group (**INSARAG**), Global Facility for Disaster Reduction and Recovery (GFDRR), SAARC Disaster Management Centre - Interim Unit (SDMC-IU), Asian Disaster Reduction Center (ADRC), Asian Disaster Preparedness Centre (ADPC) and ASEAN Regional Forum (ARF) etc.

Q.11) Consider the following statements regarding Global Facility for Disaster Reduction and Recovery (GFDRR)

1. GFDRR is administered by the United Nations Office for Disaster Risk Reduction (UNISDR).
2. India is a member of GFDRR.
3. GFDRR supports the implementation of Sendai Framework for Disaster Risk Reduction.

Which of the above statements is/are INCORRECT?

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

Q.11) Solution (a)

The Global Facility for Disaster Reduction and Recovery (GFDRR) is a global partnership program administered by the World Bank Group.

Hence statement 1 is incorrect.

India is a member county of GFDRR. Hence statement 2 is correct.

GFDRR was launched on September 29, 2006 to support implementation of the Hyogo Framework for Action 2005-2015 (HFA). On March 18, 2015, the Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework) was adopted. GFDRR now supports the implementation of this framework.

Hence statement 3 is correct.

Additional Information:

GFDRR supports **developing countries** to: (i) mainstream disaster risk management and climate change adaptation in development strategies and investment programs, and (ii) improve the quality and timeliness of resilient recovery and reconstruction following a disaster.

The Consultative Group (CG) is GFDRR's primary decision-making and advisory body.

Consisting of Members and Observers, the CG sets GFDRR's long-term strategic objectives and oversees expected results. The Consultative Group has a Chair, who is a representative of the World Bank Group, and a Co-chair, who is a Member of the CG.

Q.12) Consider the following statements

1. Sustainable Agriculture Mission is one of the eight Missions outlined under National Action Plan on Climate Change (NAPCC)
2. Soil Health Management (SHM) is one of the components under National Mission for Sustainable Agriculture (NMSA)

Which of the above statements is/are INCORRECT?

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

Q.12) Solution (d)

NMSA derives its mandate from Sustainable Agriculture Mission which is one of the eight Missions outlined under National Action Plan on Climate Change (NAPCC). Hence Statement 1 is correct.

Soil Health Management (**SHM**) is one of the components under National Mission for Sustainable Agriculture (NMSA). SHM aims at promoting Integrated Nutrient Management (INM) through judicious use of chemical fertilizers including secondary and micro nutrients in conjunction with organic manures and bio fertilizers for improving soil health and its productivity, strengthening of soil and fertilizer testing facilities to improve soil test based recommendations to farmers for improving soil fertility.

Hence statement 2 is correct.

Additional Information:

National Mission for Sustainable Agriculture (NMSA) has been formulated for enhancing agricultural productivity especially in rainfed areas focusing on integrated farming, water use efficiency, soil health management and synergizing resource conservation.

Q.13) Consider the following statements regarding “Green – Ag: Transforming Indian Agriculture for global environment benefits and the conservation of critical biodiversity and forest landscapes”

1. It is a Global Environment Facility (GEF) assisted project.
2. It is launched in collaboration with the Food and Agriculture Organisation (FAO).

Which of the above statements is/are correct?

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

Q.13) Solution (c)

The government of India has launched a Global Environment Facility (**GEF**) assisted project namely, “Green – Ag: Transforming Indian Agriculture for global environment benefits and the conservation of critical biodiversity and forest landscapes” in collaboration with the Food and Agriculture Organisation (**FAO**).

Hence statement 1 and 2 are correct.

Additional Information:

The project is launched during September, 2018 in high-conservation-value landscapes of five States namely (i) Madhya Pradesh: Chambal Landscape, (ii) Mizoram: Dampa Landscape, (iii) Odisha: Similipal Landscape, (iv) Rajasthan: Desert National Park Landscape and v) Uttarakhand: Corbett-Rajaji Landscape.

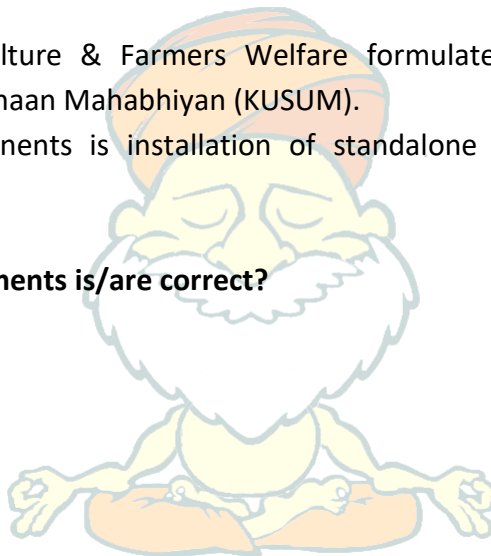
The project seeks to mainstream biodiversity, climate change and sustainable land management objectives and practices into Indian agriculture. The overall objective of the project is to catalyze transformative change of India's agricultural sector to support achievement of national and global environmental benefits and conservation of critical biodiversity and forest landscapes.

