

ForumIAS

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## Prelims Marathon

3<sup>rd</sup> Week September, 2024

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*HISTORY*  
*ECONOMICS*  
*POLITY*  
*SCIENCE AND TECHNOLOGY*  
*GEOGRAPHY AND ENVIRONMENT*

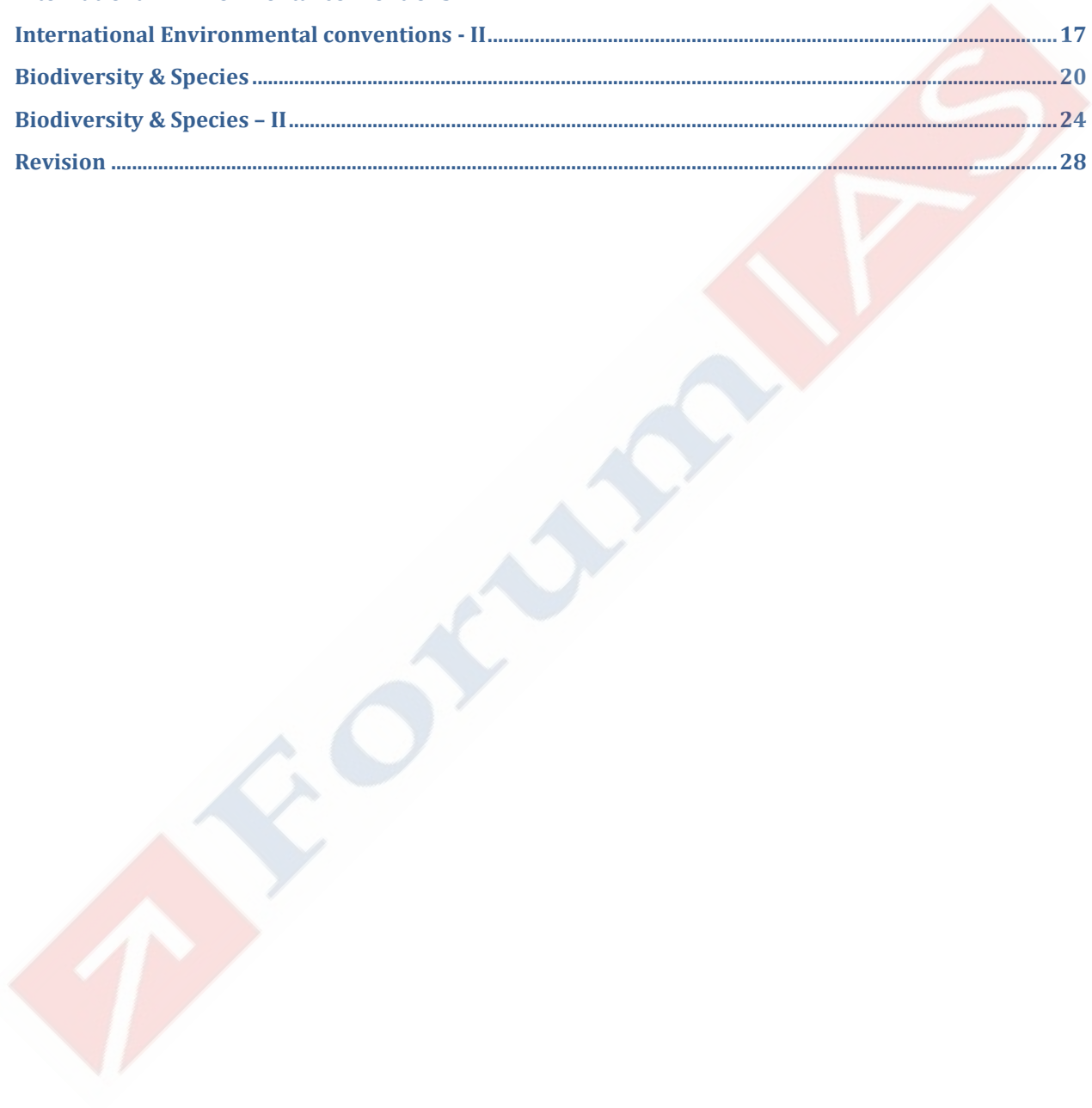
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## Revision

**Q.1) Consider the following statements:**

1. India is the 3rd largest energy consuming country in the world.
2. India has achieved its Paris target of 40% installed electric capacity from non-fossil fuels.

**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

**ANS: C**

**Explanation:** India is the 3rd largest energy consuming country in the world. India has already achieved its target of 40% installed electric capacity from non-fossil fuels.

India has set an enhanced target of 500 GW of non-fossil fuel-based energy by 2030, which is the world's largest expansion plan in renewable energy.

**Source: FORUMIAS**

**Q.2) Which of the following limit of foreign direct investment through automatic route in renewable energy?**

- a) 24 percent
- b) 49 percent
- c) 76 percent
- d) 100 percent

**ANS: D**

**Explanation:** India allows up to 100% Foreign Direct Investment under the automatic route for renewable energy generation and distribution project.

**Source: FORUMIAS**

**Q.3) Which of the following is/are member countries of "Global Biofuel Alliance"?**

1. Israel
2. South Korea
3. Australia

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: D**

**Explanation:** Global Biofuel Alliance- It is an alliance driven by India, the United States, and Brazil, to accelerated adoption of biofuels, creating new biofuels, setting globally recognized standards, identifying global best practices, and ensuring industry participation.

**Source: FORUMIAS**

**Q.4) Which of the following green house gas has the least average lifetime in the atmosphere?**

- a) Methane
- b) CFC - 11
- c) Nitrous Oxide
- d) HFC - 134a

**ANS: A**

**Explanation:**

Greenhouse gas	Average lifetime in the atmosphere	Global warming potential of one molecule of the gas over 100 years (Relative to carbon dioxide=1)
Carbon dioxide	50-200 years*	1
Methane	12 years	21
Nitrous oxide	120 years	310
CFC-12	100 years	10,600
CFC-11	45 years	4,600
HFC-134a	14.6 years	1,300
Sulfur hexafluoride	3,200 years	23,900

**Source: FORUMIAS**

**Q.5) Which of the following is/are challenges facing for scaling up of solar roof top energy?**

- 1. High cost installation
- 2. Grid instability
- 3. High net metering

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: B**

**Explanation:** Challenges for scaling up Solar Rooftop System:

- Grid stability and energy storage due to variability and unpredictability of solar energy.
- High cost due to lack of Research & Development, increased imports of components.
- Low DISCOMs participation and low net metering (delivering net surplus energy).

