UPPCS Prelims 2025 Test 7 (Solution) – Environment Full Length (SSW - 8077834630)

Question 1. Which of the following coined the term Ecology?

(a) Eugene Odum

(b) Ramdeo Misra

(c) A.G. Tansley

(d) Ernst Haeckel

Answer – (d) Ernst Haeckel

Explanation – Ernst Haeckel first coined the term "Ecology" in 1866. Eugene Odum is regarded as the father of modern ecology, and Ramdeo Misra is considered the father of Indian ecology. A.G. Tansley coined the term ecosystem in 1935.

Question 2. Assertion (A): Ecosystems maintain homeostasis through feedback mechanisms.

Reason (R): Negative feedback amplifies ecological disturbances.

Code:

(a) Both A and R are true, and R is the correct explanation of A.

(b) Both A and R are true, but R is not the correct explanation of A.

(c) A is true, but R is false.

(d) A is false, but R is true.

Answer – (c) A is true, but R is false.

Explanation –

Ecosystems maintain homeostasis (stability) through feedback mechanisms, particularly negative feedback, which reduces or counteracts disturbances, helping the system return to equilibrium.

The reason is false because negative feedback does not amplify disturbances—that is the role of positive feedback.

Question 3. Consider the following statements:

1. Foundation species exert minimal impact on ecosystem structure.
2. Keystone species exert a disproportionate impact on ecosystem function.

Choose the correct option:

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (b) Only 2

Explanation –

Statement 1 is incorrect: Foundation species, such as corals or trees in forests, have a significant impact on ecosystem structure by creating or modifying habitats and supporting other species.

Statement 2 is correct: Keystone species, like sea otters or wolves, have a disproportionate influence on ecosystem function relative to their abundance; their removal can lead to dramatic ecological shifts.

Question 4. Which of the following is not a feature of ecotone?

(a) Edge effect

(b) Higher species diversity

(c) Uniform environmental conditions

(d) Transitional zone between two ecosystems

Answer – (c) Uniform environmental conditions

Explanation – Ecotones have intermediate and dynamic environmental conditions, not uniform ones.

Question 5. Choose the incorrect statement

(a) Net Primary Productivity = GPP – Respiration

(b) Marine ecosystems have higher NPP than terrestrial ecosystems

(c) Primary productivity is highest in tropical rainforests

(d) GPP is the total energy fixed through photosynthesis

Answer – (b) Marine ecosystems have higher NPP than terrestrial ecosystems

Explanation –

Global NPP Estimate:

- Approx. 170 billion tons (dry weight) per year.
- Terrestrial ecosystems: ~115 billion tons
- Marine ecosystems: ~55 billion tons
- Despite covering ~70% of Earth's surface, marine ecosystems contribute less to global NPP than terrestrial ecosystems, which are more productive per unit area.

Question 6. Consider the following statements:

1. Producers use photosynthesis to fix energy.
2. Chemotrophs depend on sunlight for energy.

Which of the above are correct?

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (a) Only 1

Explanation – Chemotrophs use chemical reactions, not sunlight, e.g., in deep-sea vents.

Question 7. Choose the true statement from the following:

(a) Deep-sea bacteria use chemosynthesis

(b) All ecosystems have equal productivity

(c) Ecosystems are closed systems

(d) Energy flows cyclically in ecosystems

Answer – (a) Deep-sea bacteria use chemosynthesis

Explanation –

(a) True: In the absence of sunlight, deep-sea bacteria (especially near hydrothermal vents) derive energy by oxidizing inorganic substances like hydrogen sulfide – a process called chemosynthesis.

(b) False: Ecosystems vary widely in productivity. Tropical rainforests are highly productive, while deserts and deep oceans have low productivity.

(c) False: Ecosystems are open systems—they exchange energy and matter with their surroundings.

(d) False: Energy flows in one direction through ecosystems—from producers to consumers to decomposers—and is not cyclic. Nutrients, however, do cycle.

Question 8. Consider the following statements:

1. Ecological succession results in climax communities.
2. Ecological succession is random and unidirectional.

Choose the correct option:

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (a) Only 1

Explanation – Succession is predictable, not random; it leads to a stable climax.

Question 9. Choose the correct statement(s):

1. Decomposers operate at all trophic levels.
2. Detritivores chemically decompose dead matter.

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (a) Only 1

Explanation – Detritivores physically break down dead matter; decomposers perform chemical decomposition.

Question 10. Assertion (A): Pyramid of energy is never inverted.

Reason (R): Energy flow in ecosystems follows the Second Law of Thermodynamics.

Code:

(a) Both A and R are true, and R is the correct explanation of A.

(b) Both A and R are true, but R is not the correct explanation.

(c) A is true, but R is false.

(d) A is false, but R is true.

Answer – (a) Both A and R are true, and R is the correct explanation of A.

Explanation –

Assertion is true: The pyramid of energy is always upright because energy is lost at every trophic level (as heat, etc.), and less energy is transferred to the next level.

Reason is also true: According to the Second Law of Thermodynamics, energy conversions are not 100% efficient; some energy is always lost as heat.

Therefore, the reason correctly explains why the pyramid of energy is never inverted.

Question 11. Consider the following statements:

1. Bioaccumulation occurs within one organism.
2. Biomagnification occurs across trophic levels.

Which of the above are correct?

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (c) Both 1 and 2

Explanation – Bioaccumulation is within a single organism; biomagnification is across the food chain.

Question 12. Consider the following pairs:

1. Mutualism – Both benefit
2. Commensalism – One benefits, one unaffected
3. Amensalism – One harmed, other unaffected

Which of the above are correctly matched?

(a) Only 1

(b) 1 and 2 only

(c) 2 and 3 only

(d) 1, 2 and 3

Answer – (d) 1, 2 and 3

Explanation –

These are types of biotic interactions in ecology, particularly under symbiotic and non-symbiotic relationships:

Mutualism – Both organisms benefit from the interaction.

Example: Lichen (fungus + algae) or pollination by bees.

Commensalism – One organism benefits, and the other is neither harmed nor benefited.Example: Cattle egret and grazing cattle.

Amensalism – One organism is harmed while the other remains unaffected.

Example: Penicillium secreting penicillin inhibits bacterial growth, but bacteria have no effect on the fungus.

All three pairs are correctly matched. Hence, option (d) is correct.

Question 13. Which is the slowest nutrient cycle among the following?

(a) Carbon

(b) Nitrogen

(c) Phosphorus

(d) Oxygen

Answer – (c) Phosphorus

Explanation – Phosphorus cycle lacks a gaseous phase and is very slow due to rock weathering.

Question 14. Choose the incorrect match:

(a) Nitrosomonas – Nitrification

(b) Nitrobacter – Nitrate → Nitrogen

(c) Rhizobium – Symbiotic nitrogen fixation

(d) Pseudomonas – Denitrification

Answer – (b) Nitrobacter – Nitrate → Nitrogen

Explanation –

Let's examine each pair:

(a) Nitrosomonas – Nitrification

Correct. Nitrosomonas converts ammonia (NH_3) into nitrite (NO_2^-) during the nitrification process.

(b) Nitrobacter – Nitrate → Nitrogen

Incorrect match. Nitrobacter is involved in nitrification, specifically converting nitrite (NO_2^-) to nitrate (NO_3^-).

The conversion of nitrate (NO_3^-) to nitrogen gas (N_2) is done by denitrifying bacteria like Pseudomonas, not Nitrobacter.

(c) Rhizobium – Symbiotic nitrogen fixation

Correct. Rhizobium forms a symbiotic relationship with leguminous plants and fixes atmospheric nitrogen into a usable form (ammonia).

(d) Pseudomonas – Denitrification

Correct. Pseudomonas is a denitrifying bacterium that converts nitrate into nitrogen gas, completing the nitrogen cycle.

Question 15. Consider the following:

1. Eutrophication
2. Ocean acidification

Which is related to excess nitrogen and phosphorus?

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (a) Only 1

Explanation – Eutrophication is due to excess nutrients; ocean acidification is due to excess CO_2.

Question 16. Consider the following statements:

1. Sulphuric acid in acid rain comes from SO_2 oxidation.
2. Acid rain reduces soil fertility.

Which is/are correct?

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (c) Both 1 and 2

Explanation – SO_2 forms H_2SO_4 in air, and acid rain leaches essential soil nutrients.

Question 17. Match the succession types with examples:

List-I – List-II

A. Hydrosere – 1. Bare rock colonization

B. Lithosere – 2. Succession in lakes

C. Psammosere – 3. Saline marsh succession

D. Halosere – 4. Sand dune succession

Code:

A B C D

(a) 1 2 3 4

(b) 2 1 4 3

(c) 4 1 3 2

(d) 3 2 1 4

Answer – (b) 2 1 4 3

Explanation –

Let's match each succession type correctly:

A. Hydrosere – Succession that starts in freshwater bodies like ponds or lakes and gradually leads to forest → (2)

B. Lithosere – Succession on bare rocks, starting with lichens → (1)

C. Psammosere – Succession on sandy habitats, especially sand dunes → (4)

D. Halosere – Succession in saline environments like salt marshes or mangroves → (3)

Correct match:

A–2, B–1, C–4, D–3 → Option (b) is correct.