Q.14) Consider the following statements

1. Ministry of Agriculture & Farmers Welfare formulated the Scheme Kisan Urja Suraksha evam Utthaan Mahabhiyan (KUSUM).
2. One of its components is installation of standalone Solar Powered Agriculture Pumps.

Which of the above statements is/are correct?

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

**Q.14) Solution (b)**

The Ministry of New and Renewable Energy has formulated a Scheme 'Kisan Urja Suraksha evam Utthaan Mahabhiyan (KUSUM)'. Hence statement 1 is incorrect.

The scheme consists of three components:

Component-A: 10,000 MW of Decentralized Ground Mounted Grid Connected Renewable Power Plants.

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

Component-C: Solarisation of 10 Lakh Grid-connected Solar Powered Agriculture Pumps.

Hence statement 2 is correct.

Additional Information:

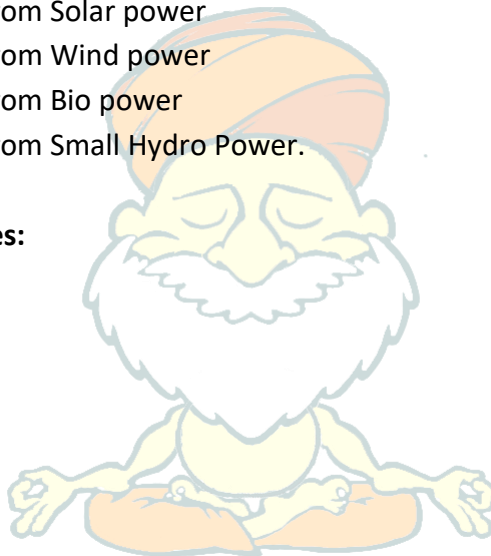
The Scheme will have substantial environmental impact in terms of savings of CO₂ emissions. All three components of the Scheme combined together are likely to result in saving of about 27 million tonnes of CO₂ emission per annum. Further, Component-B of the Scheme on standalone solar pumps may result in saving of 1.2 billion liters of diesel per annum and associated savings in the foreign exchange due to reduction of import of crude oil.

Q.15) Arrange the following in decreasing order (installed capacity of renewable energy in India)

1. Installed capacity from Solar power
2. Installed capacity from Wind power
3. Installed capacity from Bio power
4. Installed capacity from Small Hydro Power.

Select from the given codes:

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



Q.15) Solution (b)

A total of 74.79 GW of renewable energy capacity has been installed in the country as on 31/12/2018 which includes 35.14 GW from Wind, 25.21 GW from Solar, 9.92 GW from Bio power and 4.52 GW from Small Hydro Power.

Additional Information:

- Tamil Nadu stands first in the installed capacity from Wind power.
- Karnataka stands first in the installed capacity from Solar power.
- Maharashtra stands first in the installed capacity from Bio power.
- Karnataka stands first in the installed capacity of from Hydro Power.

Overall, Karnataka stands first in the total installed capacity of renewable energy.

India ranks 4 in the world in wind energy capacity and 5th in solar & total renewable energy capacity installed in the world.

Q.16) Consider the following statements

1. The International Renewable Energy Agency (IRENA) is a non-governmental organization.
2. The IRENA membership is open to those states that are members of the United Nations.
3. Renewable Capacity Statistics is published by IRENA.

Which of the above statement is/are correct?

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

Q.16) Solution (a)

The International Renewable Energy Agency (IRENA) is **an intergovernmental organisation** that supports countries in their transition to a sustainable energy future, and serves as the principal platform for international co-operation, a centre of excellence, and a repository of policy, technology, resource and financial knowledge on renewable energy.

Hence statement 1 is incorrect.

The IRENA Statute stipulates that membership in the agency is open to those states that are members of the United Nations, and to regional intergovernmental economic-integration organisations.

Hence statement 2 is correct.

Renewable Capacity Statistics is published by IRENA.

Hence statement 3 is correct.

Additional Information:

Members of IRENA must be willing and able to act in accordance with the objectives and activities laid down in the statute.

India, China, Pakistan and United States of America are members of IRENA.

