

AS' SAARTHI IAS

MAJOR ENVIRONMENTAL ISSUES

1. Which of the following is considered a biotic component of the environment?

- a) Rocks
- b) Soil
- c) Vegetation
- d) Sun

Answer: c) Vegetation

Explanation: Vegetation is a biotic component of the environment, which includes living organisms like plants and trees. Rocks, soil, and the sun are abiotic components.

Additional Information: Vegetation plays a crucial role in regulating climate and supporting ecosystems by providing oxygen and serving as the base of food chains.

2. What is the critical threshold of Dissolved Oxygen (DO) in water below which it is considered polluted?

- a) 10.0 mg/L
- b) 9.0 mg/L
- c) 8.0 mg/L
- d) 5.0 mg/L

Answer: c) 8.0 mg/L

Explanation: Dissolved Oxygen (DO) levels below 8.0 mg/L indicate that the water is polluted and can harm aquatic life.

Additional Information: Adequate DO levels are essential for the survival of aquatic organisms. Pollutants such as heavy metals and industrial waste can lower DO levels

3. Which of the following gases is a major contributor to the depletion of the ozone layer?

- a) Carbon dioxide
- b) Methane
- c) Chlorofluorocarbons (CFCs)
- d) Nitrous oxide

Answer: c) Chlorofluorocarbons (CFCs)

Explanation: CFCs are responsible for ozone

depletion, as they release chlorine atoms that destroy ozone molecules in the stratosphere.

Additional Information: The thinning of the ozone layer increases the Earth's exposure to harmful ultraviolet (UV) radiation, leading to health issues like skin cancer.

4. Which pollutant is primarily responsible for the formation of acid rain?

- a) Carbon dioxide
- b) Sulfur dioxide (SO₂)
- c) Oxygen
- d) Lead

Answer: b) Sulfur dioxide (SO₂)

Explanation: Sulfur dioxide, when released into the atmosphere, reacts with water vapor to form sulfuric acid, leading to acid rain.

Additional Information: Acid rain negatively affects crops, aquatic ecosystems, and buildings by lowering the pH levels of precipitation.

5. What is the primary source of nitrogen oxides (NO_x) that contributes to smog formation?

- a) Vehicle emissions
- b) Industrial waste
- c) Volcanic eruptions
- d) Mining activities

Answer: a) Vehicle emissions

Explanation: Vehicle exhaust releases nitrogen oxides, which react with other pollutants in the atmosphere to form smog.

Additional Information: Smog can cause respiratory problems and reduces visibility in urban areas

6. Which of the following is a traditional water conservation technique used in Rajasthan?

- a) Bawdi
- b) Sprinkler irrigation
- c) Check dam

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d) Artificial lakes

Answer: a) Bawdi

Explanation: Bawdi (stepwells) are traditional water conservation structures in Rajasthan that store rainwater and provide a year-round water supply.

Additional Information: These structures are vital for water conservation in Rajasthan's arid regions, where water scarcity is a significant issue.

7. What is the noise level above which sound is considered harmful to human health?

a) 50 dB

b) 60 dB

c) 70 dB

d) 80 dB

Answer: d) 80 dB

Explanation: Noise levels above 80 dB are considered harmful and can lead to hearing loss, stress, and reduced productivity.

Additional Information: Common sources of noise pollution include industrial machinery, traffic, and jet planes.

8. Which renewable energy source has the highest potential capacity in Rajasthan?

a) Solar energy

b) Wind energy

c) Biomass energy

d) Small hydropower

Answer: a) Solar energy

Explanation: Rajasthan has a potential capacity of 142 GW for solar energy, making it the state's most abundant renewable energy source.

Additional Information: Rajasthan receives over 325 sunny days per year, making it an ideal location for solar energy projects like the Bhadla Solar Park.