Question 18. Assertion (A): Phosphorus is often a limiting nutrient in freshwater ecosystems.

Reason (R): Phosphorus is highly soluble and rapidly cycled in the atmosphere.

Code:

(a) Both A and R are true, and R is the correct explanation

(b) A is true, R is false

(c) Both A and R are false

(d) A is false, R is true

Answer – (b) A is true, R is false

Explanation –

Assertion (A) is true:

Phosphorus is often a limiting nutrient in freshwater ecosystems because it is present in low concentrations and is essential for plant and algal growth. Its shortage can limit productivity in aquatic environments.

Reason (R) is false:

Phosphorus is not cycled through the atmosphere like nitrogen or carbon. It exists primarily in

sedimentary rocks and moves slowly through the phosphorus cycle, mainly via erosion, runoff, and uptake by organisms.

Also, it is not highly soluble compared to nitrates; instead, it tends to bind with soil particles and settle in sediments.

Thus, A is true but R is false → Option (b) is correct.

Question 19. Which species type is most useful in detecting early environmental changes in an ecosystem?

(a) Keystone species

(b) Foundation species

(c) Indicator species

(d) Flagship species

Answer – (c) Indicator species

Explanation – Indicator species (like frogs, lichens) respond quickly to environmental stress and are used to monitor ecosystem health.

Question 20. Choose the correct statement:

(a) Lichens are air pollution indicators.

(b) Sea otters are keystone species.

(c) Corals are foundation species.

(d) All of the above

Answer – (d) All of the above

Explanation –

(a) Lichens are air pollution indicators

Lichens are bioindicators of air quality. They are sensitive to sulfur dioxide (SO_2) and other pollutants, and their absence indicates air pollution.

(b) Sea otters are keystone species

Sea otters regulate the population of sea urchins, which in turn helps maintain kelp forests. Without otters, urchins can destroy kelp beds. Thus, sea otters play a keystone role in marine ecosystems.

(c) Corals are foundation species

Corals build and structure reef ecosystems, providing habitat for a variety of marine life. Their role in creating a complex physical environment makes them foundation species.

All statements are correct → Option (d) is correct.

Question 21. Assertion (A): The tiger is both a flagship and umbrella species.

Reason (R): Protecting the tiger ensures the conservation of entire ecosystems and generates public support.

Code:

(a) Both A and R are true and R is the correct explanation

(b) Both A and R are true, but R is not the correct explanation

(c) A is true, R is false

(d) A is false, R is true

Answer – (a) Both A and R are true and R is the correct explanation

Explanation – Tigers attract attention (flagship) and conserving their habitats benefits multiple species (umbrella).

Question 22. Choose the incorrect match:

(a) Bee – Pollination

(b) Coral – Foundation species

(c) Frog – Air quality indicator

(d) Panda – Flagship species

Answer – (c) Frog – Air quality indicator

Explanation – Frogs are water quality indicators due to their permeable skin.

Question 23. Match List-I with List-II

List-I (Ecosystem Service) – List-II (Example)

A. Provisioning – 1. Water purification

B. Regulating – 2. Sacred groves

C. Supporting – 3. Timber

D. Cultural – 4. Nutrient cycling

Code:

A B C D

(a) 1 2 3 4

(b) 4 2 1 3

(c) 3 1 4 2

(d) 2 4 1 3

Answer – (c) 3 1 4 2

Explanation –

Ecosystem services are categorized into four types:

A. Provisioning Services – Direct material benefits like food, water, fuel, timber, fiber → Example: Timber → (3)

B. Regulating Services – Control of natural processes like climate regulation, water purification, pollination → Example: Water purification → (1)

C. Supporting Services – Fundamental processes that support other ecosystem services like nutrient cycling, soil formation → Example: Nutrient cycling → (4)

D. Cultural Services – Non-material benefits like spiritual, religious, recreational value → Example: Sacred groves → (2)

Question 24. Choose the true statement:

(a) Eco-Mark is mandatory for all consumer goods.

(b) Eco-Mark is certified by CPCB.

(c) Eco-Mark focuses on biodegradability and pollution control.

(d) Eco-Mark is awarded by NITI Aayog.

Answer – (c) Eco-Mark focuses on biodegradability and pollution control.

Explanation –

Let's evaluate each option:

(a) Eco-Mark is mandatory for all consumer goods

Incorrect. Eco-Mark is a voluntary labeling scheme, not mandatory.

(b) Eco-Mark is certified by CPCB

Incorrect. The Bureau of Indian Standards (BIS) is the implementing authority for Eco-Mark, although criteria are developed in consultation with MoEFCC.

(c) Eco-Mark focuses on biodegradability and pollution control

Correct. Eco-Mark is awarded to products that are environmentally friendly, considering aspects such as biodegradability, energy efficiency, and pollution reduction during production, use, and disposal.

(d) Eco-Mark is awarded by NITI Aayog

Incorrect. NITI Aayog is not involved in awarding Eco-Mark.

Question 25. Consider the following species:

1. Lion-tailed macaque
2. Nilgiri tahr
3. Water hyacinth

Which are endemic species?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) All of the above

Answer – (a) 1 and 2 only

Explanation – Water hyacinth is an invasive species, not endemic.

Question 26. Choose the incorrect pair:

(a) Bio-capacity Debtor – Footprint > Biocapacity

(b) Earth Overshoot Day – Resource consumption exceeds regeneration

(c) Deep Ecology – Human-centered approach

(d) Carrying Capacity – Maximum sustainable population

Answer – (c) Deep Ecology – Human-centered approach

Explanation – Deep Ecology is eco-centric, not anthropocentric.

Question 27. Choose the correct statement:

(a) Ecocline is a sharp ecological boundary.

(b) Ecophene is a genetic change in populations.

(c) Ecotype is a permanent genetic adaptation.

(d) Home range is a defended territory.

Answer – (c) Ecotype is a permanent genetic adaptation.

Explanation –

Let's analyze each term:

(a) Ecocline is a sharp ecological boundary

Incorrect. An ecocline is a gradual change in species composition or trait expression along an environmental gradient (e.g., altitude, salinity). A sharp boundary would be called an ecotone, not ecocline.

(b) Ecophene is a genetic change in populations

Incorrect. An ecophene refers to phenotypic plasticity — changes in an organism's appearance or behavior due to environmental factors, not genetic changes.

(c) Ecotype is a permanent genetic adaptation

Correct. An ecotype is a genetically distinct population adapted to specific environmental conditions. These adaptations are heritable and stable.

(d) Home range is a defended territory

Incorrect. A home range is the area an animal uses for its normal activities, but it is not necessarily defended. A territory, on the other hand, is actively defended from others.

Question 28. Which of the following correctly defines "carrying capacity"?

(a) Amount of nutrients in an ecosystem

(b) Number of species in a forest

(c) Maximum population an ecosystem can sustain

(d) Productivity of primary producers

Answer – (c) Maximum population an ecosystem can sustain

Explanation – Carrying capacity refers to ecological limits without degrading the environment.

Question 29. Consider the following statements:

1. A food web contains multiple interconnected food chains.
2. Food chains are always linear and isolated in nature.

Choose the correct option:

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (a) Only 1

Explanation –

Statement 1 is correct. A food web is a network of food chains showing complex feeding relationships.

Statement 2 is incorrect because in reality, food chains interconnect, forming webs.

Question 30. Consider the following:

1. All herbivores are primary consumers.
2. All carnivores are tertiary consumers.
3. Energy transfer in a food chain is unidirectional.

Which of the above are correct?

(a) 1 and 2 only

(b) 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Answer – (c) 1 and 3 only

Explanation –

1 is correct: Herbivores feed on plants, making them primary consumers.

2 is incorrect: Carnivores can be secondary or tertiary consumers depending on their prey.

3 is correct: Energy moves in one direction — from producers to top consumers.

Question 31. Assertion (A): Ocean acidification reduces coral reef growth.

Reason (R): Increased CO_2 in seawater lowers pH, affecting carbonate ion availability.

Code:

(a) Both A and R are true and R is the correct explanation

(b) Both A and R are true but R is not the correct explanation

(c) A is true, R is false

(d) A is false, R is true

Answer – (a) Both A and R are true and R is the correct explanation

Explanation – More H^+ ions from CO_2 form bicarbonate, reducing free carbonate needed for coral calcification.

Question 32. Which of the following is a cooling aerosol released by volcanoes?

(a) Black carbon

(b) Sulphate aerosol

(c) Carbon monoxide

(d) Fluorocarbons

Answer – (b) Sulphate aerosol

Explanation – Sulphate aerosols reflect sunlight, causing short-term cooling after volcanic eruptions.

Question 33. Assertion (A): Arctic sea ice is melting at unprecedented rates.

Reason (R): Ice-albedo feedback accelerates warming in polar regions.

Code:

(a) Both A and R are true and R is the correct explanation

(b) Both A and R are true but R is not the correct explanation

(c) A is true, R is false

(d) A is false, R is true

Answer – (a) Both A and R are true and R is the correct explanation

Explanation – Melting ice reduces reflectivity, reduces albedo, increasing heat absorption and more melting.