**Source: FORUMIAS**

**Q.6) Which of the following organization has the strategy of "Towards 1000"?**

- a) UNEP
- b) Global Environment facility
- c) International Solar Alliance
- d) UN Secretariat

**ANS: C**

**Explanation:** Under "Towards 1000" strategy, ISA aims to:

- Mobilize USD 1,000 billion of investments in solar energy solutions by 2030.
- Delivering energy access to 1,000 million people.
- Installation of 1,000 GW of solar energy capacity.

**Source: FORUMIAS**

**Q.7) The term “KABIL” is often seen in news related to which of the following?**

- a) Khadi industries
- b) Strategic minerals
- c) Sacred grooves
- d) Green energy

**ANS: B**

**Explanation:** Khanij Bidesh India Limited (KABIL), formed to identify, acquire, process and make commercial use of strategic minerals in overseas locations for supply in India.

**Source: FORUMIAS**

**Q.8) Which of the following activities is/are excluded from the definition of non-forest purposes under Forest Conservation Amendment Act (2023)?**

- 1. Piscicultural operations
- 2. Silvicultural operations
- 3. Horticultural operations

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: A**

**Explanation:** Key provision of the Forest Conservation Amendment Act (2023):

- New name: Van (Sanrakshan Evam Samvardhan) Adhinyam (Forest (Conservation and Augmentation) Act), 1980.
- Addition of Preamble: It encompasses India’s Nationality Determined Contribution and other National targets.

Activities excluded from the definition of non-forest purposes:

- Establishment of zoos and safaris under the Wild Life (Protection) Act, 1972, in forest areas other than protected areas;
- Eco-tourism facilities included in plans of the area;
- Silvicultural operations, including regeneration operations.

**Source: FORUMIAS**

**Q.9) The “Joint Forest Management (JFM)” approach and program initiated in the context of the?**

- a) Forest conservation act, 1980
- b) National Forest Policy of 1988
- c) Biodiversity act, 2002
- d) Forest rights act, 2006

**ANS: B**

**Explanation:** Joint Forest Management (JFM) is an approach and program initiated in the context of the National Forest Policy of 1988 wherein state forest departments support local forest dwelling and forest fringe communities to protect and manage forests and share the costs and benefits from the forests with them.

## Prelims Marathon Compilation September (Third Week) 2024

- Communities organize themselves into a JFM Committee to protect and manage nearby forests, guided by locally prepared byelaws and micro plans.
- The key element in JFM is that communities have the power to manage the use of forests by members and also exclude non-members.

**Source: FORUMIAS**

**Q.10) Consider the following statements regarding “wildlife protection act (amendment), 2023:**

1. Schedules in the act are increased from 4 to 6.
2. Restricted the use of elephants for religious purposes.

**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

**ANS: D**

**Explanation:** Key amendments in WPA, 2022:

- Removes the present schedule for vermin species and inserts a new schedule for specimens listed for extinction under CITES.
- Reduced the number of schedules from 6 to 4.
- Seeks to empower the Centre to regulate plant or animal species not native to India - invasive alien species.
- Permitted the use of elephants for 'religious or any other purposes'.
- Central Government to form a Managing Authority and a Scientific Authority to regulate the import and export of specimens of species.
- Entrusts the Chief Wildlife Warden to control, manage, and maintain all sanctuaries in a state.

**Source: FORUMIAS**

## Environmental Pollution and Environmental issues

**Q.1) The “Resin Identification Code” is often seen in news related to?**

- a) Food safety
- b) Commodity plastics
- c) Vaccine production
- d) Antibiotics

**ANS: B**

**Explanation:** Commodity plastics: These refer to the 6 major polymer types which constitute around 70% of global plastic production.

- They can be identified by their resin identification code (RIC) denoted by symbols found on plastic products.
- Resin Identification Code (RIC) - RIC shows the consumer which type of plastic resin was used to make the chosen product.

**Source: FORUMIAS**

**Q.2) The “Great Pacific Garbage Patch” is often seen in news located at?**

- a) Indian Ocean
- b) South Pacific Ocean
- c) Atlantic Ocean
- d) North Pacific Ocean

**ANS: D**

**Explanation:** Great Pacific Garbage Patch - It is the largest collection of marine debris in the North Pacific Ocean and is also known as the Pacific trash vortex.

- The garbage patch is actually two distinct collections of debris bounded by the massive North Pacific Subtropical Gyre.
- It is located between California and Japan, and formed due to converging ocean currents.

**Source: FORUMIAS**

**Q.3) Consider the following statements regarding “Polyethylene Terephthalate (PET or PETE)”:**

1. It is the most widely recycled plastic.
2. It is not permitted to import 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

**ANS: A**

**Explanation:** Polyethylene Terephthalate (PET or PETE): A member of the polyester family of polymers, a strong synthetic fibre and resin.

- It is produced by the polymerization of ethylene glycol and terephthalic acid. PET is the most widely recycled plastic.
- The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 were amended in 2021 to allow import of PET into the country including Special Economic Zones (SEZs) and Export Oriented Units (EOUs).

**Source: FORUMIAS**

**Q.4) Which of the following organization prepares the “Air Quality Life Index (AQLI) Report”?**

- a) World Health Organization
- b) United Nations Environment Programme
- c) University of Chicago’s Energy Policy Institute
- d) United Nations Development Programme

**ANS: C**

**Explanation:** According to the University of Chicago report, the air pollution has major impact on the life expectancy.

Air Quality Life Index (AQLI) Report is prepared by University of Chicago’s Energy Policy Institute (UCEPI).

**Source: FORUMIAS**



**Q.5) Consider the following statements regarding “National Clean Air Program”:**

1. It was launched in 2015.
2. It aims to achieve a 100 percent reduction in particulate pollution levels by 2030 in 131 non-attainment cities.

**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

**ANS: D**

**Explanation:** National Clean Air Program- It was launched in 2019 as a long-term, time-bound, national level strategy to tackle the air pollution problem across the country.

The Government of India revamped its NCAP (National Clean Air Programme) goal in 2022 which aims to achieve a 40% reduction in particulate pollution levels by 2026 in 131 non-attainment cities.

**Source:** FORUMIAS

**Q.6) The “SAMEER app” is recently seen in news related to which of the following?**

- a) Air pollution
- b) Micro plastics pollution
- c) Noise pollution
- d) Soil pollution

**ANS: A**

**Explanation:** SAMEER App is one of the air pollution mitigation measures which provides hourly updates on the National Air Quality Index (AQI).

- The app is developed by the Central Pollution Control Bureau (CPCB) which provides information on air quality for more than 100 cities across the country.
- The app represents the listed cities in a color-coded format based on their AQI levels.
- The app can also be used to file or track complaints related to garbage dumping, road dust, vehicular emissions or other pollution issues in a particular area.