Q.17) Consider the following statements

1. SDG India Index is constructed by NITI Aayog.
2. SDG India Index covers all the 17 Sustainable Development Goals (SDG's).
3. SDG India Index tracks the progress of all the States and UTs in achieving SDG's.

Which of the above statements is/are INCORRECT?

- a) 1 only
- b) 2 only
- c) 2 and 3
- d) All are correct

Q.17) Solution (b)

NITI Aayog has constructed the SDG India Index spanning across **13 out of 17** SDG's (leaving out goals 12, 13, 14, and 17).

Hence statement 1 is correct and 2 is incorrect.

The Index tracks the progress of **all the States and UTs** on a set of 62 Priority Indicators, measuring their progress on the outcomes of the interventions and schemes of the Government of India. The SDG India Index is intended to provide a holistic view on the social, economic and environmental status of the country and its States and UTs.

Hence statement 3 is correct.

Additional Information:

SDG India Index does not currently cover Goals 12, 13 and 14 largely on account of unavailability of comparable data across States and UTs. Further, SDG 17 is also not included given that indicators have not been identified by National Indicator Framework for this goal.

Q.18) Consider the following statements regarding United Nations High-level Political Forum on Sustainable Development (HLPF)

1. It replaced the Commission on Sustainable Development.
2. The Forum meets annually under the auspices of the United Nations Economic and Social Council.

Which of the above statements is/are correct?

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

Q.18) Solution (c)

The High-level Political Forum's first meeting was held on 24 September 2013. It **replaced the Commission on Sustainable Development**, which had met annually since 1993.

Hence statement 1 is correct.

The Forum meets annually under the auspices of the **UN Economic and Social Council** for eight days, including a three-day ministerial segment and every four years at the level of Heads of State and Government under the auspices of the General Assembly for two days.

Hence statement 2 is correct.

Background:

The annual High-level Political Forum on Sustainable Development serves as the central UN platform for the follow-up and review of the SDGs.

Q.19) Consider the following statements

1. The First Assembly of International Solar Alliance was organized in India.
2. ISA membership is open to all the countries that are members of United Nations.

Which of the above statements is/are correct?

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

Q.19) Solution (c)

The Union Cabinet chaired by the Prime Minister has given ex-post facto approval for moving a Resolution in the first Assembly of the International Solar Alliance (ISA) for

amending the Framework Agreement of the ISA for **opening up the ISA membership to all countries that are members of the United Nations.**

Hence statement 2 is correct.

The First Assembly of the ISA was held from 2nd – 5th October, 2018 at Delhi-NCR, India.

The Ministry of New and Renewable Energy hosted the First Assembly of International Solar Alliance (ISA).

Hence statement 1 is correct.

Q.20) Consider the following statements

1. The Himalayan States Regional Council will be the nodal agency for the Sustainable development in the Himalayan Region.
2. NITI Aayog has constituted the Himalayan State Regional Council.
3. West Bengal is also one among the twelve states for which the council acts as nodal agency.

Which of the above statements is/are correct?

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

Q.20) Solution (d)

NITI Aayog has constituted the 'Himalayan State Regional Council' to ensure sustainable development of the Indian Himalayan region.

Hence statement 2 is correct.

The Himalayan States Regional Council will be the **nodal agency** for the Sustainable development in the Himalayan Region which consists of the twelve States namely Jammu & Kashmir, Uttarakhand, Himachal Pradesh, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, two districts of Assam namely Dima Hasao and KarbiAnglong and Darjeeling and Kalimpong in **West Bengal**.

Hence statement 1 and 3 are correct.

Additional Information:

The terms of reference of the Council states that it shall monitor the implementation of action points for Central Ministries, Institutions and 12 Himalayan State Governments in Indian Himalayan Region which include river basin development and regional cooperation, spring mapping and revival across Himalayas in phased manner for water security; develop, implement and monitor tourism sector standards as well as bring policy coherence, strengthen skill & entrepreneurship with focus on identified priority sectors, among other action points.

Q.21) Consider the following statements regarding Asiatic Lion

1. Asiatic Lions are slightly smaller than the African Lions.
2. It is listed as Endangered on IUCN Red List and Appendix-I of CITES.
3. The population is steadily increasing in the last decade.

Which of the above statements is/are correct?

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

Q.21) Solution (d)

The 2015 Census showed that there are 523 lions, up 27% from the last census conducted in 2010 in Gir sanctuary, the last habitat for the big cats globally.

The last census in 2010 showed 411 lions, up from 359 in 2005.

Hence statement 3 is correct.

Asiatic lions are slightly smaller than African lions. Adult males weigh 160 to 190 kg, while females weigh 110 to 120 kg.