9. Which of the following pollutants is primarily linked to global warming?

a) Carbon monoxide (CO)

b) Lead

c) Carbon dioxide (CO₂)

d) Nitrogen dioxide (NO₂)

Answer: c) Carbon dioxide (CO₂)

Explanation: Carbon dioxide is a major greenhouse gas that traps heat in the Earth's atmosphere, leading to global warming.

Additional Information: CO₂ is released through the burning of fossil fuels, deforestation, and other industrial processes

10. Which act regulates the discharge of pollutants into water bodies in India?

a) Environmental Protection Act (1986)

b) Water Pollution Prevention and Control Act (1974)

c) Air Pollution Prevention and Control Act (1981)

d) Biodiversity Act (2002)

Answer: b) Water Pollution Prevention and Control Act (1974)

Explanation: This act aims to prevent and control water pollution by regulating the discharge of pollutants into water bodies.

Additional Information: The act sets water quality standards and ensures the proper treatment of industrial effluents before their release into water bodies.

11. Which of the following is a primary cause of desertification in Rajasthan?

a) Deforestation

b) Heavy rainfall

c) Industrial pollution

d) Urbanization

Answer: a) Deforestation

Explanation: Deforestation, combined with overgrazing and unsustainable farming practices, is a leading cause of desertification in Rajasthan.

Additional Information: Desertification leads to the loss of fertile land and biodiversity, making it harder for communities to sustain agriculture

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12. The Indira Gandhi Canal primarily provides water to which region in Rajasthan?

- a) Southern Rajasthan
- b) Thar Desert
- c) Aravalli Hills
- d) Eastern Rajasthan

Answer: b) Thar Desert

Explanation: The Indira Gandhi Canal supplies irrigation water to the northwestern desert regions of Rajasthan, transforming barren land into productive agricultural areas.

Additional Information: The canal is the longest in India, spanning from Punjab to Rajasthan.

13. Which pollutant is primarily responsible for the neurological damage associated with air pollution?

- a) Lead
- b) Carbon dioxide
- c) Ozone
- d) Methane

Answer: a) Lead

Explanation: Lead, often found in industrial waste and vehicle exhaust, can cause neurological damage when inhaled or ingested.

Additional Information: Lead poisoning is particularly harmful to children, as it affects brain development and cognitive abilities.

14. Which of the following renewable energy sources is underutilized in Rajasthan compared to solar and wind energy?

- a) Biomass energy
- b) Wind energy
- c) Solar energy
- d) Small hydropower

Answer: a) Biomass energy

Explanation: Despite the potential from agricultural residues, biomass energy remains underutilized in Rajasthan compared to solar and wind energy.

Additional Information: Biomass energy is derived from organic materials such as crop residues and animal waste, which are abundant in Rajasthan's agricultural areas

15. Which of the following pollutants is responsible for the greenhouse effect and global warming?

- a) Chlorofluorocarbons (CFCs)
- b) Sulfur dioxide
- c) Carbon dioxide
- d) Nitrous oxide

Answer: c) Carbon dioxide

Explanation: Carbon dioxide is a greenhouse gas that contributes to the trapping of heat in the Earth's atmosphere, leading to global warming.

Additional Information: Global warming is a major driver of climate change, leading to rising sea levels, extreme weather events, and biodiversity loss.

16. Which traditional water harvesting technique in Rajasthan involves building a small underground tank for collecting rainwater?

- a) Bawdi
- b) Tanka
- c) Kund
- d) Kui

Answer: b) Tanka

Explanation: A Tanka is a traditional rainwater harvesting system where a small underground tank is used to collect and store rainwater, especially in the Thar Desert.

Additional Information: Tankas are commonly used in arid regions for household purposes, providing a crucial water source during dry periods

17. Which renewable energy project is one of the largest solar parks in the world, located in Rajasthan?

- a) Mahi Bajaj Sagar Dam
- b) Jaisalmer Wind Park
- c) Bhadla Solar Park

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d) Jhalara Solar Project

Answer: c) Bhadla Solar Park

Explanation: Bhadla Solar Park, located in Jodhpur, is one of the largest solar parks in the world with a total capacity of over 2,245 MW.