Question 34. Which of the following are observed consequences of climate change?

1. Coral bleaching
2. Groundwater recharge improvement
3. Vector-borne disease expansion

Code:

(a) 1 and 3 only

(b) 2 and 3 only

(c) 1 and 2 only

(d) All of the above

Answer – (a) 1 and 3 only

Explanation – Groundwater recharge is negatively affected by erratic rainfall.

Question 35. Assertion (A): India is both a victim and contributor to climate change.

Reason (R): India ranks among the top 3 cumulative GHG emitters.

Code:

(a) Both A and R are true and R is the correct explanation

(b) A is true, R is false

(c) Both A and R are false

(d) A is false, R is true

Answer – (b) A is true, R is false

Explanation –

Assertion (A) is true:

India is highly vulnerable to climate change impacts (e.g., Himalayan glacier melting, sea-level rise, extreme weather), making it a victim. Simultaneously, India is also a contributor, being the 3rd largest annual emitter of GHGs (after China and the USA), though its per capita and cumulative emissions are much lower.

Reason (R) is false:

India is highly vulnerable but ranks 3rd in current emissions, not cumulative.

India does not rank among the top 3 cumulative emitters.

The top cumulative emitters (historically) are:

1. USA
2. EU
3. China

Hence, A is true but R is false → Option (b) is correct.

Question 36. Which of the following contributes to ocean acidification?

1. Volcanic eruptions
2. CO_2 absorption by oceans
3. Coral reef bleaching

Code:

(a) 1 and 2

(b) 2 only

(c) 2 and 3

(d) All of the above

Answer – (b) 2 only

Explanation – Ocean acidification is caused directly by atmospheric CO_2 dissolving in seawater.

Question 37. Arrange the following greenhouse gases in increasing order of their GWP:

A. CO_2

B. CH_4

C. SF_6

D. N_2O

Code:

(a) A < B < D < C

(b) A < D < B < C

(c) D < B < C < A

(d) C < D < B < A

Answer: (a) A < B < D < C

Explanation: CO_2 = 1 < CH_4 = 21 < N_2O = 310 < SF_6 = 24,000.

Question 38. Which of the following are impacts of global warming?

1. Glacier and snow cover reduction
2. Habitat expansion for polar bears
3. Increase in vector-borne diseases

Select the correct code:

(a) 1 and 2 only

(b) 1 and 3 only

(c) 2 and 3 only

(d) 1, 2, and 3

Answer: (b) 1 and 3 only

Explanation: Polar bears are losing habitat, not gaining. Glacial retreat and disease spread due to warming are well-documented.

Question 39. Which of the following explains why methane is a potent greenhouse gas?

(a) It is released in large quantities.

(b) It traps more heat per molecule than CO_2.

(c) It reacts with ozone.

(d) It is a secondary pollutant.

Answer: (b) It traps more heat per molecule than CO_2.

Explanation: Methane has a GWP of 21, meaning it's far more potent than CO_2 in heat retention.

Question 40. Which of the following represents the "Deadly Trio" of ocean-related climate threats?

(a) Acidification, oil spills, deoxygenation

(b) Coral bleaching, plastic pollution, warming

(c) Warming, acidification, deoxygenation

(d) Warming, eutrophication, coral loss

Answer: (c) Warming, acidification, deoxygenation

Explanation: These three stressors are transforming ocean chemistry and endangering marine life.

Question 41. Which international treaty was the first legally binding climate agreement?

(a) Paris Agreement

(b) Kyoto Protocol

(c) Montreal Protocol

(d) Bali Action Plan

Answer – (b) Kyoto Protocol

Explanation – Kyoto Protocol (COP3, 1997) was the first legally binding climate treaty with targets for Annex I nations.

Question 42. Assertion (A): The Paris Agreement has no strict division of countries into Annex I and Non-Annex I.

Reason (R): It follows a voluntary pledge-based system under Common But Differentiated Responsibilities (CBDR).

Code:

(a) Both A and R are true and R is the correct explanation

(b) Both A and R are true, but R is not the correct explanation

(c) A is true, R is false

(d) A is false, R is true

Answer – (a) Both A and R are true and R is the correct explanation

Explanation – The Paris Agreement encourages all countries to contribute, unlike Kyoto's Annex-based system.

Question 43. Arrange the following in chronological order of launch:

1. UNEP
2. IPCC

3. Green Climate Fund
4. Kyoto Protocol

Code:

(a) 1-2-3-4

(b) 1-2-4-3

(c) 1-3-2-4

(d) 1-2-3-4

Answer – (b) 1-2-4-3

Explanation – UNEP (1972), IPCC (1988), Kyoto Protocol (1997), GCF (2010).

Question 44. India's net zero year commitment under Paris Agreement is:

(a) 2030

(b) 2047

(c) 2050

(d) 2070

Answer – (d) 2070

Explanation – India committed to achieve net-zero emissions by 2070 (COP26, Glasgow).

Question 45. Assertion (A): India has ratified the Doha Amendment to the Kyoto Protocol.

Reason (R): It binds India to legally reduce its emissions.

Code:

(a) Both A and R are true and R is the correct explanation

(b) A is true, R is false

(c) Both A and R are false

(d) A is false, R is true

Answer – (b) A is true, R is false

Explanation – India ratified the Doha Amendment but, as a Non-Annex I country, had no binding targets.

Question 46. Which of the following reports is published by UNEP?

(a) Global Climate Risk Index

(b) Climate Change Performance Index (CCPI)

(c) Emission Gap Report

(d) Environmental Performance Index

Answer – (c) Emission Gap Report

Explanation –

The Emission Gap Report is published annually by the United Nations Environment Programme (UNEP). It assesses the gap between current greenhouse gas emissions and the emission levels needed to achieve the Paris Agreement targets of limiting global warming to 1.5°C or 2°C. The report provides critical insights for climate action and policy-making.

Why the other options are incorrect:

(a) Global Climate Risk Index – Published by Germanwatch, not UNEP.

(b) Climate Change Performance Index (CCPI) – Also released by Germanwatch in cooperation with Climate Action Network (CAN) and NewClimate Institute.

(d) Environmental Performance Index (EPI) – Jointly released by Yale University and Columbia University, not by UNEP.

Question 47. Match COPs with major decisions:

A. COP3 – 1. Kyoto Protocol

B. COP21 – 2. Paris Agreement

C. COP26 – 3. Panchamrit

D. COP27 – 4. Loss and Damage Fund

Code:

A B C D

(a) 1 2 3 4

(b) 1 2 4 3

(c) 1 4 2 3

(d) 2 3 1 4

Answer – (a) 1 2 3 4

Explanation –

A. COP3 (1997, Kyoto, Japan) → Kyoto Protocol was adopted, committing developed countries to emission reduction targets.

B. COP21 (2015, Paris, France) → Paris Agreement was signed, aiming to limit global warming well below 2°C, ideally 1.5°C.

C. COP26 (2021, Glasgow, UK) → India announced the Panchamrit strategy, its five-point climate action plan including net-zero target by 2070.

D. COP27 (2022, Sharm El-Sheikh, Egypt) → Historic agreement to establish a Loss and Damage Fund for vulnerable countries affected by climate change.

Thus, the correct matching is:

A–1, B–2, C–3, D–4

Question 48. Assertion (A): India is ranked among the top 10 in CCPI 2025.

Reason (R): India's climate policy is rated as "Very High" in all categories.

Code:

(a) Both A and R are true and R is the correct explanation

(b) Both A and R are true, but R is not the correct explanation

(c) A is true, R is false

(d) A is false, R is true

Answer – (c) A is true, R is false

Explanation –

India was indeed ranked among the top 10 countries in the Climate Change Performance Index (CCPI) 2025, continuing its strong performance from previous years.

However, Reason (R) is false because India's climate policy is not rated as "Very High" in all categories. According to the CCPI 2025, India's performance is:

- Very High in GHG Emissions and Energy Use,
- High in Climate Policy, and
- Medium in Renewable Energy.

Therefore, while India is among the top performers, its climate policy is not rated as "Very High" across all categories, making the assertion true but the reason false.

Question 49. In which year was the Intergovernmental Panel on Climate Change (IPCC) formed?

(a) 1982

(b) 1988

(c) 1992

(d) 2000

Answer: (b)

Explanation: IPCC was formed in 1988 by UNEP and WMO to assess scientific aspects of climate change.

Question 50. Choose the incorrect statement:

(a) Green Climate Fund (GCF) was created at COP16, Cancun

(b) Loss and Damage Fund is governed under Kyoto Protocol

(c) Adaptation Fund gets money from Clean Development Mechanism (CDM)

(d) Least Developed Countries Fund (LDCF) supports National Adaptation Plans in LDCs

Answer – (b) Loss and Damage Fund is governed under Kyoto Protocol

Explanation –

(a) True – The Green Climate Fund (GCF) was established at COP16 in Cancun (2010) as part of the financial mechanism under the UNFCCC to assist developing countries in adaptation and mitigation.

(b) Incorrect – The Loss and Damage Fund is not governed under the Kyoto Protocol. It was established at COP27 (2022, Sharm El-Sheikh) under the framework of the UNFCCC and Paris Agreement, specifically to support developing nations impacted by climate-induced losses. The Kyoto Protocol deals primarily with mitigation obligations of developed countries, not loss and damage financing.