**Source:** FORUMIAS

**Q.7) Consider the following statements regarding “Graded Response Action Plan (GRAP)”:**

1. It is a set of emergency measures to be taken to reduce air pollution.
2. It has yearlong measures to control air pollution.

**Which of the statements given above is/are not correct?**

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

**ANS: B**

**Explanation:** GRAP is a set of emergency measures to be taken to reduce air pollution.

- GRAP does not include yearlong measures and only incremental actions which gets activated on the basis of values of AQI.



- GRAP creates a step-by-step plan for the entire Delhi-NCR region and getting on board 13 different agencies of NCR regions (Delhi, Uttar Pradesh, Haryana and Rajasthan).

Source: FORUMIAS

**Q.8) Consider the following statements regarding “System of Air Quality and Weather Forecasting (SAFAR)”:**

1. It was launched by Ministry of Environment & Forest.
2. It is a dedicated Air Quality Information Service for Indian Metropolitan Cities to make India self-sufficient in providing frontier research.

**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

**ANS: B**

**Explanation:** System of Air Quality and Weather Forecasting (SAFAR) Air Quality Index (AQI): A dedicated Air Quality Information Service for Indian Metropolitan Cities to make India self-sufficient in providing frontier research based scientific accredited robust Air Quality Forecasting system. Launched by- Ministry of Earth Sciences.

Source: FORUMIAS

**Q.9) Consider the following statements:**

1. Photochemical smog is called as London smog which is produced when sunlight reacts with nitrogen oxides and at least one volatile organic compound (VOC) in the atmosphere.
2. Sulphurous smog is called as Los Angeles smog which is caused by the high concentration of sulphur oxides in the atmosphere.

**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

**ANS: D**

**Explanation:** Photochemical smog- It is called as Los Angeles smog which is produced when sunlight reacts with nitrogen oxides and at least one volatile organic compound (VOC) in the atmosphere.

- Sunlight hits these chemicals, thus forming airborne particles and ground-level ozone or smog.
- Sulphurous smog -It is called as London smog which is caused by the high concentration of sulphur oxides in the atmosphere.

Source: FORUMIAS

**Q.10) The “planetGOLD program” initiated by UNEP to eliminate which of the following?**

- a) Mercury
- b) Cobalt
- c) Cadmium
- d) Uranium

**ANS: A**

**Explanation:** The planetGOLD program, led by UNEP seeks to eliminate mercury from artisanal gold mining.

Source: FORUMIAS

## Environmental Pollution and Environmental issues - II

**Q.1) Red tides are seen on the puducherry coast, which of the following is/are reasons for formation of red tides?**

1. Sewage mixing into the sea.
2. Reversal of ocean currents.
3. Increased concentration of nutrients in the coastal waters.

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: C**

**Explanation:** Reason for Red Tide in Puducherry:

- Anthropogenic influences like sewage mixing into the sea.
- Reversal of ocean currents.
- Increased concentration of nutrients in the coastal waters.

**Source: FORUMIAS**

**Q.2) Consider the following statements regarding “White Phosphorus”:**

1. It is formally regulated under chemical weapons convention.
2. It is considered as chemical weapon.

**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

**ANS: D**

**Explanation:** White phosphorus is not explicitly banned by international conventions but their use is regulated under the International Humanitarian Law (IHL).

It is not considered a chemical weapon because its operational utility is primarily due to heat and smoke, rather than toxicity.

**Source: FORUMIAS**

**Q.3) The “Fit for 55” package is often seen in news associated with which of the following?**

- a) European Union
- b) USA
- c) Canada
- d) Small Island Nations group

**ANS: A**

**Explanation:** The “Fit for 55” package – Is a set of legislative proposals by the European Union (EU) to reduce greenhouse gas emissions by 55% by 2030.

**Source: FORUMIAS**

**Q.4) Which of the following ways used for “Carbon dioxide removal (CDR)” from atmosphere?**

1. Sequestering carbon dioxide.
2. Increasing the uptake of carbon dioxide by the ocean.
3. Enhancing natural weathering processes.

Select the correct answer from below given codes:

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: C**

**Explanation:** Carbon dioxide removal (CDR) – It removes and stores the emitted CO<sub>2</sub> from the atmosphere. It includes:

- Direct air capture or Land-use management (afforestation / reforestation)
- Sequestering carbon dioxide (CO<sub>2</sub>)
- Increasing the uptake of CO<sub>2</sub> by the ocean
- Enhancing natural weathering processes that remove CO<sub>2</sub> from the atmosphere

**Source: FORUMIAS**

**Q.5) The “Carbon Border Adjustment Mechanism” is often seen in news related to?**

- a) Canada
- b) Australia
- c) United States of America
- d) European Union

**ANS: D**

**Explanation:** The EU’s Carbon Border Adjustment Mechanism (CBAM) is the EU's tool to put a fair price on the carbon emitted during the production of carbon intensive goods that are entering the EU, and to encourage cleaner industrial production in non-EU countries.

- By confirming that a price has been paid for the embedded carbon emissions generated in the production of certain goods imported into the EU, the CBAM will ensure the carbon price of imports is equivalent to the carbon price of domestic production, and that the EU's climate objectives are not undermined. The CBAM is designed to be compatible with WTO-rules.
- CBAM will apply in its definitive regime from 2026, while the current transitional phase lasts between 2023 and 2025.
- This gradual introduction of the CBAM is aligned with the phase-out of the allocation of free allowances under the EU Emissions Trading System (ETS) to support the decarbonisation of EU industry.

**Source:** [https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism\\_en](https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en)

**Q.6) The term “Day Zero” is recently seen in news related to?**

- a) Power supply
- b) Sewage treatment
- c) Water supply
- d) Air pollution

**ANS: C**

**Explanation:** Bengaluru city witnessed its worst water crisis in decades, highlighting the issue of urban water crisis in India.

Water resources becoming scarce because of drought conditions as aggravated by climate change has been referred to as 'Day Zero'.

Source: FORUMIAS

**Q.7) Consider the following statements regarding "babool":**

1. It is a perennial tree suitable for agriculture.
2. It works as a windbreak.

**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

**ANS: B**

**Explanation:** Babool also known as gum arabic (*Acacia nilotica*) is a perennial tree that can thrive on marginal land, which is unsuitable for agriculture, and can survive both droughts and floods.

- Babool seeds are highly nutritious and the tree works as a windbreak and haven for biodiversity.
- As a nitrogen-fixing legume, it also helps in reclamation of areas degraded by mining or erosion.