Hence statement 1 is correct.

Asiatic Lion is listed in Schedule I of Wildlife (Protection) Act 1972, in Appendix I of CITES and as Endangered on IUCN Red List.

Hence statement 2 is correct.

Additional Information:

The Asiatic Lion, endemic to Gir landscape of Gujarat, is one of the 21 critically endangered species identified by the MoEFCC for taking up recovery programmes.

Q.22) Consider the following statements

1. IUCN has United Nations Observer Status.
2. IUCN has been publishing the IUCN Red List of Threatened Species from its establishment in 1948.
3. IUCN's headquarter is located in Gland, Switzerland.

Which of the above statements is/are INCORRECT?

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

Q.22) Solution (c)

In 1999, as environmental issues continued to gain importance at the international stage, IUCN was granted **official observer status** to the United Nations.

Hence statement 1 is correct.

In 1964, IUCN established the IUCN Red List of Threatened Species, which has since evolved into the world's most comprehensive data source on the global extinction risk of species.

Hence statement 2 is incorrect.

IUCN's headquarters are located in Gland, Switzerland, in one of Europe's greenest office buildings: the IUCN Conservation Centre.

Hence statement 3 is correct.

Additional Information:

Protected Planet is the most up to date and complete source of information on protected areas, updated monthly with submissions from governments, non-governmental organizations, landowners and communities. It is managed by the United Nations Environment World Conservation Monitoring Centre (UNEP-WCMC) with **support from IUCN** and its World Commission on Protected Areas (WCPA).

Held once every four years, the IUCN World Conservation Congress brings together several thousand leaders and decision-makers from government, civil society, indigenous peoples, business, and academia, with the goal of conserving the environment and harnessing the solutions nature offers to global challenges.

Q.23) Consider the following statements

1. IUCN Red List divides species into nine categories.
2. Conservation International is one of the organizations involved in Red List Partnership.

Which of the above statements is/are correct?

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

Q.23) Solution (c)

The IUCN Red List Categories and Criteria are intended to be an easily and widely understood system for classifying species at high risk of global extinction. It divides species into nine categories: Not Evaluated, Data Deficient, Least Concern, Near Threatened, Vulnerable, Endangered, Critically Endangered, Extinct in the Wild and Extinct.

Hence statement 1 is correct.

The IUCN Red List is produced by the Red List Partnership, currently: Arizona State University, BirdLife International, Botanic Gardens Conservation International, **Conservation International**, International Union for Conservation of Nature (IUCN), NatureServe, Royal Botanic Gardens Kew, Sapienza University of Rome, IUCN Species Survival Commission, Texas A&M University, and Zoological Society of London.

Hence statement 2 is correct.

Q.24) Arrange the following in the decreasing order (in terms of area occupied)

1. National Parks
2. Wildlife Sanctuaries
3. Conservation Reserves

4. Community Reserves

Select from the given codes:

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

Q.24) Solution (b)

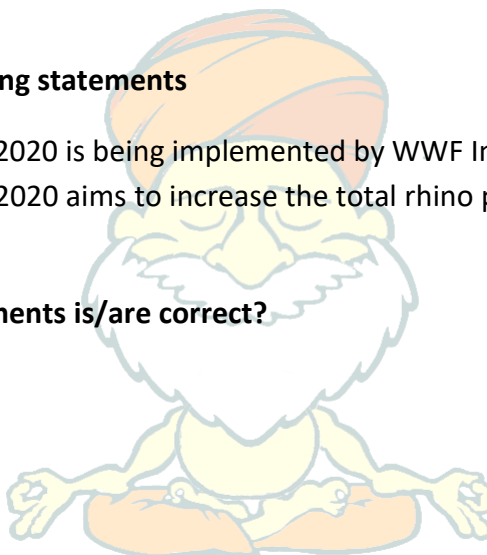
	Total Area	Coverage% of country
National Parks	40501.13	1.23
Wildlife Sanctuaries	119775.55	3.64
Conservation Reserves	4286.31	0.13
Community Reserves	525.22	0.02

Q.25) Consider the following statements

1. Indian rhino vision 2020 is being implemented by WWF India.
2. Indian rhino vision 2020 aims to increase the total rhino population in Assam to 3000 by 2020.

Which of the above statements is/are correct?

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

**Q.25) Solution (b)**

Indian rhino vision 2020 is being **implemented by the Department of Environment and Forest Assam, in partnership with Bodo Autonomous Council**. It is supported by WWF India, WWF areas (Asian Rhino and Elephant action strategy) program, the international rhino foundation (IRF), US fish and wildlife service, save the rhino s campaign of zoological institutions worldwide, and several NGOs and local conservation groups.