Additional Information: Rajasthan receives high levels of solar radiation, making it ideal for solar power generation and positioning the state as a leader in India's renewable energy sector

18. Which act in India was introduced to protect forests from deforestation and illegal logging?

- a) Water Pollution Prevention and Control Act (1974)
- b) Environmental Protection Act (1986)
- c) Forest Conservation Act (1980)
- d) Air Pollution Prevention and Control Act (1981)

Answer: c) Forest Conservation Act (1980)

Explanation: The Forest Conservation Act (1980) aims to protect forests from deforestation, illegal logging, and other forms of exploitation, promoting sustainable forest management.

Additional Information: Forest conservation is vital for maintaining biodiversity, regulating climate, and supporting livelihoods in forest-dependent communities.

19. What is the major environmental issue caused by sulfur dioxide (SO₂) and nitrogen oxides (NO_x) mixing with rainwater?

- a) Greenhouse effect
- b) Acid rain
- c) Ozone depletion
- d) Smog

Answer: b) Acid rain

Explanation: Sulfur dioxide and nitrogen oxides mix with rainwater to form acidic compounds, resulting in acid rain, which damages ecosystems and infrastructure.

Additional Information: Acid rain affects soil fertility, aquatic life, and even buildings by corroding materials like limestone and marble.

20. Which of the following is a major pollutant from vehicle exhaust that reduces oxygen levels in the bloodstream?

- a) Carbon monoxide (CO)
- b) Carbon dioxide (CO₂)
- c) Sulfur dioxide (SO₂)
- d) Methane (CH₄)

Answer: a) Carbon monoxide (CO)

Explanation: Carbon monoxide is a poisonous gas that binds to hemoglobin in the bloodstream, reducing the oxygen-carrying capacity of blood, which can lead to suffocation.

Additional Information: High levels of carbon monoxide exposure can be fatal, especially in poorly ventilated spaces.

21. Which traditional water conservation structure in Rajasthan is used to capture rainwater in sandy soil areas?

- a) Bawdi
- b) Kund
- c) Tanka
- d) Jhalara

Answer: b) Kund

Explanation: Kunds are traditional water harvesting structures built in sandy areas, designed to collect and store rainwater for use during dry periods.

Additional Information: These systems are highly efficient in desert regions where water is scarce, helping communities survive long dry seasons.

22. Which renewable energy policy in Rajasthan aims to achieve 30 GW of solar energy capacity by 2025?

- a) Rajasthan Wind and Hybrid Energy Policy (2019)
- b) Rajasthan Solar Energy Policy (2019)
- c) Net Metering Policy
- d) Energy Conservation Building Code

Answer: b) Rajasthan Solar Energy Policy (2019)

Explanation: The Rajasthan Solar Energy

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Policy (2019) aims to boost solar power generation in the state, targeting 30 GW of capacity by 2025.

Additional Information: The policy includes incentives like subsidies, streamlined land acquisition, and grid connectivity to attract investments in solar energy projects

23. Which pollutant is associated with smog formation and respiratory issues, particularly in urban areas?

- a) Nitrogen oxides (NO_x)
- b) Carbon dioxide (CO₂)
- c) Chlorofluorocarbons (CFCs)
- d) Ozone (O₃)

Answer: a) Nitrogen oxides (NO_x)

Explanation: Nitrogen oxides, primarily from vehicle emissions, contribute to the formation of ground-level ozone and smog, causing respiratory problems.

Additional Information: Smog is a common environmental issue in urban areas with heavy traffic and industrial activities.