Source: FORUMIAS

**Q.8) The term "Apis Mellifera" is often seen in news related to which of the following?**

- a) Butterflies
- b) Honey bees
- c) Sparrows
- d) Deep sea fish

**ANS: B**

**Explanation:** A recent study has found that *Apis mellifera* can be an effective bio-monitor for determining the spread of antimicrobial resistance (AMR) in urban neighborhoods.

- The western honey bee or European honey bee is the most common of the 7–12 species of honey bees worldwide.
- It is native to Europe, western Asia, and Africa. Now it can be found on every continent except Antarctica.

Source: FORUMIAS

**Q.9) The famous "Kali Tiger Reserve" is recently seen in news located at?**

- a) Tamil Nadu
- b) West Bengal
- c) Karnataka
- d) Goa

**ANS: C**

**Explanation:** Kali Tiger Reserve is a protected area and tiger reserve. It is located in Uttara Kannada district, in Karnataka, India.

The reserve is a habitat of Bengal tigers, black panthers and Indian elephants, amongst other distinctive fauna.

Source: FORUMIAS

**Q.10) The “Nalsarovar Bird Sanctuary” is recently seen in news located at?**

- a) Rajasthan
- b) Maharashtra
- c) Haryana
- d) Gujarat

**ANS: D**

**Explanation:** Nalsarovar Bird Sanctuary is a stunning natural haven located just an hour's drive away from Ahmedabad.

- Spread over an area of 120.82 sq km, this sanctuary is a paradise for bird watchers and nature enthusiasts. It is home to more than 250 species of birds including pelicans, flamingos, egrets, herons, cranes, and many more.
- The history of Nalsarovar dates back to the 15th century when the lake was created as a result of the construction of a check dam across the Sabarmati River.
- The lake was initially used for irrigation and as a source of drinking water for nearby villages. Over time, the lake became an important habitat for a variety of bird species, and local communities recognized its ecological significance.
- In the early 20th century, the British colonial administration recognized the importance of Nalsarovar as a wetland ecosystem and established it as a protected area.
- In 1969, the Gujarat government declared Nalsarovar a bird sanctuary to primarily protect its bird population.
- The Ramsar Convention designation of Nalsarovar Bird Sanctuary in 2012 recognized its ecological importance as a wetland habitat for birds and other wildlife.
- The designation provides a framework for the conservation and sustainable use of the sanctuary and its surrounding wetlands.
- It also acknowledges the socio-economic importance of the wetlands to the local communities who depend on them for their livelihoods.

**Source: FORUMIAS**

## International Environmental conventions

**Q.1) Consider the following statements regarding “Lifestyle for Environment (LiFE)”:**

1. It was introduced by Indian Prime Minister during UNFCCC - Conference of Parties (COP26) at United Kingdom in 2022.
2. It is an international mass movement to protect and preserve the environment by replacing the prevalent use-and-dispose economy with a circular economy.

**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

**ANS: B**

**Explanation:** The concept of Lifestyle for Environment (LiFE) was introduced by Indian Prime Minister during UNFCCC - Conference of Parties (COP25) at Glasgow in 2021.

LiFE is an international mass movement to protect and preserve the environment by replacing the prevalent 'use-and-dispose' economy with a circular economy.

Source: FORUMIAS

**Q.2) Which of the following is/are objectives of India's "Long Term-Low Emission Development Strategy (LT-LEDS)"?**

1. Rational utilization of national resources with due regard to energy security.
2. Maximizing the use of green hydrogen fuel to drive the low carbon development of the transport sector.
3. Reducing the dependence on nuclear power.

Select the correct answer from below given codes:

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: B**

**Explanation:** India's LT-LEDS - India's LT-LEDS was launched to transition to a low emissions pathway. The LT-LEDS has been prepared in the framework of India's right to an equitable and fair share of the global carbon budget.

Objectives - The strategy focuses on:

- Rational utilisation of national resources with due regard to energy security
- Increased use of biofuels, especially ethanol blending in petrol
- Maximizing the use of green hydrogen fuel to drive the low carbon development of the transport sector
- Expanding its nuclear power capacity by at least three-fold in the next decade.

Source: FORUMIAS

**Q.3) Which of the following convention is not related to hazardous materials?**

- a) Rotterdam convention
- b) Basel convention
- c) Bonn convention
- d) Stockholm convention

**ANS: C**

**Explanation:** The Stockholm Convention on Persistent Organic Pollutants was adopted at a Conference of Plenipotentiaries on 22 May 2001 in Stockholm, Sweden and entered into force on 17 May 2004.

- The Basel Convention on the Control of transboundary Movements of Hazardous Wastes and their Disposal was adopted on 22 March 1989 by the Conference of Plenipotentiaries in Basel, Switzerland, in response to a public outcry following the discovery, in the 1980s, in Africa and other parts of the developing world of deposits of toxic wastes imported from abroad.
- The Rotterdam convention was adopted in 1998 by a Conference of Plenipotentiaries in Rotterdam, the Netherlands and entered into force on 24 February 2004. The Convention covers pesticides and industrial chemicals that have been banned or severely restricted for health or environmental reasons by Parties and which have been notified by Parties for inclusion in the PIC procedure.

Source: FORUMIAS



**Q.4) Which of the following issues was/were discussed at “United Nations Conference on Environment and Development (UNCED)”?**

1. Systematic scrutiny of patterns of production.
2. Energy based on nuclear power.
3. The growing concerns of cyber security.

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: A**

**Explanation:** United Nations Conference on Environment and Development (UNCED) Also known as the Rio Summit, Rio Conference, Earth Summit held in Rio de Janeiro in June 1992.

The issues addressed included:

- Systematic scrutiny of patterns of production — particularly the production of toxic components, such as lead in gasoline, or poisonous waste including radioactive chemicals
- Alternative sources of energy to replace the use of fossil fuels which are linked to global climate change
- New reliance on public transportation systems in order to reduce vehicle emissions, congestion in cities and the health problems caused by polluted air and smog
- The growing scarcity of water.

**Source: FORUMIAS**

**Q.5) Which of the following was not outcome of the “earth summit”?**

- a) Agenda 21
- b) Clean development mechanism
- c) Forest principles
- d) Rio declaration on environment and development

**ANS: B**

**Explanation:** The Earth Summit resulted in the following documents:

- Rio Declaration on Environment and Development
- Agenda 21
- Forest Principles

**Source: FORUMIAS**

**Q.6) Which of the following is/are goals of “Convention on Biological Diversity (CBD)”?**

1. The conservation of biodiversity.
2. Sharing the benefits arising from the commercial and other utilization of genetic resources in a fair and equitable way.
3. Joint forest management.

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: B**

**Explanation:** CBD is a legally binding Convention recognized for the first time, that the conservation of biological diversity is “a common concern of humankind” and is an integral part of the development process.