Hence statement 1 is incorrect.

IRV 2020 aims to increase the total rhino population in Assam to 3000 by 2020. The population of rhinos are to be distributed in various rhino habit in at least 7 protected areas in order to provide a long-term sustainable population of one-horned Indian rhino species.

Hence statement 2 is correct.

Q.26) Consider the following statements

1. Project Elephant is a Centrally Sponsored Scheme.
2. Project Elephant has been implementing MIKE (Monitoring of Illegal Killing of Elephants) programme of CITES.

Which of the above statements is/are correct?

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

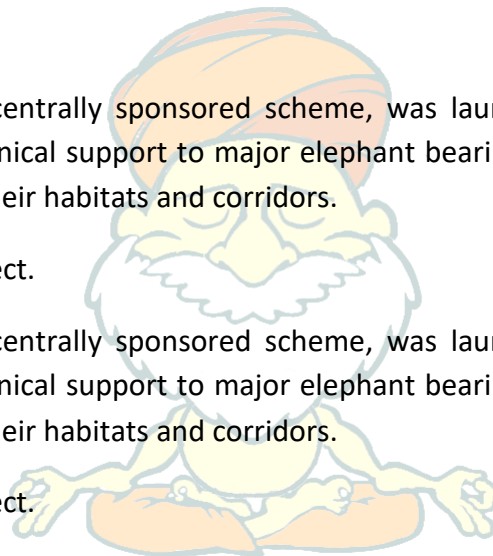
Q.26) Solution (c)

Project Elephant (PE), a centrally sponsored scheme, was launched in February 1992 to provide financial and technical support to major elephant bearing States in the country for protection of elephants, their habitats and corridors.

Hence statement 1 is correct.

Project Elephant (PE), a centrally sponsored scheme, was launched in February 1992 to provide financial and technical support to major elephant bearing States in the country for protection of elephants, their habitats and corridors.

Hence statement 2 is correct.



Q.27) Which of the following is a Tiger Range Country?

1. Vietnam
2. Malaysia
3. Laos
4. Thailand

Select from the given codes:

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

Q.27) Solution (d)

13 Tiger Range Countries include Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Russia, Thailand, and Vietnam.

Q.28) Consider the following statements regarding Wild Life Crime Control Bureau (WCCB)

1. WCCB is a statutory body.
2. The bureau has it's headquarter in Kolkata.
3. Operation WILDNET is one of the operations conducted by WCCB
4. United Nation Environment has awarded Wildlife Crime Control Bureau (WCCB) with Asia Environment Enforcement Awards, 2018 under the Collaboration category.

Which of the above statements are correct?

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

Q.28) Solution (c)

Wildlife Crime Control Bureau is a **statutory** multi-disciplinary body established by the Government of India under the Ministry of Environment and Forests, to combat organized wildlife crime in the country.

Hence statement 1 is correct.

The Bureau has it's headquarter in **New Delhi**.

Hence statement 2 is incorrect.

United Nation Environment has awarded Wildlife Crime Control Bureau (WCCB), with Asia Environment Enforcement Awards, 2018 for excellent work done by the Bureau in combating transboundary environmental crime.

The awards are given to outstanding individuals and/or government organizations/teams that demonstrate excellence and leadership in enforcement of national laws to combat transboundary environmental crime in one of the following eligibility criteria areas: collaboration; impact; innovation; integrity and gender leadership.

WCCB has been conferred this award in **Innovation category**.

Hence statement 4 is incorrect.

WCCB has conducted Operation Save Kurma, Operation Thunder Bird, **Operation Wildnet** etc.

Hence statement 3 is correct.

Q.29) Consider the following statements

1. World Bank is one of the funding partners for Global Tiger Initiative (GTI).
2. GTI is led by 13 Tiger Range Countries.
3. GTI also includes Snow Leopards under its ambit.

Which of the above statements are correct?

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

Q.29) Solution (d)

The Global Tiger Initiative (GTI) was launched in 2008 as a global alliance of governments, international organizations, civil society, the conservation and scientific communities and the private sector, with the aim of working together to save wild tigers from extinction. In 2013, the scope was broadened **to include Snow Leopards**.

Hence statement 3 is correct.

The GTI's founding partners included the World Bank, the Global Environment Facility (GEF), the Smithsonian Institution, Save the Tiger Fund, and International Tiger Coalition (representing more than 40 non-government organizations). The initiative is led by the 13 tiger range countries (TRCs).

Hence statement 1 and 2 are correct.