24. Which act in India aims to prevent the release of pollutants into the atmosphere by regulating industrial emissions?

- a) Air Pollution Prevention and Control Act (1981)
- b) Environmental Protection Act (1986)
- c) Water Pollution Prevention and Control Act (1974)
- d) Biodiversity Act (2002)

Answer: a) Air Pollution Prevention and Control Act (1981)

Explanation: The Air Pollution Prevention and Control Act (1981) regulates industrial emissions and aims to reduce air pollution across India.

Additional Information: This act sets standards for air quality and emissions, helping to mitigate the health and environmental impacts of air pollution

25. Which water conservation technique in Rajasthan is used to retain water in agricultural fields by bunding?

- a) Bawdi

- b) Tanka
- c) Khadeen
- d) Jhalara

Answer: c) Khadeen

Explanation: Khadeen is a traditional water harvesting technique that involves bunding to retain surface runoff in agricultural fields, helping to store water for irrigation.

Additional Information: Khadeen systems are commonly used in Rajasthan's desert areas, where water retention is crucial for crop survival.

26. Which renewable energy source in Rajasthan has the potential to generate around 18.77 GW of electricity?

- a) Solar energy
- b) Wind energy
- c) Biomass energy
- d) Small hydropower

Answer: b) Wind energy

Explanation: Rajasthan has a potential wind energy capacity of 18.77 GW, particularly in its western regions where wind speeds are high.

Additional Information: The Jaisalmer Wind Park is one of the largest wind farms in India, contributing significantly to Rajasthan's renewable energy output.

27. Which environmental issue refers to the process where fertile land becomes desert due to unsustainable practices?

- a) Desertification
- b) Deforestation
- c) Erosion
- d) Industrialization

Answer: a) Desertification

Explanation: Desertification occurs when fertile land is degraded due to deforestation, overgrazing, and unsustainable farming practices, turning it into desert.

Additional Information: Desertification reduces the land's ability to support vegetation and agriculture, affecting local communities' livelihoods.

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28. Which Rajasthan initiative aims to make villages self-reliant in water through rainwater harvesting?

- a) Atal Groundwater Scheme
- b) Jal Swavlamban Yojana
- c) Desert Plantation Program
- d) National Lake Conservation Plan

Answer: b) Jal Swavlamban Yojana

Explanation: Jal Swavlamban Yojana focuses on building small dams, check dams, and ponds to capture rainwater and make villages self-sufficient in water.

Additional Information: This initiative involves community participation and is designed to combat water scarcity in Rajasthan's rural areas.

29. Which program in Rajasthan focuses on afforestation in desert regions to prevent the movement of sand dunes?

- a) Green Rajasthan
- b) Desert Plantation Program
- c) Van Dhan Yojana
- d) Aravalli Plantation Program

Answer: b) Desert Plantation Program

Explanation: The Desert Plantation Program, initiated in 1977–78, focuses on afforestation in desert regions of Rajasthan to prevent sand dune movement and combat desertification.

Additional Information: Afforestation efforts are crucial for maintaining ecological balance and reducing desert expansion in arid regions.

30. What is the major pollutant responsible for the depletion of the ozone layer, which protects Earth from harmful UV radiation?

- a) Chlorofluorocarbons (CFCs)
- b) Carbon monoxide
- c) Sulfur dioxide
- d) Nitrogen oxides

Answer: a) Chlorofluorocarbons (CFCs)

Explanation: CFCs are chemicals that break down ozone molecules in the stratosphere, leading to the depletion of the ozone layer.

Additional Information: Ozone layer depletion increases the risk of skin cancer, cataracts, and other health issues due to increased UV exposure.

31. Which of the following is a key component of noise pollution that can lead to hearing loss and stress?

- a) Noise levels above 60 dB
- b) Noise levels above 50 dB
- c) Noise levels above 80 dB
- d) Noise levels above 30 dB

Answer: c) Noise levels above 80 dB

Explanation: Noise pollution is harmful when noise levels exceed 80 dB, causing hearing loss, stress, and other health issues.

Additional Information: Common sources of noise pollution include transportation systems, industrial machinery, and loudspeakers.