Three main goals:



- The conservation of biodiversity
- Sustainable use of the components of biodiversity
- Sharing the benefits arising from the commercial and other utilization of genetic resources in a fair and equitable way

Source: FORUMIAS

**Q.7) Which of the following protocol specifies response measures to be taken in the event of damage to biodiversity resulting from LMOs?**

- a) Montreal Protocol
- b) Nagoya—Kuala Lumpur Protocol
- c) Cartagena Protocol
- d) Vienna Protocol

**ANS: B**

**Explanation:** The Cartagena Protocol is reinforced by the Nagoya—Kuala Lumpur Supplementary Protocol on Liability and Redress.

- The Supplementary Protocol specifies response measures to be taken in the event of damage to biodiversity resulting from LMOs.
- The competent authority in a Party to the Supplementary Protocol must require the person in control of the LMO (operator) to take the response measures or it may implement such measures itself and recover any costs incurred from the operator.

Source: FORUMIAS

**Q.8) Which of the following protocol provides a transparent legal framework for the effective implementation of sharing the benefits arising from the commercial and other utilization of genetic resources in a fair and equitable way?**

- a) Montreal Protocol
- b) Nagoya Protocol
- c) Cartagena Protocol
- d) Vienna Protocol

**ANS: B**

**Explanation:** The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) to the Convention on Biological Diversity is a supplementary agreement to the Convention on Biological Diversity.

It provides a transparent legal framework for the effective implementation of one of the three objectives of the CBD.

Source: FORUMIAS

**Q.9) Consider the following statements:**

1. Nagoya Protocol addresses traditional knowledge associated with genetic resources with provisions on access, benefit-sharing and compliance.
2. Nagoya Protocol addresses genetic resources where indigenous and local communities have the established right to grant access to them.

**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

**ANS: C**

**Explanation:** The Nagoya Protocol addresses traditional knowledge associated with genetic resources with provisions on access, benefit-sharing and compliance.

- It also addresses genetic resources where indigenous and local communities have the established right to grant access to them.
- Contracting Parties are to take measures to ensure these communities' prior informed consent, and fair and equitable benefit-sharing, keeping in mind community laws and procedures as well as customary use and exchange.

**Source: FORUMIAS**

**Q.10) The famous "Mollem National Park" is recently seen in news located at?**

- a) Karnataka
- b) Tamil Nadu
- c) Kerala
- d) Goa

**ANS: D**

**Explanation:** Mollem National Park and Bhagwan Mahaveer Sanctuary is located in the Western Ghats in Goa.

- National Highway 4A divides the park into two parts. It is home to waterfalls, such as Dudhsagar Falls (on the Mandovi River; it is Goa's tallest waterfall and India's 5th tallest) and Tambdi Falls.
- It is also home to a community of nomadic buffalo herders known as the Dhangar.

**Source: FORUMIAS**

## International Environmental conventions - II

**Q.1) Which of the following is/are strategic goals of “Aichi Biodiversity Targets”?**

1. Address the underlying causes of biodiversity loss.
2. Reduce the direct pressures on biodiversity and promote sustainable use.
3. To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity.

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: C**

**Explanation:** Aichi Biodiversity Targets:

- Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society.
- Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use.
- Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity.
- Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services.
- Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building.

**Source: FORUMIAS**

**Q.2) Which of the following is called “Waterfowl Convention”?**

- a) Bonn Convention
- b) Washington Convention
- c) Stockholm Convention
- d) Ramsar Convention

**ANS: D**

**Explanation:** Ramsar Convention on Wetlands: The Convention on Wetlands [waterfowl convention] is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.

**Source: FORUMIAS**

**Q.3) The “Changwon Declaration” is often seen in news related to which of the following?**

- a) Species trade
- b) Endangered species protection
- c) Wetland conservation
- d) Island protection

**ANS: C**

**Explanation:** The Changwon Declaration on human well-being and wetlands: The Changwon Declaration highlights positive action for ensuring human well-being and security in the future under the themes - water, climate change, people’s livelihood and health, land use change, and biodiversity.

**Source: FORUMIAS**

**Q.4) The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) programme administered by?**

- a) UNDP
- b) UNEP
- c) IUCN
- d) WWF (World Wide Fund for Nature) International

**ANS: B**

**Explanation:** The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an international agreement between governments entered into force in 1975, and became the only treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.

- CITES is administered through the United Nations Environment Programme (UNEP).
- A Secretariat, located in Geneva, Switzerland, oversees the implementation of the treaty and assists with communications between countries.

**Source: FORUMIAS**

**Q.5) Which of the following is/are correctly matched with respect to appendixes of Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)?**

- 1. Appendix – I : species currently not threatened with extinction
- 2. Appendix – II : species currently threatened with extinction
- 3. Appendix – III : already extinct species

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: D**

**Explanation:** Species for which trade is controlled are listed in one of three Appendices to CITES, each conferring a different level of regulation and requiring CITES permits or certificates.

- Appendix I: Includes species threatened with extinction and provides the greatest level of protection, including restrictions on commercial trade. Examples include gorillas, sea turtles, most lady slipper orchids, and giant pandas.
- Appendix II: Includes species that although currently not threatened with extinction, may become so without trade controls. It also includes species that resemble other listed species and need to be regulated in order to effectively control the trade in those other listed species.
- Appendix III: Includes species for which a range country has asked other Parties to help in controlling international trade. Examples include map turtles, walrus and Cape stag beetles.

**Source: FORUMIAS**

**Q.6) Consider the following statements regarding “TRAFFIC: The Wildlife Trade Monitoring Network”:**

1. It is a joint conservation programme of WWF and IUCN.
2. It was established in 1976 by the Species Survival Commission of IUCN.

**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

**ANS: C**

**Explanation:** TRAFFIC is a joint conservation programme of WWF and IUCN.

- It was established in 1976 by the Species Survival Commission of IUCN, principally as a response to the entry into force during the previous year of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- TRAFFIC is an international network, consisting of TRAFFIC International, based in Cambridge, UK with offices on five continents.

**Source: FORUMIAS**

**Q.7) Which of the following organization established the “United Nations Forum on Forests (UNFF)”?**

- a) UNEP
- b) WWF
- c) IUCN
- d) Economic and Social Council of the United Nations (ECOSOC)

**ANS: D**

**Explanation:** The Economic and Social Council of the United Nations (ECOSOC), established the United Nations Forum on Forests (UNFF) In October 2000, a subsidiary body with the main objective to promote “the management, conservation and sustainable development of all types of forests and to strengthen long-term political commitment to this end” based on the Rio Declaration, the Forest Principles, Chapter 11 of Agenda 21 and the outcome of the Intergovernmental Panel on Forests (IPF) / Intergovernmental Forum on Forests (IFF) Processes and other key milestones of international forest policy.