Additional Information:

In November 2010, leaders of the tiger range countries (TRCs) assembled at an International Tiger Forum in St. Petersburg, Russia to adopt the St. Petersburg Declaration on Tiger Conservation and endorsed its implementation mechanism, called the **Global Tiger**

Recovery Program. Their overarching goal was to double the number of wild tigers across their geographical area from about 3,200 to more than 7,000 by 2022.

Q.30) Consider the following statements

1. The Bombay Natural History Society (BNHS) partners Birdlife International in identifying Important Bird Areas (IBAs) in India.
2. BirdLife International is an intergovernmental organization.
3. BirdLife International is the IUCN Red List Authority for birds.

Which of the above statements is/are INCORRECT?

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

Q.30) Solution (b)

The Bombay Natural History Society and Birdlife International have identifies Important Bird Areas (IBAs) in India.

Hence statement 1 is correct.

BirdLife International is a **global partnership of conservation organisations (NGOs)** that strives to conserve birds, their habitats and global biodiversity, working with people towards sustainability in the use of natural resources.

Hence statement 2 is incorrect.

BirdLife International is the Red List Authority for birds, coordinating the process of evaluating all of the world's bird species against the Red List categories and criteria in order to assess their extinction risk. As of 2015, BirdLife has established that 1,375 bird species (13% of the total, or roughly one in eight) are threatened with extinction.

Hence statement 3 is correct.

Q.31) Which of the following National Parks are also recognized as Important Bird Areas (IBAs) in India?

1. Desert National Park

2. Great Himalayan National Park
3. Kudremukh National Park
4. Manas National Park

Select from the given codes:

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

Q.31) Solution (d)

Desert National Park, Great Himalayan National Park, Kudremukh National Park, Manas National Park, Mudumalai National Park, Nagarhole National Park, Orang National Park, Panna National Park, etc. are recognized as **Important Bird Areas (IBAs)** in India.

Q.32) Consider the following statements

1. Red Sanders is listed under the endangered category of IUCN Red List.
2. Red Sanders is listed in Appendix II of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora).

Which of the above statements is/are INCORRECT?

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

Q.32) Solution (a)

The International Union for Conservation of Nature (IUCN) has reclassified (in 2018) red sanders (*Pterocarpus santalinus*) as **near threatened** from the earlier endangered.

Hence statement 1 is incorrect.

Red Sanders is listed in Appendix II of CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora).

Hence statement 2 is correct.

Additional Information:

Pterocarpus santalinus has a restrictive distribution in the South Eastern portion of Indian Peninsula to which it is **endemic**. It is **native to the states of Andhra Pradesh, Tamil Nadu and Karnataka (Dry Deciduous region)**

More specifically it is found in the Palakonda and Seshachalam hill ranges of Cuddapah-Chittoor Districts of the State of **Andhra Pradesh** (Rajampet, Rayachoti, Ballepalle, Kodur ranges, Gangana Palle forest of Vempalle village and Lankamal Reserve Forest). It occurs less frequently in the regions of Chengalpattu, **Tamil Nadu** and also in the North Arcot Hills.

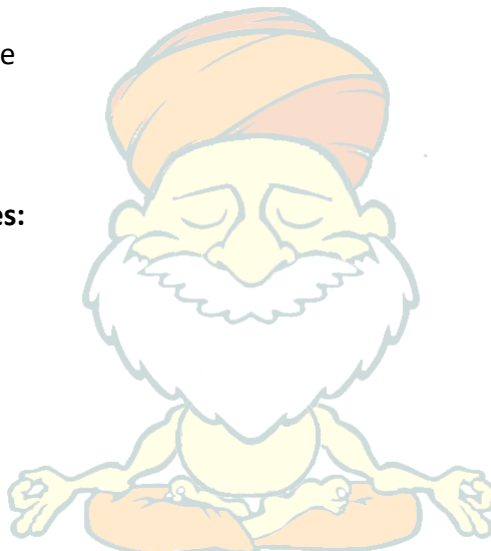
Q.33) Which of the following species is/are listed under Critically Endangered category in IUCN Red List?

1. Nilgiri Tahr
2. Lion Tailed Macaque
3. Bengal Tiger
4. Malabar Civet

Select from the given codes:

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

Q.33) Solution (c)



Nilgiri Tahr (*Nilgiritragus hylocrius*) is listed under the **endangered** category of IUCN Red List.

The present distribution of the Nilgiri tahr is limited to approximately 5% of the Western Ghats in southern India, in Kerala and Tamil Nadu in southern India.

Lion Tailed Macaque (*Macaca silenus*) is listed under the **endangered** category of IUCN Red List.