(c) True – The Adaptation Fund is financed by a share of proceeds from the Clean Development Mechanism (CDM) under the Kyoto Protocol.

(d) True – The Least Developed Countries Fund (LDCF) supports the preparation and implementation of National Adaptation Programmes of Action (NAPAs) and National Adaptation Plans (NAPs) in LDCs, under the Global Environment Facility (GEF).

Question 51. Which countries host COP28 and COP29 respectively?

(a) UK and Brazil

(b) UAE and Azerbaijan

(c) Egypt and Canada

(d) USA and Germany

Answer – (b) UAE and Azerbaijan

Explanation – COP28 was held in Dubai; COP29 is scheduled in Baku, Azerbaijan.

Question 52. Consider the following statements regarding Article 6 of the Paris Agreement:

1. It sets out the framework for international cooperation using market and non-market approaches.
2. It includes mechanisms for countries to trade carbon credits towards achieving their Nationally Determined Contributions (NDCs).

Which of the statements given above are correct?

(a) 1 only

(b) 2 only

(c) 1 and 2 both

(d) Neither 1 Nor 2

Answer – (c) 1 and 2 both

Explanation –

Statement 1 is correct: Article 6 provides a framework for both market (Article 6.2 and 6.4) and non-market approaches (Article 6.8).

Statement 2 is correct: It includes carbon trading mechanisms to help countries achieve their NDCs.

Question 53. The Clean Development Mechanism (CDM) allows –

1. Developing countries to get financial support for climate projects.
2. Developed countries to meet emission targets cost-effectively.

Select the correct code:

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer: (c)

Explanation: CDM benefits both: funding for developing nations and credit for developed.

Question 54. Which of the statements given above is/are correct?

(a) 1 only

(b) 2 only

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (a) 1 only

Explanation –

Statement 1 is correct: India's per capita CO_2 emissions (~2 tons) are lower than the global average (~4.7 tons).

Statement 2 is incorrect: India is third globally (after China and the USA) and second in Asia-Pacific, not the largest emitter.

Question 55. Choose the correct statement:

(a) Environmental Performance Index (EPI) is published annually by Yale University.

(b) COP26 introduced the Paris Agreement.

(c) Climate Change Performance Index (CCPI) ranks India highest in renewable energy.

(d) GST (Global Stocktake) occurs every 5 years.

Answer – (d) GST (Global Stocktake) occurs every 5 years.

Explanation –

(a) Incorrect – The Environmental Performance Index (EPI) is published biennially (every two

years), not annually, by Yale University and Columbia University, in collaboration with the World Economic Forum.

(b) Incorrect – The Paris Agreement was adopted at COP21 (2015, Paris), not at COP26.

(c) Incorrect – While India performs well in the Climate Change Performance Index (CCPI), it is not ranked highest in renewable energy. India's ranking is medium in the renewable energy category.

(d) Correct – The Global Stocktake (GST) under the Paris Agreement is a process that takes place every 5 years to assess collective progress towards achieving long-term climate goals.

Question 56. Which of the following are components of National Mission on Enhanced Energy Efficiency (NMEEE)?

1. PAT Scheme
2. SEEP
3. CAMPA

Select the correct code:

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) All of the above

Answer – (a) 1 and 2 only

Explanation –

The National Mission on Enhanced Energy Efficiency (NMEEE) is one of the eight missions under the National Action Plan on Climate Change (NAPCC). It comprises the following four components:

- Perform, Achieve and Trade (PAT) – A market-based mechanism to enhance energy efficiency in large industries by setting energy-saving targets.
- Market Transformation for Energy Efficiency (MTEE) – Aims to accelerate the shift to energy-efficient appliances.
    - SEEP (Super-Efficient Equipment Programme) – falls under MTEE, and is therefore part of NMEEE.
- Energy Efficiency Financing Platform (EEFP) – Facilitates interaction between stakeholders for financing energy efficiency projects.
- Framework for Energy Efficient Economic Development (FEEED) – Promotes energy efficiency in new infrastructure.

CAMPA (Compensatory Afforestation Fund Management and Planning Authority) – is not part of NMEEE; it deals with forest conservation and afforestation, not energy efficiency.

Hence, correct components: 1 and 2 only.

Question 57. Consider the following pairs (Organization – Year of establishment):

1. UNEP – 1972
2. IPCC – 1992
3. GEF – 1991
4. WMO – 1950

How many of the above pairs are correctly matched?

(a) Only one

(b) Only two

(c) Only three

(d) All four

Answer: (c)

Explanation –

UNEP – 1972

- Correct. The United Nations Environment Programme (UNEP) was established in 1972 following the Stockholm Conference on the Human Environment.

IPCC – 1992

- Incorrect. The Intergovernmental Panel on Climate Change (IPCC) was established in 1988 by WMO and UNEP, not 1992.

GEF – 1991

- Correct. The Global Environment Facility (GEF) was formally established in 1991 to fund environmental projects in developing countries.

WMO – 1950

- Correct. The World Meteorological Organization (WMO) was established in 1950 as a specialized agency of the United Nations.

Question 58. Which is the largest solar park in India?

(a) Pavagada

(b) Bhadla

(c) Charanka

(d) Rewa

Answer – (b) Bhadla

Explanation – Bhadla Solar Park in Rajasthan is the world's largest Solar Park in capacity. It has a total installed capacity of 2,245 MW and covers an area of 56 sq. km. The park was developed in four phases and is now fully operational.

Question 59. Which plant is central to the cold desert sub-mission of the Green India Mission?

(a) Bamboo

(b) Acacia

(c) Seabuckthorn

(d) Jatropha

Answer – (c) Seabuckthorn

Explanation – Seabuckthorn (Leh Berry) is a resilient plant used in cold desert afforestation (e.g., Ladakh).

Question 60. Which of the following cities in India has been recognized as a "Tree City of the World"?

(a) Bengaluru

(b) Mumbai

(c) Ahmedabad

(d) Chennai

Answer – (b) Mumbai

Explanation – Mumbai was recognized in 2022, after Hyderabad (2020), by the Arbor Day Foundation and FAO.

Question 61. Match the type of carbon with its characteristic feature:

A. Black Carbon – 1. Soot from incomplete combustion

B. Blue Carbon – 2. Sequestered in mangroves, seagrass

C. Brown Carbon – 3. Absorbs UV, from biomass burning

D. Green Carbon – 4. Carbon stored in terrestrial vegetation

Code:

A B C D

(a) 1 2 3 4

(b) 1 3 2 4

(c) 3 1 2 4

(d) 1 3 4 2

Answer – (a) 1 2 3 4

Explanation – All carbon types are correctly matched to their environmental role.

Question 62. Which gases are released from biomass/crop residue burning?

1. CO_2
2. Methane
3. Sulphur dioxide
4. Ozone

Code:

(a) 1 and 2 only

(b) 1, 2 and 3 only

(c) 2, 3 and 4 only

(d) All of the above

Answer – (d) All of the above

Explanation – All listed gases are emitted directly or indirectly from biomass combustion.

Question 63. The first Climate Smart Village in India is:

(a) Rampur, Uttar Pradesh

(b) Dhanora, Rajasthan

(c) Mewat, Haryana

(d) Kalpetta, Kerala

Answer – (b) Dhanora, Rajasthan

Explanation – Dhanora in Dholpur, Rajasthan, was declared India's first Climate Smart Village.

Question 64. Assertion (A): Methane hydrate is a potential future energy source.

Reason (R): It traps methane under high temperature and pressure.

Code:

(a) Both A and R are true and R is the correct explanation

(b) A is true, R is false

(c) Both A and R are false

(d) A is false, R is true

Answer – (b) A is true, R is false

Explanation – Methane hydrates form under low temperature and high pressure.

Question 65. Assertion (A): Carbon fertilization enhances greening, but may have limitations.

Reason (R): Greening is independent of water and nutrient availability.

Code:

(a) Both A and R are true and R is the correct explanation

(b) A is true, R is false

(c) Both A and R are false

(d) A is false, R is true

Answer – (b) A is true, R is false

Explanation – Greening depends on water and nutrients along with CO_2 levels.

Question 66. Consider the following statements:

1. VOCs are released from both industrial and household sources.
2. VOCs are responsible for formation of ground-level ozone in presence of sunlight.

Which of the statements given above is/are correct?

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (c) Both 1 and 2

Explanation –

Statement 1 – Correct

Volatile Organic Compounds (VOCs) are released from a wide range of industrial sources (e.g., paint, solvents, petroleum refining) and household products (e.g., air fresheners, cleaning agents, adhesives, varnishes).

Statement 2 – Correct

VOCs react with nitrogen oxides (NOx) in the presence of sunlight to form ground-level ozone, a major component of photochemical smog, which is harmful to health and crops.

Hence, both statements are correct.