32. Which of the following is a key source of biomass energy in Rajasthan?

- a) Agricultural residues
- b) Solar panels
- c) Hydropower
- d) Wind turbines

Answer: a) Agricultural residues

Explanation: Biomass energy in Rajasthan is derived from agricultural residues such as mustard stalks, cotton stalks, and other organic matter.

Additional Information: Biomass energy is renewable and can be used to generate electricity, especially in states with large agricultural sectors like Rajasthan.

33. Which of the following is a modern water conservation initiative in Rajasthan aimed at improving groundwater recharge?

- a) Bawdi
- b) Tanka
- c) Atal Groundwater Scheme
- d) Khadeen

Answer: c) Atal Groundwater Scheme

Explanation: The Atal Groundwater Scheme,

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initiated in 2019, focuses on groundwater recharge and management, promoting sustainable water use in areas facing critical groundwater depletion.

Additional Information: Groundwater is a crucial resource in Rajasthan, where surface water is scarce, making its conservation and recharge essential.

34. Which pollutant, primarily from industrial processes, contributes to acid rain formation?

- a) Sulfur dioxide (SO₂)
- b) Carbon monoxide (CO)
- c) Lead
- d) Methane

Answer: a) Sulfur dioxide (SO₂)

Explanation: Sulfur dioxide, released from burning fossil fuels in industries, reacts with water vapor in the atmosphere to form sulfuric acid, which leads to acid rain.

Additional Information: Acid rain can damage crops, forests, and buildings, and acidify water bodies, harming aquatic life.

35. Which act aims to regulate activities that could lead to air pollution and sets limits on industrial emissions?

- a) Air Pollution Prevention and Control Act (1981)
- b) Environmental Protection Act (1986)
- c) Forest Conservation Act (1980)
- d) Water Pollution Prevention and Control Act (1974)

Answer: a) Air Pollution Prevention and Control Act (1981)

Explanation: The Air Pollution Prevention and Control Act (1981) sets limits on industrial emissions and regulates activities that could lead to air pollution, promoting cleaner air.

Additional Information: Air pollution control is essential for maintaining public health and reducing the environmental impacts of industrial activities

36. Which technique in Rajasthan involves planting trees alongside crops to

conserve soil moisture and reduce water loss?

- a) Agroforestry
- b) Drip irrigation
- c) Khadeen system
- d) Bawdi

Answer: a) Agroforestry

Explanation: Agroforestry involves planting trees alongside crops, helping to conserve soil moisture, reduce water loss, and improve the resilience of agricultural systems.

Additional Information: Agroforestry is a sustainable farming practice that enhances biodiversity and reduces the need for frequent irrigation.

37. What is the focus of the Green Rajasthan program initiated between 2009–2014?

- a) Afforestation in desert regions
- b) Enhancing forest density and tree cover
- c) Organic farming promotion
- d) Groundwater recharge

Answer: b) Enhancing forest density and tree cover

Explanation: The Green Rajasthan program aimed to increase forest density and tree cover across the state to combat desertification and enhance ecological balance.

Additional Information: Increasing forest cover helps reduce carbon dioxide levels, protect biodiversity, and stabilize the climate.

38. Which pollutant, primarily from vehicle exhaust, reduces oxygen levels in human blood, leading to potential suffocation?

- a) Carbon monoxide (CO)
- b) Sulfur dioxide (SO₂)
- c) Nitrogen oxides (NO_x)
- d) Ozone (O₃)

Answer: a) Carbon monoxide (CO)

Explanation: Carbon monoxide is a colorless, odorless gas that binds with hemoglobin in the

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bloodstream, reducing the blood's ability to carry oxygen.

Additional Information: High levels of carbon monoxide exposure can cause dizziness, unconsciousness, and even death, particularly in poorly ventilated spaces.