This species is endemic to the Western Ghats hill ranges in southwestern India from the Kalakkadu Hills north to Anshi Ghat, in the states of Karnataka, Kerala and Tamil Nadu.

Bengal Tiger (*Panthera tigris* ssp. *Tigris*) is listed under the **endangered** category of IUCN Red List.

Malabar Civet (*Viverra civettina*) is listed under the **critically endangered** category of IUCN Red List.

Malabar Civet is endemic to the Western Ghats of southern India.

Q.34) Consider the following statement

1. Sarus crane is the tallest flying bird in the world.
2. Sarus Crane is listed under the endangered category of IUCN Red List.
3. Sarus Crane is listed in Schedule IV of the Wildlife (Protection) Act 1972.

Which of the above statements is/are correct?

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

Q.34) Solution (c)

The Sarus crane is the tallest flying bird in the world standing 152-156 cm tall with a wingspan of 240cm.

Hence statement 1 is correct.

Sarus Crane is Listed in Schedule IV of the Wildlife (Protection) Act 1972 and as Vulnerable on IUCN Red List.

Hence statement 2 is incorrect and statement 3 is correct.

Additional Information:

Towering at 152-156 cm, over 5 feet on average, the Sarus (*Grus antigone*) is not only the tallest flying bird in the world, it is also India's only resident breeding crane, as per the Wildlife Trust of India (WTI), a leading nature conservation organisation that works with the State wildlife department.

Q.35) Which of the following National Parks and locations is/are correctly matched?

National Park

Location

1. Black Buck National Park:: Madhya Pradesh
2. Kudremukh National Park:: Kerala
3. Tadoba National Park:: Maharashtra

4. Clouded Leopard National Park:: Tripura

Select from the given codes:

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

Q.35) Solution (c)

Some of the important National Parks and their Locations:

Black Buck National Park	Gujarat
Kudremukh National Park	Karnataka
Tadoba National Park	Maharashtra
Clouded Leopard National Park	Tripura
Corbett National Park	Uttarakhand
Dudhwa National Park	Uttar Pradesh
Kasu Brahmananda Reddy National Park	Telangana
Kanha National Park	Madhya Pradesh

Q.36) Which of the following vultures found in India are critically endangered?

- 1. Himalayan Griffon (*Gyps himalayensis*)
- 2. Indian Vulture (*Gyps indicus*)
- 3. Red Headed Vulture (*Sarcogyps calvus*)
- 4. White-rumped Vulture

Select from the given codes:

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

Q.36) Solution (c)

Vulture species of India

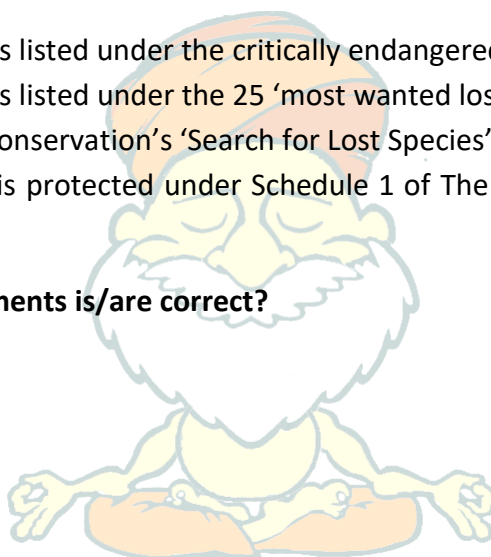
S. No.	Common Name	Scientific Name	Conservation Status
1.	White-rumped Vulture	Gyps bengalensis	Critically Endangered
2.	Red-headed Vulture	Sarcogyps calvus	Critically Endangered
3.	Slender-billed Vulture	Gyps tenuirostris	Critically Endangered
4.	Indian Vulture	Gyps indicus	Critically Endangered
5.	Egyptian Vulture	Neophron percnopterus	Endangered
6.	Cinereous Vulture	Aegypius monachus	Near Threatened
7.	Lammergeyer/ Bearded Vulture	Gypaetus barbatus	Near Threatened
8.	Himalayan Griffon	Gyps himalayensis	Near Threatened
9.	Eurasian Griffon	Gyps fulvus	Least Concern

Q.37) Consider the following statements

1. Pondicherry Shark is listed under the critically endangered category of IUCN Red List.
2. Pondicherry Shark is listed under the 25 'most wanted lost' species that are the focus of Global Wildlife Conservation's 'Search for Lost Species' initiative.
3. Pondicherry Shark is protected under Schedule 1 of The Indian Wildlife (Protection) Act, 1972.

Which of the above statements is/are correct?