Question 67. Match List-I with List-II and select the correct Answer:

List-I (Radiation Type) | List-II (Effect)

A. UV-A | 1. Sunburn and Vitamin D formation

B. UV-B | 2. Skin cancer and DNA damage

C. UV-C | 3. Completely absorbed by ozone layer

Code:

A B C

(a) 2 1 3

(b) 1 2 3

(c) 3 2 1

(d) 2 3 1

Answer – (b) 1 2 3

Explanation –

A. UV-A → 1. Sunburn and Vitamin D formation

UV-A (longest wavelength) penetrates deep into the skin, causes tanning, and contributes to sunburn and Vitamin D synthesis.

B. UV-B → 2. Skin cancer and DNA damage

UV-B rays are partially filtered by the ozone layer and are more energetic, causing DNA damage, sunburn, and contributing to skin cancer.

C. UV-C → 3. Completely absorbed by ozone layer

UV-C is the most dangerous, but it is completely absorbed by the ozone layer and atmosphere, so it does not normally reach the Earth's surface.

Question 68. Assertion (A): Ground-level ozone is highest in summer.

Reason (R): Ozone forms in presence of heat, sunlight, VOCs and NOx.

Code:

(a) Both A and R are true, and R is the correct explanation

(b) Both A and R are true, but R is not the correct explanation

(c) A is true, R is false

(d) A is false, R is true

Answer – (a) Both A and R are true, and R is the correct explanation

Explanation –

Assertion (A) – True

Ground-level ozone concentrations are typically highest in summer, especially on hot, sunny days, due to favorable conditions for its formation.

Reason (R) – True

Ground-level ozone is a secondary pollutant that forms through photochemical reactions involving volatile organic compounds (VOCs) and nitrogen oxides (NOx) in the presence of sunlight and heat.

Since the reason correctly explains the assertion, the correct Answer is: (a) Both A and R are true, and R is the correct explanation

Question 69. The ozone hole is most prominently observed over:

(a) Himalayas

(b) Sahara Desert

(c) Antarctic Region

(d) Arctic Region

Answer – (c) Antarctic Region

Explanation – Polar vortex over Antarctica creates ideal conditions for ozone depletion.

Question 70. Which of the following is the first treaty in the UN system to achieve universal ratification?

(a) Kyoto Protocol

(b) Montreal Protocol

(c) Paris Agreement

(d) Stockholm Convention

Answer – (b) Montreal Protocol

Explanation – Universally ratified by 197 countries, the Montreal Protocol targets ODS.

Question 71. Who coined the term "Biodiversity"?

(a) Edward O. Wilson

(b) R.H. Whittaker

(c) W.G. Rosen

(d) Norman Myers

Answer – (c) W.G. Rosen

Explanation – The term 'Biodiversity' was coined by W.G. Rosen in 1985 and popularized by E.O. Wilson in 1988.

Question 72. Assertion (A): Genetic diversity ensures adaptability of species to environmental change.

Reason (R): It reduces the genetic variability within a species.

Code:

(a) Both A and R are true and R is the correct explanation

(b) Both A and R are true but R is not the correct explanation

(c) A is true, R is false

(d) A is false, R is true

Answer – (c) A is true, R is false

Explanation – Genetic diversity increases variability, which supports adaptability.

Question 73. Which biodiversity levels are correctly matched?

1. Alpha – Within habitat
2. Beta – Between habitats
3. Gamma – Landscape level

Code:

(a) Only 1 and 2

(b) Only 2 and 3

(c) All three

(d) Only 1 and 3

Answer – (c) All three

Explanation – Alpha, Beta, and Gamma refer to within, between, and total regional diversity.

Question 74. Assertion (A): Amphibians are the most threatened vertebrate group.

Reason (R): They are highly sensitive to environmental changes.

Code:

(a) Both A and R are true and R is the correct explanation

(b) Both A and R are true but R is not the correct explanation

(c) A is true, R is false

(d) A is false, R is true

Answer – (a) Both A and R are true and R is the correct explanation

Explanation – Amphibians are highly vulnerable due to habitat sensitivity and pollution.

Question 75. Which of the following are among the "Hottest Hotspots" of biodiversity?

1. Himalayas
2. Indo-Burma
3. Eastern Ghats
4. Western Ghats

Code:

(a) 1, 2 and 3 only

(b) 1, 2 and 4 only

(c) 2 and 4 only

(d) All of the above

Answer – (b) 1, 2 and 4 only

Explanation – Eastern Ghats is not a biodiversity hotspot. The other three qualify as "hottest".

Question 76. Match the biodiversity measurement type with its feature:

A. Species Richness – 1. Number of species

B. Species Evenness – 2. Relative abundance

C. Shannon Index – 3. Diversity Index

D. Simpson's Index – 4. Dominance measure

Code:

A B C D

(a) 1 2 3 4

(b) 1 3 2 4

(c) 1 4 2 3

(d) 3 1 4 2

Answer – (a) 1 2 3 4

Explanation – Each measurement tool is aligned to the aspect of biodiversity it quantifies.

Question 77. Assertion (A): Coral reefs are among the most biodiverse marine ecosystems.

Reason (R): They exist in low-nutrient environments.

Code:

(a) Both A and R are true and R is the correct explanation

(b) Both A and R are true but R is not the correct explanation

(c) A is true, R is false

(d) A is false, R is true

Answer – (b) Both A and R are true but R is not the correct explanation

Explanation – Coral reefs thrive in low-nutrient water due to efficient nutrient recycling, but R is not the primary reason for biodiversity.

Question 78. Choose the incorrect statement:

(a) Species richness decreases with ocean depth

(b) Coral reefs have low species density

(c) Amazon rainforest is the richest biodiversity zone

(d) Deep oceans have low productivity

Answer – (b) Coral reefs have low species density

Explanation – Coral reefs have extremely high species density and diversity.

Question 79. Which of the following is an example of ex-situ conservation?

(a) Sacred grove

(b) Biosphere reserve

(c) Botanical garden

(d) Wildlife sanctuary

Answer – (c) Botanical garden

Explanation – Botanical gardens conserve plant species outside their natural habitat.

Question 80. Match Threats with Examples:

A. Habitat loss – 1. Pesticides

B. Invasive species – 2. Poaching

C. Pollution – 3. Deforestation

D. Overexploitation – 4. Lantana

Code:

A B C D

(a) 1 2 3 4

(b) 2 3 1 4

(c) 3 4 1 2

(d) 1 3 2 4

Answer – (c) 3 4 1 2

Explanation –

A. Habitat loss → Deforestation (3)

Deforestation is a major cause of habitat loss, especially for forest-dwelling species.

B. Invasive species → Lantana (4)

Lantana camara is a notorious invasive species in India, outcompeting native flora.

C. Pollution → Pesticides (1)

Pesticides contribute to soil and water pollution, affecting biodiversity.

D. Overexploitation → Poaching (2)

Poaching is an example of overexploitation, especially of endangered animals like tigers, rhinos, and elephants.

Question 81. Assertion (A): Sacred groves are examples of community-led conservation.

Reason (R): They are a modern invention under the Wildlife Protection Act.

Code:

(a) Both A and R are true and R is the correct explanation

(b) A is true, R is false

(c) Both A and R are false

(d) A is false, R is true

Answer – (b) A is true, R is false

Explanation – Sacred groves are traditional conservation practices, predating modern laws.

Question 82. Which of the following is the most species-rich group of organisms?

(a) Birds

(b) Mammals

(c) Insects

(d) Fungi

Answer – (c) Insects

Explanation – Insects comprise ~70% of all known animal species.

Question 83. Consider the following pairs:

1. WWF – Earth Hour
2. UNEP – Champions of the Earth
3. ZSL – Living Planet Index

Which of the pairs given above is/are correctly matched?

(a) Only 1

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Answer – (d) 1, 2 and 3

Explanation – All pairs are correctly matched. WWF started Earth Hour, UNEP confers the Champions of the Earth Award, and ZSL developed the Living Planet Index (LPI).

Question 84. Consider the following statements:

1. India ratified the CBD in 1994.
2. India enacted the Biological Diversity Act in 2002.

Choose the correct Answer:

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (c) Both 1 and 2

Explanation – India ratified the Convention on Biological Diversity (CBD) in 1994 and enacted the Biological Diversity Act in 2002 to give effect to its provisions.

Question 85. Match List-I with List-II and select the correct Answer from the code given below:

List-I (Convention)	List-II (Focus Area)
A. CITES	1. Wetlands
B. Ramsar Convention	2. Trade in endangered species
C. UNCBD	3. Genetic resource access
D. ITPGRFA	4. Plant genetic resources

Code:

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

Answer – (b) 2 1 3 4

Explanation –

A. CITES – Trade regulation in endangered species

B. Ramsar – Wetlands conservation

C. UNCBD – Genetic resources and access

D. ITPGRFA – Focused on plant genetic resources for food/agriculture

Question 86. Choose the true statement from the following regarding the Living Planet Index (LPI):

(a) It measures changes in populations of plant species globally.

(b) It is published annually by BirdLife International.

(c) It is developed by ZSL and WWF to track vertebrate species trends.

(d) It was first published in 2010.

Answer – (c) It is developed by ZSL and WWF to track vertebrate species trends.

Explanation – The LPI measures average population trends in vertebrate species and is developed by ZSL in collaboration with WWF. It was first published in 1998. It does not cover plant species.