**Source: FORUMIAS**

**Q.8) Consider the following statements regarding “Global Tiger Forum (GTF)”:**

1. It is the only inter-governmental & international body campaigning to save the tiger worldwide.
2. The General Assembly of GTF shall meet once in five years.

**Which of the statements given above is/are not correct?**

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

**ANS: B**

**Explanation:** The Global Tiger Forum (GTF) is an inter-governmental and international body established with members from willing countries to embark on a worldwide campaign, common approach, promotion of appropriate programmes and controls to save the remaining five sub-species of tigers in the wild distributed over 14 tiger range countries of the world.

- Formed in 1994 with its secretariat at New Delhi, GTF is the only inter-governmental & international body campaigning to save the TIGER worldwide.
- The General Assembly of GTF shall meet once in three years.

Source: FORUMIAS

**Q.9) Which of the following is/are characteristics of “Persistent Organic Pollutants”?**

1. Concentrate on living organisms through bioaccumulation process.
2. They are soluble in water.
3. They are not readily absorbed in fatty tissues.

Select the correct answer from below given codes:

- a) Only one
- b) Only two
- c) Only three
- d) None

ANS: A

**Explanation:** Persistent Organic Pollutants (POPs) are organic chemical substances, that is, they are carbon-based.

- POPs concentrate in living organisms through another process called bioaccumulation.
- Though not soluble in water, POPs are readily absorbed in fatty tissue, where concentrations can become magnified by up to 70,000 times the background levels.

Source: FORUMIAS

**Q.10) Which of the following convention deals with the “Persistent Organic Pollutants (POPs)”?**

- a) Stockholm convention
- b) Basel convention
- c) Rotterdam convention
- d) Bonn convention

ANS: A

**Explanation:** The Stockholm Convention on Persistent Organic Pollutants was adopted at a Conference of Plenipotentiaries on 22 May 2001 in Stockholm, Sweden and entered into force on 17 May 2004.

Source: FORUMIAS

## Biodiversity & Species

**Q.1) The term “Fur-picking” is related to which of the following?**

- a) Honeybees
- b) Elephants
- c) Lions
- d) Apes

ANS: D

**Explanation:** Fur-picking, the universal habit among the apes and monkeys is not a hunt for lice or fleas.

- They are naturally remarkably free from these vermin.



- On the contrary it is a means of social communication between members of the troop (a group of monkeys) and to develop strong social bond.

Source: FORUMIAS

**Q.2) In which of the following state has the largest zoo in India?**

- a) Kerala
- b) Tamil Nadu
- c) Andhra Pradesh
- d) Karnataka

**ANS: C**

**Explanation:** Sri Venkateshwara Zoological Park located in Tirupati city in Andhra Pradesh is the largest zoo in the country.

Source: FORUMIAS

**Q.3) The “organisms which live at the air-water interface” are known as?**

- a) Nektons
- b) Benthos
- c) Neuston
- d) Periphyton

**ANS: C**

**Explanation:** Neuston: These are unattached organisms which live at the airwater interface such as floating plants, etc.

Some organisms spend most of their lives on top of the air-water interface such as water striders, while others spend most of their time just beneath the air-water interface and obtain most of their food within the water.

Source: FORUMIAS

**Q.4) Consider the following statements:**

1. Bats are nocturnal animals.
2. Bats are the second largest group of mammals after rodents.

**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

**ANS: C**

**Explanation:** Bats are social animals. They hang UPSIDE DOWN when they sleep.

- They feed at night (they are “nocturnal”) and spend the day sleeping in caves or in tree tops.
- They are the second largest group of mammals after rodents.

Source: FORUMIAS



**Q.5) The Nekkampur Lake is the largest floating treatment wetland in the country located at?**

- a) Kerala
- b) Uttar Pradesh
- c) Telangana
- d) Andhra Pradesh

**ANS: C**

**Explanation:** The Nekkampur Lake, Hyderabad is the largest floating treatment wetland in the country.

- Floating treatment wetland works on the basis of hydroponics technique.
- Hydroponics permits plants to grow on the water with the help of sunlight (no need of soil).
- A floating island unit is essentially a platform designed using styrofoam, bamboo, gunny bags and coir and it performs the function of a wetland.

**Source: FORUMIAS**

**Q.6) Which of the following heavy elements are found in fly ash?**

- 1. Lithium
- 2. Cobalt
- 3. Mercury

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: A**

**Explanation:** Fly ash particles are oxide rich and consist of silica, alumina, oxides of iron, calcium, and magnesium and toxic heavy metals like lead, arsenic, cobalt, and copper.

**Source: FORUMIAS**

**Q.7) Under which of the following act Zoological Survey of India has been declared as the designated repository for the National Zoological Collection?**

- a) Forests act 1927
- b) Wildlife conservation act 1972
- c) National biodiversity act 2002
- d) Forest rights act 2006

**ANS: C**

**Explanation:** Zoological Survey of India (ZSI) was established on 1st July 1916 to promote the survey, exploration, research and documentation leading to the advancement in our knowledge on various aspects of animal taxonomy of the Indian subcontinent.

- ZSI is a premier institution on animal taxonomy in India under the Ministry of Environment, Forest and Climate Change.
- ZSI has been declared as the designated repository for the National Zoological Collection as per Section 39 of the National Biodiversity Act, 2002.

**Source: FORUMIAS**

**Q.8) Which of the following plants is also known as “pitcher plants”?**

- a) Sundew
- b) Aldrovanda
- c) Nepenthes
- d) Utricularia

**ANS: C**

**Explanation:** Nepenthes: The members of the family are commonly known as ‘pitcher plants’ because their leaves bear jar-like structures.

**Source: FORUMIAS**

**Q.9) Consider the following statements regarding “seaweed”:**

- 1. They are microscopic algae.
- 2. They grow in shallow coastal waters.

**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

**ANS: B**

**Explanation:** Seaweeds are (thalloid plants) macroscopic algae, which mean they have no differentiation of true tissues such as roots, stems and leaves. They have leaf-like appendages.

- Seaweeds, the larger and visible marine plants are found attached to rocks, corals and other submerged strata in the intertidal and shallow sub tidal zones of the sea.
- Seaweeds grow in shallow coastal waters wherever sizable substata is available.

**Source: FORUMIAS**

**Q.10) Consider the following statements:**

- 1. Frogs are found all over the world including Antarctica.
- 2. Frogs can live in the sea or any salt water.

**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

**ANS: D**

**Explanation:** Frogs are found all over the world and in every climate, except Antarctica. Frogs cannot live in the sea or any salt water.