39. What is the primary environmental issue caused by the burning of fossil fuels in power plants and factories?

- a) Water pollution
- b) Air pollution
- c) Noise pollution
- d) Soil pollution

Answer: b) Air pollution

Explanation: The burning of fossil fuels in power plants and factories releases pollutants such as carbon dioxide, sulfur dioxide, and nitrogen oxides, contributing to air pollution.

Additional Information: Air pollution can lead to health problems, including respiratory diseases, and contribute to climate change through the release of greenhouse gases.

40. Which water conservation program in Rajasthan focuses on rainwater harvesting and building small dams to make villages self-reliant in water?

- a) Atal Groundwater Scheme
- b) National Lake Conservation Plan
- c) Jal Swavlamban Yojana
- d) Indira Gandhi Canal

Answer: c) Jal Swavlamban Yojana

Explanation: Jal Swavlamban Yojana focuses on rainwater harvesting and constructing small dams to capture rainwater, making villages self-reliant in water.

Additional Information: Community participation plays a significant role in the success of this program, which aims to mitigate water scarcity in rural Rajasthan.

41. Which traditional water harvesting system in Rajasthan involves a shallow well dug near agricultural fields to store excess water?

- a) Bawdi

b) Tanka

c) Kui

d) Kund

Answer: c) Kui

Explanation: Kui is a traditional water harvesting system in Rajasthan where shallow wells are dug near agricultural fields to store water for irrigation during dry periods.

Additional Information: The Kui system helps conserve water in areas with limited rainfall, ensuring a reliable water source for agriculture.

42. Which type of pollution is primarily caused by industrial noise, traffic, and urbanization?

- a) Water pollution
- b) Noise pollution
- c) Air pollution
- d) Soil pollution

Answer: b) Noise pollution

Explanation: Noise pollution is caused by harmful or excessive levels of noise from industrial machinery, transportation systems, and urbanization, leading to health issues such as stress and hearing loss.

Additional Information: Exposure to high levels of noise pollution over long periods can affect mental well-being and reduce productivity.

43. Which environmental protection body was established in Rajasthan to oversee the conservation of wetlands?

- a) Biodiversity Board
- b) Wetland Authority
- c) National Green Tribunal
- d) Directorate of Environment and Climate Change

Answer: b) Wetland Authority

Explanation: The Wetland Authority, established in 2019, is responsible for overseeing the conservation and management of wetlands in Rajasthan.

Additional Information: Wetlands play a critical role in maintaining water quality,

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supporting biodiversity, and protecting against floods.

44. Which pollutant, commonly released from industrial processes, contributes to neurological damage when inhaled?

- a) Lead
- b) Carbon dioxide
- c) Ozone
- d) Methane

Answer: a) Lead

Explanation: Lead, a heavy metal released from industrial processes and vehicle exhaust, causes neurological damage when inhaled or ingested, especially in children.

Additional Information: Lead exposure affects cognitive development and can lead to long-term health problems, particularly in vulnerable populations.

45. Which traditional rainwater harvesting system in Rajasthan is typically built near temples and communities to ensure a year-round water supply?

- a) Bawdi
- b) Jhalara
- c) Tanka
- d) Kund

Answer: b) Jhalara

Explanation: Jhalaras are man-made tanks used for collecting sub-surface water, often built near temples and communities to provide a reliable water supply throughout the year.

Additional Information: These structures help recharge groundwater and are crucial in regions with low rainfall.

46. Which renewable energy source in Rajasthan is ideal due to its high solar insolation and vast stretches of barren land?

- a) Wind energy
- b) Biomass energy
- c) Solar energy
- d) Small hydropower

Answer: c) Solar energy

Explanation: Rajasthan's high solar insolation and vast barren land make it ideal for large-scale solar energy projects, such as the Bhadla Solar Park.

Additional Information: Rajasthan is a leader in India's renewable energy sector, with plans to further expand its solar energy capacity in the coming years.

47. Which act was introduced in India to prevent the destruction of biodiversity and ensure sustainable use of its components?