Question 87. Arrange the following Red List categories in descending order of extinction risk:

A. Vulnerable

B. Extinct

C. Critically Endangered

D. Endangered

Code:

(a) B, C, D, A

(b) C, D, A, B

(c) B, A, D, C

(d) C, A, D, B

Answer – (a) B, C, D, A

Explanation –

Extinct (B) is the highest extinction status.

Followed by Critically Endangered (C) → Endangered (D) → Vulnerable (A).

Question 88. Consider the following pairs regarding endangered mammals in India (as per IUCN Red List 2025-1):

1. Kashmir Stag – Jammu & Kashmir
2. Namdapha Flying Squirrel – Arunachal Pradesh
3. Elvira Rat – Himachal Pradesh

Which of the above pairs is/are correctly matched?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Answer – (a) 1 and 2 only

Explanation –

Kashmir Stag is found in J&K (correct),

Namdapha Flying Squirrel is endemic to Namdapha, Arunachal Pradesh (correct),

Elvira Rat is found in Tamil Nadu (not Himachal Pradesh).

Question 89. Which of the following is the correct descending order of threat among the IUCN Red List species groups in India?

(A) Amphibians

(B) Mammals

(C) Birds

(D) Fishes

Select the correct order:

(a) A > B > D > C

(b) B > A > C > D

(c) D > B > C > A

(d) A > D > B > C

Answer – (d) A > D > B > C

Explanation –

As per IUCN 2025-1 data:

Amphibians (33 CR species) >

Fishes (44) >

Mammals (11) >

Birds (19).

But proportionally, amphibians have the highest percentage, followed by fishes, then mammals and birds.

Question 90. Choose the true statement from the following about the Nagoya Protocol:

(a) It deals with conservation of wetlands.

(b) It is legally non-binding.

(c) It ensures fair benefit-sharing from genetic resource use.

(d) It was adopted in 2000 along with the Cartagena Protocol.

Answer – (c) It ensures fair benefit-sharing from genetic resource use.

Explanation –

The Nagoya Protocol (2010) is legally binding and aims at equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge. Cartagena Protocol was adopted in 2000.

Question 91. Consider the following statements regarding the World Heritage Convention:

1. It was adopted by UNESCO in 1972.
2. It protects only natural sites of universal value.

Select the correct Answer using the code given below:

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (a) Only 1

Explanation – The World Heritage Convention was adopted in 1972 by UNESCO. It protects both cultural and natural heritage sites of outstanding universal value, not just natural ones.

Question 92. Arrange the following biodiversity-related conventions in chronological order of adoption:

1. Ramsar Convention
2. CITES
3. CBD
4. Cartagena Protocol

Code:

(a) 1, 2, 3, 4

(b) 2, 1, 4, 3

(c) 1, 2, 4, 3

(d) 1, 3, 2, 4

Answer – (a) 1, 2, 3, 4

Explanation –

Ramsar – 1971

CITES – 1973

CBD – 1992

Cartagena Protocol – 2000

Question 93. Consider the following pairs:

Convention – India's Host Role

1. CBD COP-11 – Hyderabad
2. CMS COP-13 – Gandhinagar
3. CITES COP-3 – Delhi

Which of the above are correctly matched?

(a) Only 1 and 2

(b) Only 2 and 3

(c) All 1, 2 and 3

(d) Only 1 and 3

Answer – (c) All 1, 2 and 3

Explanation –

India has hosted all:

CBD COP-11 in 2012 (Hyderabad)

CMS COP-13 in 2020 (Gandhinagar)

CITES COP-3 in 1981 (New Delhi)

Question 94. Which of the following conventions is referred to as the "Bonn Convention"?

(a) CITES

(b) CMS

(c) CBD

(d) UNCCD

Answer – (b) CMS

Explanation – The Convention on the Conservation of Migratory Species of Wild Animals (CMS) is also known as the Bonn Convention, adopted in 1979 and came into force in 1983.

Question 95. Which of the following targets is not part of the Kunming-Montreal Global Biodiversity Framework 2030?

(a) Restore 30% of degraded ecosystems

(b) Eliminate invasive alien species completely

(c) Conserve 30% of land and sea areas

(d) Reduce pollution to non-harmful levels for biodiversity

Answer – (b) Eliminate invasive alien species completely

Explanation – The framework aims to reduce introduction by 50% and control priority species, but not complete elimination of all invasive alien species.

Question 96. Consider the following statements regarding the TEEB initiative:

1. It aims to assign economic value to biodiversity and ecosystem services.
2. It was launched by the Global Footprint Network.

Which of the statements given above is/are correct?

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (a) Only 1

Explanation – TEEB (The Economics of Ecosystems and Biodiversity) was launched by UNEP, not the Global Footprint Network. It focuses on making nature's services economically visible to guide policy and business.

Question 97. Consider the following statements regarding the WWF's Living Planet Report 2024:

1. It reported a 69% global decline in vertebrate populations between 1970 and 2020.
2. The Latin America region showed the highest decline.

Which of the statements given above is/are correct?

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (c) Both 1 and 2

Explanation –

LPR 2024 reported a 69% average global decline in vertebrate populations.

Latin America & Caribbean saw the highest decline: 94%.

Question 98. Consider the following statements regarding the Nagoya-Kuala Lumpur Supplementary Protocol:

1. It is related to liability and redress for damage caused by LMOs.
2. It is a part of the Nagoya Protocol on Access and Benefit Sharing.

Which of the above statements is/are correct?

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (a) Only 1

Explanation –

The Nagoya–Kuala Lumpur Supplementary Protocol is linked to the Cartagena Protocol, not the Nagoya ABS Protocol.

It addresses liability and redress in case of environmental damage due to LMOs.

Question 99. Consider the following statements:

1. Forests and wildlife are under the Union List.
2. Environment protection is a Directive Principle under Article 48A.

Which of the above is/are correct?

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (b) Only 2

Explanation – Forests and wildlife are in the Concurrent List (Seventh Schedule), not Union List. Article 48A is a Directive Principle.

Question 100. Arrange the following events in chronological order:

I. Wildlife Protection Act

II. Environment Protection Act

III. Forest Conservation Act

Code:

(a) I, II, III

(b) I, III, II

(c) III, I, II

(d) II, I, III

Answer – (b) I, III, II

Explanation – Wildlife Protection Act (1972) → Forest Conservation Act (1980) → Environment Protection Act (1986).

Question 101. Consider the following pairs:

1. Schedule I – Highest protection to animals
2. Schedule III – CITES-regulated species
3. Schedule IV – Protected plants

Which are correctly matched post-2022 amendment?

(a) 1 only

(b) 1 and 2 only

(c) 1 and 3 only

(d) 1, 2 and 3

Answer – (a)

Explanation –

Revised Schedule Structure (Post-2022):

Schedule I

- Highest level of protection to wild animals
- Includes species that were earlier in Schedule I and Part II of Schedule II.

Schedule II

- Other protected wild animals, with relatively lower protection than Schedule I.
- Includes animals that may be hunted under specific circumstances or with permits.

Schedule III

- Protected plants
- This includes select endangered plant species that are now consolidated here.
- (Earlier these were in Schedule VI.)

Schedule IV

- CITES-regulated species
- Species listed in various Appendices of CITES are now placed here for regulation of international trade.

Question 102. Which of the following is India's first Marine National Park?

(a) Gulf of Mannar Marine

(b) Rani Jhansi Marine

(c) Mahatma Gandhi Marine

(d) Gulf of Kachchh

Answer – (d)

Explanation – Gulf of Kachchh National Park, Gujarat, was the first marine NP established in 1982.

Question 103. Which of the following is not a function of Biodiversity Management Committees (BMCs)?

(a) Maintain PBRs

(b) Issue wildlife hunting licenses

(c) Levy collection fees for bioresources

(d) Promote conservation at local level

Answer – (b)

Explanation – Hunting licenses are governed by the Wildlife Protection Act, not BMCs.

Question 104. Which state has the highest number of National Parks in India?

(a) Assam

(b) Madhya Pradesh

(c) Maharashtra

(d) Karnataka

Answer – (b) Madhya Pradesh

Explanation – MP has 11 National Parks, the highest among Indian states.

Question 105. Which of the following pairs is not correctly matched?

Protected Area – River/Water Body

(a) Kaziranga – Bramhaputra

(b) Gir – Yamuna

(c) Simlipal – Deo

(d) Bandhavgarh – Charanganga

Answer – (b)

Explanation – Gir is not on Yamuna; it lies near rivers like Hiran and Shetrunji.

Question 106. Which of the following is/are true regarding the Biological Diversity Act, 2002?

1. It mandates benefit-sharing with local communities.
2. It exempts traditional healers and farmers from approval requirements.
3. All offences under this Act are bailable.

Select the correct Answer using the code below:

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Answer – (a)

Explanation – The Act mandates Access and Benefit Sharing (ABS) and exempts traditional users like farmers and vaids. However, all offences are cognizable and non-bailable.

Question 107. Consider the following statements:

1. Biosphere Reserves are notified under the Wildlife Protection Act, 1972.
2. They are part of the UNESCO Man and Biosphere Programme.

Which of the above is/are correct?