**Source: FORUMIAS**

## Biodiversity & Species – II

**Q.1) Which of the following is/are criteria for declaring biodiversity hotspot?**

1. Species endemism
2. Degree of threat
3. Species diversity

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: B**

**Explanation:** Biodiversity hot spot concept was put forth by Norman Myers in 1988.

To qualify as a hot spot, a region must meet two strict criteria:

- a. Species endemism - it must contain at least 1,500 species of vascular plants (> 0.5% of the world's total) as endemics, and
- b. Degree of threat - it has to have lost at least 70% of its original habitat.

**Source: FORUMIAS**

**Q.2) Consider the following statements:**

1. Gymnosperms produce their seeds on the surface or tips of an appendage such as a pine cone.
2. Angiosperms produce their seeds inside a fruit such as an acorn.

**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

**ANS: C**

**Explanation:** Gymnosperms produce their seeds on the surface or tips of an appendage such as a pine cone.

- Angiosperms produce their seeds inside a fruit such as an acorn.
- Dendrochronology is the science of calculating a tree's age by its rings.
- For every five percent of tree cover added to a community, storm water runoff is reduced by approximately two percent.

**Source: FORUMIAS**

**Q.3) Which of the following tiger species are extinct from world?**

1. Indochinese
2. Sumatran
3. Siberian

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: D**

**Explanation:** The scientific name for the tiger is *Panthera tigris*. There are eight subspecies of tiger: among the eight, at present five subspecies are present in the wild.

- They are - Bengal, South China, Indochinese, Sumatran, and Siberian.
- Three subspecies of tiger—Caspian, Bali, and Javan—are extinct.

**Source: FORUMIAS**

**Q.4) Consider the following statements regarding “elephants”:**

1. There are five species of elephants that occur in the world.
2. Asian Elephant (*Elephas maximus*) is the largest terrestrial mammal of 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

**ANS: B**

**Explanation:** There are three species of elephants that occur in the world. Africa has two of them and Asia has one.

- Asian Elephant (*Elephas maximus*) is the largest terrestrial mammal of India which requires large forested habitats to manage and maintain the viable populations.
- Thus, without doubt, conservation of elephants clearly rests on securing large forested habitats.

**Source: FORUMIAS**

**Q.5) Which of the following animals are poached for their ivory tusk?**

1. Walrus
2. Narwhal
3. Rhino

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: C**

**Explanation:** The hippopotamus, walrus, narwhal, mammoth, Rhino and most commonly, Asian and African elephants are poached for their ivory tusk.

**Source: FORUMIAS**

**Q.6) Which of the following is not a “Monitoring of Illegal Killing of Elephants (MIKE)” site?**

- a) Rayala
- b) Chirang ripu
- c) Garo hills
- d) Mysore

**ANS: A**

**Explanation:** Monitoring of Illegal Killing of Elephants (MIKE) Programme: Mandated by COP resolution of CITES, MIKE program started in South Asia in the year 2003 with following purpose — To provide information needed for elephant range States to make appropriate management and enforcement decisions, and to build institutional capacity within the range States for the long-term management of their elephant populations.

MIKE Sites in India:

- Chirang Ripu ( Assam )
- Dhang Patki( Assam )
- Eastern Dooars( WB )
- Deomali( Arun Pradesh )
- Garo Hills ( Meghalaya )
- Mayurbhanj( Orissa )
- Mysore ( Karnataka )
- Nilgiri ( Tamil Nadu )
- Shivalik( Uttarakhand )
- Wayanad( Kerala)

**Source:** <https://moef.gov.in/project-elephant-pe>

**Q.7) Which of the following is not a rhino habitat area?**

- a) Dibru Saikhowa Wildlife sanctuary
- b) Laokhowa - Bura Chapori Wildlife sanctuary
- c) Namdapha national park
- d) Manas national park

**ANS: C**

**Explanation:** Concentrating so many rhinos in a single protected area like Kaziranga exposes the species to risks of calamities (epidemics, floods, massive poaching attempts).

- Further, rhinos in Pabitora have exceeded carrying capacity and numbers must be reduced to protect the habitat and to mitigate the increasing rhino-human conflicts.
- The goal set was to populate the potential rhino habitat areas identified viz. Manas NP, Dibru Saikhowa WLS, Laokhowa - Bura Chapori WLS with a viable population of rhino through translocations from Kaziranga NP and Pabitora WLS.

**Source: FORUMIAS**

**Q.8) In which of the following state snow leopard is not found?**

- a) Sikkim
- b) Arunachal Pradesh
- c) Uttar Pradesh
- d) Himachal Pradesh

**ANS: C**

**Explanation:** The snow leopard is a globally endangered species. Merely 7,500 are estimated to be surviving over two million square kilometers in the Himalaya and Central Asian mountains, where they are facing tremendous human pressures.

- India is perhaps home to 10% of the global population in less than 5% of its global range, thus having a substantial proportion of its global population.
- Distribution in India – in Indian Himalayas, high altitude areas located above the forests (alpine meadows and cold deserts) Areas above 3000m broadly constitute snow leopard range in India.
- In the five Himalayan states of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh.

**Source: FORUMIAS**

**Q.9) In which of the following continents is/are hippopotamus are found?**

- 1. Asia
- 2. Africa
- 3. North America

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: A**

**Explanation:** The hippopotamus, also known as the “river horse,” lives along the rivers and lakes throughout sub-Saharan Africa.

- Weighing up to 8,000 pounds, the hippo is the heaviest land animal after the elephant.
- Hippos seek refuge from the heat by living in water during the day, and at night they come ashore to feed on short, soft grasses and fallen fruit.
- The eyes and ears of a hippopotamus are on top of its head, so it can keep watch for enemies—mainly crocodiles—while lying low in the water.
- These giants are currently at risk from habitat loss.

**Source: FORUMIAS**



**Q.10) In which of the following areas dolphins are found?**

1. Brackish water
2. Sea
3. Fresh water

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: C**

**Explanation:** Dolphins are animals of aquatic ecosystems. They are found in the sea, brackish water and fresh water.

A total of 15 species of marine and harbour dolphins have been reported from Indian waters and coasts.

**Source: FORUMIAS**

## Revision

**Q.1) Which of the following statements is/are correct?**

1. The Irrawady Dolphins are found in brackish waters of Kerala.
2. The Gangetic Dolphin is found in the Ganges River and its tributaries.
3. All fresh water, brackish water and marine Dolphins (Cetaceans) are listed in Schedule-I of the Wild Life (Protection) Act, 1972.