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

**Q.37) Solution (d)**

Pondicherry Shark (*Carcharhinus hemiodon*) is listed under the critically endangered category of IUCN Red List.

Hence statement 1 is correct.

Pondicherry Shark is listed under the 25 'most wanted lost' species that are the focus of Global Wildlife Conservation's 'Search for Lost Species' initiative.

Hence statement 2 is correct.

Pondicherry Shark is protected under Schedule 1 of The Indian Wildlife (Protection) Act, 1972.

Hence statement 3 is correct.

Additional information:

Whale Shark, Sawtooth Shark, Ganges River Shark and Pondicherry Shark were declared protected under Schedule 1 of The Indian Wildlife (Protection) Act, 1972.

Q.38) Consider the following statements

1. Corbett National Park is the oldest National Park in India.
2. Corbett National Park is an Important Bird Area (IBA).
3. Corbett National Park is a part of Corbett Tiger Reserve.

Which of the above statements is/are correct?

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

Q.38) Solution (d)

Jim Corbett National Park is the oldest national park in India and was established in 1936 as Hailey National Park.

Hence statement 1 is correct.

The Corbett National Park is one of the most prominent bird habitats in India and thus the park has been declared as an 'Important Bird Area (IBA)' by the Birdlife International.

Hence statement 2 is correct.

Jim Corbett National Park, which is a part of the larger Corbett Tiger Reserve, a Project Tiger Reserve lies in the Nainital district of Uttarakhand.

Hence statement 3 is correct.

Q.39) Consider the following statements

1. Great Indian Bustard is listed under Critically Endangered Category of IUCN Red List.
2. Great Indian Bustard is one of the species under Integrated Development of Wildlife Habitats Scheme.

3. Great Indian Bustard is the mascot for the 12th COP of the Conservation of Migratory Species (CMS).

Which of the above statements is/are INCORRECT?

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

Q.39) Solution (a)

Great Indian Bustard is listed under Critically Endangered Category of IUCN Red List.

Hence statement 1 is correct.

Great Indian Bustard is identified for the species recovery program under Integrated Development of Wildlife Habitats Scheme.

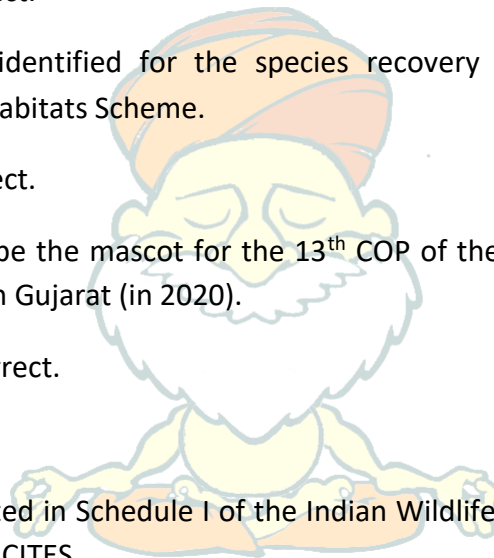
Hence statement 2 is correct.

Great Indian Bustard will be the mascot for the 13th COP of the Conservation of Migratory Species (CMS) to be held in Gujarat (in 2020).

Hence statement 3 is incorrect.

Additional Information:

Great Indian Bustard is listed in Schedule I of the Indian Wildlife (Protection) Act, 1972. It is also listed in Appendix I of CITES.



Q.40) Consider the following statements

- 1. The pangolin is the world's only truly scaly mammal.
- 2. Indian Pangolin is listed under Endangered Category of IUCN Red List.
- 3. All the eight species of Pangolin are listed under the one or the other threatened categories (Vulnerable, endangered, critically endangered categories) of IUCN Red list.
- 4. Out of all the eight species India has only one species of Pangolin.

Which of the above statements is/are correct?

- a) 1 and 4

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

Q.40) Solution (c)

Resembling an artichoke with legs and a tail, the pangolin is the world's only truly scaly mammal.

Hence statement 1 is correct.

Indian Pangolin is listed under Endangered Category of IUCN Red List.

Hence statement 2 is correct.

The International Union for Conservation of Nature (IUCN) lists six pangolin species as "endangered" and two as "critically endangered".

Hence statement 3 is correct.

Of the **two species found in India**, the Indian pangolin (*Manis crassicaudata*) is endangered and is found sporadically throughout the Himalayan foothills, the northern plains and southern India. The Chinese pangolin (*Manis pentadactyla*) is found mostly in the north-eastern states of India and parts of Southeast Asia.

Hence statement 4 is incorrect.

Additional Information:

Chinese Pangolin is listed under Critically Endangered Category of IUCN Red List.