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer – (b)

Explanation – Biosphere Reserves are not notified under WPA 1972 but are recognized under UNESCO's MAB Programme.

Question 108. Consider the following pairs:

Protected Area – Unique Feature

1. Hemis National Park – Largest NP in India
2. Keibul Lamjao – Floating NP
3. Simlipal – Part of Marine National Parks

Which of the pairs is/are correctly matched?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Answer – (a)

Explanation – Simlipal is a terrestrial forest area, not a marine national park.

Question 109. Which of the following is the largest Wildlife Sanctuary in India by area?

(a) Dibru-Saikhowa WLS

(b) Rann of Kutch WLS

(c) National Chambal Sanctuary

(d) Periyar Wildlife Sanctuary

Answer – (b) Rann of Kutch WLS

Explanation – Rann of Kutch Wildlife Sanctuary in Gujarat is the largest WLS in India.

Question 110. Which of the following zones in a Biosphere Reserve permits settlement, cultivation, and sustainable use?

(a) Core Zone

(b) Buffer Zone

(c) Transition Zone

(d) Research Zone

Answer – (c) Transition Zone

Explanation – The outermost zone is the Transition Zone where human settlements and sustainable development are permitted.

Question 111. Consider the following pairs:

1. Dibru-Saikhowa – Smallest Biosphere Reserve
2. Great Rann of Kutch – Largest Biosphere Reserve
3. Nilgiri – First included in MAB Programme

Which of the pairs above are correctly matched?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1, 2 and 3

(d) 1 and 3 only

Answer – (c)

Explanation – All are correctly matched. Dibru-Saikhowa is smallest, Kutch is largest, and Nilgiri was first in MAB.

Question 112. Which species is conserved under the project launched in 1972 at Kedarnath WLS?

(a) Hangul

(b) Himalayan Musk Deer

(c) Snow Leopard

(d) Nilgiri Tahr

Answer – (b)

Explanation – The Himalayan Musk Deer Project was launched in Kedarnath WLS in 1972 to protect the endangered musk deer.

Question 113. Which species is conserved in Vikramshila Gangetic Dolphin Sanctuary?

(a) Olive Ridley Turtle

(b) Snow Leopard

(c) Gangetic Dolphin

(d) Dugong

Answer – (c)

Explanation – Vikramshila in Bihar is the only dedicated sanctuary for the endangered Gangetic Dolphin.

Question 114. Which of the following was India's first Elephant Reserve?

(a) Agasthyamalai

(b) Terai Elephant Reserve

(c) Singhbhum Elephant Reserve

(d) Shivalik Elephant Reserve

Answer – (c)

Explanation – Singhbhum in Jharkhand was the first officially notified Elephant Reserve in India.

Question 115. Consider the following statements:

1. Project Tiger was launched in 1973 from Jim Corbett NP.
2. National Tiger Conservation Authority was formed in 2006.
3. Tigers are listed under WPA Schedule II.

Which of the statements are correct?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Answer – (a)

Explanation – Tigers are protected under Schedule I, not Schedule II. Statements 1 and 2 are correct.

Question 116. Which of the following is a primary pollutant?

(a) Ozone

(b) Sulphur dioxide

(c) Peroxyacetyl nitrate

(d) Smog

Answer - (b)

Explanation – Primary pollutants are emitted directly from a source. Sulphur dioxide is a primary pollutant, while Ozone, PAN, and smog are secondary pollutants.

Question 117. Consider the following statements:

1. PM2.5 can enter the bloodstream.
2. PM10 remains suspended in air longer than PM2.5.

Which of the above is/are correct?

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer - (a)

Explanation – PM2.5 is smaller and more harmful, capable of entering the bloodstream. PM10 is heavier and settles faster.

Question 118. Consider the following pollutants:

1. Nitrogen oxides
2. Volatile organic compounds
3. Ground-level ozone

Which of these are involved in photochemical smog formation?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Answer - (d)

Explanation – NOx and VOCs react in sunlight to form Ozone and other components of photochemical smog.

Question 119. Choose the true statement about National Clean Air Programme (NCAP):

(a) Targets reduction in PM2.5 only

(b) Aims to reduce pollution by 50% by 2030

(c) Targets at least 20% reduction in PM2.5 and PM10 by 2024

(d) Covers all metro cities only

Answer - (c)

Explanation – NCAP targets 20–30% reduction in PM2.5/PM10 by 2024 using 2017 as base year.

Question 120. Which of the following are monitored under the National Ambient Air Quality Standards (NAAQS)?

1. Ozone (O_3)
2. Carbon Dioxide (CO_2)
3. Lead (Pb)
4. Ammonia (NH_3)

Select the correct Answer using code below:

(a) 1, 2 and 3 only

(b) 1, 3 and 4 only

(c) 2, 3 and 4 only

(d) 1, 2, 3 and 4

Answer - (b)

Explanation – CO_2 is not included in NAAQS. All other pollutants are part of the list of 12 under NAAQS.

Question 121. Consider the following:

1. BOD measures biodegradable waste.
2. COD includes non-biodegradable pollutants.
3. High BOD indicates clean water.

Which statements are correct?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Answer - (a)

Explanation –

BOD measures biodegradable waste – Correct

- BOD (Biochemical Oxygen Demand) indicates the amount of dissolved oxygen required by aerobic microorganisms to decompose biodegradable organic matter in water.
- It's a standard parameter for assessing organic pollution.

COD includes non-biodegradable pollutants – Correct

- COD (Chemical Oxygen Demand) measures the total quantity of oxygen required to oxidize both biodegradable and non-biodegradable organic compounds using strong chemical oxidants.
- Hence, it's a broader measure than BOD.

High BOD indicates clean water – Incorrect

- A high BOD means there is a large amount of organic pollution, leading to oxygen depletion in water bodies — which is harmful to aquatic life.
- Clean water has low BOD (typically < 1–2 mg/L).

Question 122. Consider the following statements about Indoor Air Pollution:

1. Can be up to 10 times more than outdoor pollution.
2. Radon is a major indoor pollutant.
3. Use of VOC-rich paints can worsen it.

Which are correct?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Answer - (d)

Explanation – All are correct sources/facts related to indoor air pollution.

Question 123. Which of the following is not correctly matched?

Technique – Description

(a) Bioventing – Uses bacteria to degrade organics in soil

(b) Bioaugmentation – Uses imported microbes

(c) Biosparging – Injects air into water table

(d) Phytoremediation – Removes metals using fungi

Answer - (d)

Explanation –

(a) Bioventing – Correct

Bioventing is an in-situ remediation technique that enhances the activity of indigenous bacteria by supplying air or oxygen to contaminated soil. It helps degrade organic contaminants, particularly in unsaturated zones.

(b) Bioaugmentation – Correct

Bioaugmentation involves the addition of specific strains of microorganisms (imported microbes) to a contaminated site to accelerate the degradation of pollutants. These are often genetically engineered or naturally efficient strains.

(c) Biosparging – Correct

Biosparging is the process of injecting air or oxygen into the saturated zone (groundwater) to stimulate the activity of indigenous bacteria for degrading pollutants, especially volatile organic compounds (VOCs).

(d) Phytoremediation – Incorrectly matched

Phytoremediation is the use of plants, not fungi, to remove, transfer, stabilize, or destroy contaminants, including heavy metals, from soil and water. While fungi are used in mycoremediation, phytoremediation is plant-based.

Question 124. The pollutant responsible for 'Itai-Itai disease' is –

(a) Lead

(b) Cadmium

(c) Mercury

(d) Arsenic

Answer - (b)

Explanation – Cadmium causes Itai-Itai disease, affecting bones and joints.

Question 125. Water contaminated with excess fluoride can cause –

(a) Blackfoot disease

(b) Knock-knee syndrome

(c) Minamata disease

(d) Blue baby syndrome

Answer - (b)

Explanation – Knock-knee syndrome and skeletal fluorosis are caused by fluoride contamination.

Question 126. The term 'Dead Zone' refers to:

(a) Areas with intense UV radiation

(b) Marine zones with low oxygen

(c) Places with high biodiversity

(d) Forests affected by acid rain

Answer - (b)

Explanation – Dead zones are oxygen-depleted marine zones due to eutrophication.

Question 127. Which pollutant is correctly matched with its disease?

(a) Mercury – Minamata

(b) Arsenic – Fluorosis

(c) Cadmium – Skin lesions

(d) Fluoride – Lung cancer

Answer - (a)

Explanation –

(a) Mercury – Minamata → Correct

Minamata disease is a neurological syndrome caused by methylmercury poisoning, first discovered in Minamata, Japan, due to industrial discharge into water bodies.

(b) Arsenic – Fluorosis → Incorrect

Arsenic contamination causes arsenicosis, which includes skin lesions, cancer, and cardiovascular effects.

Fluorosis is caused by excessive fluoride, not arsenic.

(c) Cadmium – Skin lesions → Incorrect

Cadmium exposure causes Itai-Itai disease, affecting bones and kidneys. Skin lesions are more associated with arsenic exposure.

(d) Fluoride – Lung cancer → Incorrect

Fluoride in high doses causes dental and skeletal fluorosis, not lung cancer. Lung cancer is more associated with pollutants like asbestos or particulate matter.