- a) Biodiversity Act (2002)
- b) Forest Conservation Act (1980)
- c) Environmental Protection Act (1986)
- d) Air Pollution Prevention and Control Act (1981)

Answer: a) Biodiversity Act (2002)

Explanation: The Biodiversity Act (2002) aims to conserve biological diversity, ensure the sustainable use of its components, and share the benefits arising from the utilization of biological resources.

Additional Information: This act helps protect India's rich biodiversity and ensures that local communities benefit from the use of biological resources.

48. Which program in Rajasthan focuses on promoting organic farming and reducing the use of chemical fertilizers?

- a) Green Rajasthan
- b) Van Dhan Yojana
- c) Organic Agriculture Policy
- d) Atal Groundwater Scheme

Answer: c) Organic Agriculture Policy

Explanation: Rajasthan introduced the Organic Agriculture Policy in 2017 to promote organic farming, reduce the use of chemical fertilizers, and improve soil health.

Additional Information: Organic farming reduces environmental pollution, promotes sustainability, and ensures long-term soil fertility.

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49. Which of the following gases is a significant contributor to global warming due to its role in the greenhouse effect?

- a) Carbon monoxide (CO)
- b) Sulfur dioxide (SO₂)
- c) Carbon dioxide (CO₂)
- d) Nitrous oxide (NO₂)

Answer: c) Carbon dioxide (CO₂)

Explanation: Carbon dioxide is a greenhouse gas that traps heat in the Earth's atmosphere, contributing to global warming and climate change.

Additional Information: CO₂ emissions are primarily caused by the burning of fossil fuels, deforestation, and industrial activities.

50. Which modern irrigation method in Rajasthan delivers water directly to plant roots, conserving water in agriculture?

- a) Sprinkler irrigation
- b) Flood irrigation
- c) Drip irrigation
- d) Check dams

Answer: c) Drip irrigation

Explanation: Drip irrigation delivers water directly to the roots of plants, reducing water waste and conserving water, which is essential in arid regions like Rajasthan.

Additional Information: Drip irrigation is more efficient than traditional methods and is widely adopted in Rajasthan due to water scarcity.

51. Which program in Rajasthan aims to enhance the livelihoods of forest-dependent communities?

- a) Desert Plantation Program
- b) Van Dhan Yojana
- c) Aravalli Plantation Program
- d) Green Rajasthan

Answer: b) Van Dhan Yojana

Explanation: The Van Dhan Yojana, launched in 2015, focuses on improving the livelihoods of forest-dependent communities by promoting sustainable forest use.

Additional Information: This program encourages communities to derive income from forest resources while preserving the environment.

52. Which pollutant is primarily responsible for reducing the oxygen-carrying capacity of blood, leading to suffocation?

- a) Carbon monoxide (CO)
- b) Carbon dioxide (CO₂)
- c) Sulfur dioxide (SO₂)
- d) Ozone (O₃)

Answer: a) Carbon monoxide (CO)

Explanation: Carbon monoxide binds to hemoglobin in the bloodstream, reducing the amount of oxygen carried to cells, potentially leading to suffocation.

Additional Information: CO is a colorless, odorless gas, often emitted from vehicle exhaust and industrial processes.

53. Which traditional water conservation system in Rajasthan involves bunding to retain water in agricultural fields?

- a) Bawdi
- b) Khadeen system
- c) Tanka
- d) Jhalara

Answer: b) Khadeen system

Explanation: The Khadeen system involves bunding to retain surface runoff water in agricultural fields, storing it for irrigation during dry periods.

Additional Information: This technique is particularly useful in Rajasthan's desert areas, where water retention is crucial for agriculture.

54. Which type of renewable energy project in Rajasthan combines wind farms and solar power plants to optimize land use?

- a) Wind-solar hybrid projects
- b) Biomass energy projects
- c) Hydropower projects
- d) Waste-to-energy projects

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Answer: a) Wind-solar hybrid projects

Explanation: Wind-solar hybrid projects combine wind farms and solar power plants on the same land, maximizing energy production and optimizing land use.