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: B**

**Explanation:** Dolphins are animals of aquatic ecosystems. They are found in the sea, brackish water and fresh water.

- A total of 15 species of marine and harbour dolphins have been reported from Indian waters and coasts. Besides, the Irrawady Dolphins are found in brackish waters of Odisha.
- Amongst the fresh water dolphins, the Gangetic Dolphin is found in the Ganges River and its tributaries. Apart from this, Indus River Dolphins have also been reported in Indus River in Punjab.
- All fresh water, brackish water and marine Dolphins (Cetaceans) are listed in Schedule-I of the Wild Life (Protection) Act, 1972, thereby according them the highest degree of protection against hunting.

**Source: FORUMIAS**

**Q.2) The terms “baiji, bhulan and boto” are associated with which of the following?**

- a) Butterflies
- b) Honeybees
- c) Crocodiles
- d) Dolphins

**ANS: D**

**Explanation:** The Ganges Dolphin is among the four “obligate” freshwater dolphins found in the world – the other three are the ‘baiji’ found in the Yangtze River (China), the ‘bhulan’ of the Indus (Pakistan) and the ‘boto’ of the Amazon River (Latin America).



Source: FORUMIAS

**Q.3) Which of the following species are covered under recovery programme of Integrated Development of Wildlife Habitats (IDWH)?**

1. Asiatic lion
2. Tiger
3. Elephant

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: A**

**Explanation:** Integrated Development of Wildlife Habitats (IDWH) is a centrally funded scheme for development of wildlife habitat in India.

- IDWH is meant for providing support to protected areas (national parks, wildlife sanctuaries, conservation reserves and community reserves except tiger reserves), protection of wildlife outside protected areas and recovery programmes for saving critically endangered species and habitats.
- So far, 17 species have been identified under the recovery programme.
- These are the Snow Leopard, Bustard (including Floricans), Dolphin, Hangul, Nilgiri Tahr, Marine Turtles, Dugongs, Edible Nest Swiftlet, Asian Wild Buffalo, Nicobar Megapode, Manipur Brow-antlered Deer, Vultures, Malabar Civet, Indian Rhinoceros, Asiatic Lion, Swamp Deer and Jerdon's Courser.

Source: <https://forest.tripura.gov.in/IDWH.html>

**Q.4) Which of the following is not a member of "South Asia Wildlife Enforcement Network (SAWEN)"?**

- a) Afghanistan
- b) India
- c) Bhutan
- d) Myanmar

**ANS: D**

**Explanation:** India has adopted the Statute of the South Asia Wildlife Enforcement Network (SAWEN) and becoming its formal member in order to strengthen ties with the member countries in controlling the trans-boundary wildlife crime through communication, coordination, collaboration, capacity building and cooperation in the region.

- SAWEN, a Regional network is comprised of eight countries in South Asia: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.
- It aims at working as a strong regional inter governmental body for combating wildlife crime by attempting common goals and approaches for combating illegal trade in the region.

Source: FORUMIAS

**Q.5) Which of the following statements is/are correct about trees?**

1. Tree dies of old age.
2. Trees grow from the bottom to top.
3. Tree root networks filter contaminants in soils producing clean water.

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: A**

**Explanation:** No tree dies of old age. They are generally killed by insects, disease or by people.

- Trees grow from the top, not from the bottom as is commonly believed.
- Tree leaves help trap and remove tiny particles of soot and dust which otherwise damages human lungs.
- Tree root networks filter contaminants in soils producing clean water.
- Trees prevent erosion by trapping soil that would otherwise become silt.

**Source: FORUMIAS**

**Q.6) Consider the following statements regarding "water vapour":**

1. It is the biggest contributor to the greenhouse effect.
2. Humans are directly responsible for emitting this gas in quantities sufficient to change its concentration in the atmosphere.

**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

**ANS: A**

**Explanation:** Water vapour is the biggest overall contributor to the greenhouse effect and humans are not directly responsible for emitting this gas in quantities sufficient to change its concentration in the atmosphere.

- However, CO<sub>2</sub> and other greenhouse gases is increasing the amount of water vapour in the air by boosting the rate of evaporation.
- Unlike CO<sub>2</sub>, which can persist in the air for centuries, water vapour cycles through the atmosphere quickly, evaporating from the oceans and elsewhere before coming back down as rain or snow.
- Since the rate of evaporation rises with temperature, the amount of water vapour in the air at any one time (and the amount of warming it causes) is strongly related to the amount of other greenhouse gases in the air.

**Source: FORUMIAS**

**Q.7) Which of the following is/are sources of methane emission?**

1. Termites
2. Sediments
3. Wildfires

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: C**

**Explanation:** Methane (CH<sub>4</sub>) is emitted by natural sources such as wetlands, as well as human activities such as leakage from natural gas systems and the raising of livestock.

- Wetlands are the largest source, emitting CH<sub>4</sub> from bacteria that decompose organic materials in the absence of oxygen.
- Smaller sources include termites, oceans, sediments, volcanoes, and wildfires.

**Source: FORUMIAS**

**Q.8) Consider the following statements:**

1. Fluorinated gases have very high global warming potentials (GWPs).
2. Fluorinated gases are removed from the upper atmosphere by sunlight.

**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

**ANS: C**

**Explanation:** Fluorinated gases have very high global warming potentials (GWPs) relative to other greenhouse gases.

- Fluorinated gases are well-mixed in the atmosphere, spreading around the world after they're emitted.
- Fluorinated gases are removed from the atmosphere only when they are destroyed by sunlight in the far upper atmosphere.
- In general, fluorinated gases are the most potent and longest lasting type of greenhouse gases emitted by human activities.

**Source: FORUMIAS**

**Q.9) Which of the following is/are sources of black carbon?**

1. Biomass burning
2. Cooking with solid fuels
3. Diesel exhaust

**Select the correct answer from below given codes:**

- a) Only one
- b) Only two
- c) Only three
- d) None

**ANS: C**

**Explanation:** Black carbon (BC) is a solid particle or aerosol, (though not a gas) contributes to warming of the atmosphere.

Black carbon, commonly known as soot, is a form of particulate air pollutant, produced from incomplete combustion. It consists of pure carbon in several linked forms.

Source

- biomass burning,
- cooking with solid fuels, and
- Diesel exhaust, etc.

Source: FORUMIAS

**Q.10) Consider the following statements:**

1. Spices and condiments are flavoring agents obtained from plants.
2. Spices and condiments stimulate the appetite and increase the flow of gastric juices.

**Which of the statements given above is/are not correct?**

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

**ANS: D**

**Explanation:** Spices and condiments are flavoring agents obtained from plants.

- Because they have little nutritive value, they are not classified as foods.
- They contain essential oils, which impart flavor and aroma to food and add greatly to the pleasure of eating.
- They stimulate the appetite and increase the flow of gastric juices.

Source: FORUMIAS