Question 128. Assertion (A): CO_2 is excluded from AQI.

Reason (R): CO_2 does not affect human health in normal conditions.

Code:

(a) Both A and R true, R correct explanation

(b) Both A and R true, R not correct explanation

(c) A true, R false

(d) A false, R true

Answer - (a)

Explanation – CO_2 isn't an AQI parameter as it doesn't affect health directly in small quantities.

Question 129. Water contaminated with high nitrates can cause –

(a) Fluorosis

(b) Minamata disease

(c) Blue baby syndrome

(d) Itai-Itai

Answer - (c)

Explanation – Nitrates cause methemoglobinemia (Blue Baby Syndrome).

Question 130. Consider the following statements:

1. Noise above 85 dB can cause hearing loss.
2. WHO considers noise under 70 dB safe.

Which of the above statements is/are true?

(a) Only 1

(b) Only 2

(c) Both 1 and 2

(d) Neither 1 nor 2

Answer - (c)

Explanation –

Statement 1: True

According to health agencies like NIOSH (USA) and WHO, exposure to noise above 85 decibels (dB) over extended periods (typically 8 hours or more) can cause permanent hearing loss. This is especially a concern in workplaces and urban traffic zones.

Statement 2: True

The World Health Organization (WHO) recommends that environmental noise levels should be below 70 dB over a 24-hour average to prevent hearing impairment in the general population. For nighttime, it recommends even lower levels (~40–55 dB) to avoid sleep disturbance.

Question 131. Arrange the following types of radiation in order of penetration (low to high):

A. Alpha

B. Beta

C. Gamma

Code:

(a) A, C, B

(b) A, B, C

(c) C, B, A

(d) B, C, A

Answer - (b)

Explanation – Gamma penetrates the most; alpha the least.

Question 132. Identify the odd pair:

(a) Becquerel – Radioactivity

(b) Roentgen – X-rays

(c) Sievert – Sound intensity

(d) Gray – Absorbed dose

Answer - (c)

Explanation – Sievert measures radiation, not sound.

Question 133. What is the major goal of Mission Amrit Sarovar?

(a) Artificial recharge wells

(b) Urban wastewater reuse

(c) Rejuvenation of 75 water bodies per district

(d) Canal irrigation in tribal areas

Answer - (c)

Explanation – The mission aims to rejuvenate 75 water bodies per district.

Question 134. Choose the correct statement:

(a) GLOFs reduce flooding downstream.

(b) Dead zones are rich in oxygen.

(c) Riparian buffers reduce agricultural runoff.

(d) Phytoremediation uses heat to remove toxins.

Answer - (c)

Explanation – Riparian buffers (vegetation along streams) filter runoff and reduce pollution.

Question 135. Assertion (A): Eucalyptus trees reduce sewage water in ponds.

Reason (R): They absorb and release water vapour efficiently.

Code:

(a) Both A and R true, and R is correct explanation

(b) Both A and R true, but R not correct explanation

(c) A true, R false

(d) A false, R true

Answer - (a)

Explanation – Eucalyptus are used in sewage ponds for rapid water absorption.

Question 136. What type of toilet decomposes human waste using anaerobic bacteria?

(a) Ecosan

(b) RO toilet

(c) Bio-toilet

(d) Flush tank

Answer - (c)

Explanation – Bio-toilets use anaerobic bacteria in digesters to treat waste.

Question 137. Match the pollutant with its major source:

A. Mercury – 1. Paper Industry

B. Arsenic – 2. Groundwater

C. Lead – 3. Old Plumbing

D. Cadmium – 4. Electroplating

Code:

A B C D

(a) 1 2 3 4

(b) 2 1 3 4

(c) 1 3 2 4

(d) 4 2 1 3

Answer: (a) 1 2 3 4

Explanation:

Mercury – Paper industry

Arsenic – Naturally present in groundwater (e.g. UP, Bihar)

Lead – Found in old pipes/plumbing

Cadmium – Used in electroplating and batteries

Question 138. Choose the incorrect statement:

(a) Thermal pollution increases dissolved oxygen in water.

(b) Oil spills form a layer that blocks oxygen.

(c) Algal bloom is associated with nutrient enrichment.

(d) Coliform bacteria indicate fecal contamination.

Answer: (a) Thermal pollution increases dissolved oxygen in water.

Explanation: Warmer water holds less oxygen. So thermal pollution actually decreases oxygen levels.

Question 139. Which of the following are biodegradable pollutants?

A. Sewage

B. Pesticides

C. Detergents

D. Heavy metals

Code:

(a) A and B only

(b) A and C only

(c) A, C and D

(d) B, C and D

Answer: (b) A and C only

Explanation:

Sewage and some detergents are biodegradable.

Pesticides and heavy metals are non-biodegradable.

Question 140. Choose the correct statement:

(a) Incineration is a biological treatment process.

(b) Composting is suitable for dry, non-biodegradable waste.

(c) Vermiculture involves using bacteria for waste digestion.

(d) Pyrolysis is a thermochemical process without oxygen.

Answer - (d)

Explanation:

(a) Incorrect: Incineration is a thermal (not biological) process used to burn waste at high temperatures.

(b) Incorrect: Composting is ideal for wet, biodegradable waste like food and plant material, not for dry or non-biodegradable waste.

(c) Incorrect: Vermiculture uses earthworms, not bacteria, to break down organic matter.

(d) Correct: Pyrolysis is a thermochemical decomposition of materials at high temperatures in the absence of oxygen, used for converting biomass or plastic into gas, oil, or char.

Question 141. Match the following waste types with disposal methods:

A. Low-level radioactive waste — 1. Incineration

B. Municipal Solid Waste — 2. Composting

C. High-level radioactive waste — 3. Deep geological disposal

D. Plastic waste — 4. Road construction

Code:

A B C D

(a) 1 2 3 4

(b) 2 1 3 4

(c) 3 2 4 1

(d) 4 3 1 2

Answer - (a)

Explanation – Correct disposal methods aligned with the respective waste type.

Question 142. Which rule introduced the concept of Extended Producer Responsibility (EPR) for the first time?

(a) Hazardous Waste Rules

(b) Bio-medical Waste Rules

(c) Plastic Waste Management Rules

(d) E-Waste Management Rules, 2016

Answer - (d)

Explanation – E-Waste Management Rules, 2016 brought EPR obligations on producers.

Question 143. What does 'Cradle to Grave' policy relate to?

(a) E-waste recycling

(b) Hazardous waste tracking

(c) Compost generation

(d) Bio-medical waste transport

Answer - (b)

Explanation – 'Cradle to Grave' implies complete lifecycle management of hazardous waste.

Question 144. What is the minimum thickness prescribed for plastic carry bags under Plastic Waste Management Rules, 2016?

(a) 20 microns

(b) 30 microns

(c) 40 microns

(d) 50 microns

Answer - (d)

Explanation – The 2016 rules increased the minimum thickness of plastic carry bags from 40 to 50 microns to encourage reuse and ease of recycling.

Question 145. Assertion (A): Vermicomposting involves earthworms.

Reason (R): Earthworms consume plastics and metals.

Code:

(a) Both A and R are true, and R is the correct explanation of A

(b) Both A and R are true, but R is not the correct explanation of A

(c) A is true, R is false

(d) A is false, R is true

Answer - (c)

Explanation – Vermicomposting involves decomposition of organic waste by earthworms, not metals or plastics.

Question 146. Which of the following is not a form of renewable energy?

(a) Solar energy

(b) Nuclear energy

(c) Wind energy

(d) Biomass energy

Answer: (b)

Explanation: Nuclear energy is considered non-fossil but not renewable, as uranium/plutonium resources are finite.

Question 147. India's renewable energy target by 2030 under Panchamrit includes which of the following?

A. 50% energy from renewables

B. 500 GW renewable capacity

Select the correct Answer using the code below:

(a) Only A

(b) Only B

(c) A and B

(d) None of the above

Answer: (c)

Explanation: Both are part of India's Panchamrit commitments announced at COP26.

Question 148. Which of the following is correctly matched?

(a) Green Hydrogen – Electrolysis using fossil fuels

(b) Blue Hydrogen – Electrolysis using solar energy

(c) Grey Hydrogen – Natural Gas without CCUS

(d) White Hydrogen – Artificially produced in labs

Answer: (c)

Explanation: Grey Hydrogen is derived from methane without capturing carbon.

Question 149. Consider the following statements:

1. National Wind Mission aims for 60 GW onshore wind power by 2030.
2. Offshore wind potential in India is higher than onshore.
3. India's largest wind capacity is installed in Gujarat.

Which are correct?

(a) 1 and 2 only

(b) 2 and 3 only

(c) 1 and 3 only

(d) 1, 2 and 3

Answer: (a)

Explanation: Tamil Nadu, not Gujarat, leads wind capacity. Statements 1 and 2 are correct.

Question 150. Which of the following organizations is the headquarters of the International Solar Alliance (ISA)?

(a) Paris, France

(b) Gurugram, India

(c) Geneva, Switzerland

(d) Nairobi, Kenya

Answer: (b)

Explanation: ISA headquarters is located in Gurugram, Haryana, India.