Additional Information: Hybrid projects provide more continuous energy generation, as wind energy is often higher at night and solar energy is generated during the day.

55. Which renewable energy source in Rajasthan has the potential to produce 18.77 GW of electricity?

- a) Biomass energy
- b) Solar energy
- c) Wind energy
- d) Small hydropower

Answer: c) Wind energy

Explanation: Rajasthan has a wind energy potential of around 18.77 GW, particularly in the western desert regions where wind speeds are high.

Additional Information: Jaisalmer Wind Park is one of the largest wind farms in India, contributing significantly to Rajasthan's wind energy production.

56. Which environmental issue refers to the process where fertile land becomes desert due to overgrazing, deforestation, and unsustainable farming practices?

- a) Desertification
- b) Soil erosion
- c) Land pollution
- d) Industrialization

Answer: a) Desertification

Explanation: Desertification occurs when fertile land is degraded due to overgrazing, deforestation, and unsustainable agricultural practices, turning it into desert.

Additional Information: Desertification reduces the land's ability to support vegetation and agriculture, making it difficult for local communities to sustain their livelihoods.

57. Which act in India focuses on preventing the discharge of pollutants

into water bodies and maintaining water quality?

- a) Water Pollution Prevention and Control Act (1974)
- b) Air Pollution Prevention and Control Act (1981)
- c) Environmental Protection Act (1986)
- d) Biodiversity Act (2002)

Answer: a) Water Pollution Prevention and Control Act (1974)

Explanation: The Water Pollution Prevention and Control Act (1974) regulates the discharge of pollutants into water bodies to maintain and restore water quality.

Additional Information: This act is crucial for protecting India's rivers, lakes, and groundwater from industrial and agricultural pollution.

58. Which program in Rajasthan focuses on afforestation and reforestation of the Aravalli mountain range?

- a) Green Rajasthan
- b) Aravalli Plantation Program
- c) Van Dhan Yojana
- d) Desert Plantation Program

Answer: b) Aravalli Plantation Program

Explanation: The Aravalli Plantation Program, launched in 1992, focuses on afforestation and restoring the ecological health of the Aravalli mountain range in Rajasthan.

Additional Information: The Aravalli range plays a critical role in regulating the climate and water cycle in Rajasthan.

59. Which pollutant, primarily released from vehicle exhaust, contributes to the formation of ground-level ozone and smog?

- a) Nitrogen oxides (NO_x)
- b) Carbon dioxide (CO₂)
- c) Lead
- d) Chlorofluorocarbons (CFCs)

Answer: a) Nitrogen oxides (NO_x)

Explanation: Nitrogen oxides, particularly

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from vehicle emissions, contribute to the formation of ground-level ozone, which is a major component of smog.

Additional Information: Smog is a common environmental issue in urban areas with heavy traffic and industrial activities, causing respiratory problems and reducing visibility.

60. Which of the following initiatives in Rajasthan focuses on conserving and restoring the state's lakes, which are critical water sources?

- a) National Lake Conservation Plan
- b) Jal Swavlamban Yojana
- c) Atal Groundwater Scheme
- d) Green Rajasthan

Answer: a) National Lake Conservation Plan

Explanation: The National Lake Conservation Plan (2016) focuses on conserving and restoring Rajasthan's lakes, which are essential for maintaining water supplies in urban and rural areas.

Additional Information: Restoring lakes helps recharge groundwater, control pollution, and support biodiversity in Rajasthan's arid regions.

61. Which environmental factor plays a critical role in regulating climate and supporting ecosystems by providing oxygen?

- a) Soil
- b) Vegetation
- c) Rocks
- d) Sunlight

Answer: b) Vegetation

Explanation: Vegetation, as a biotic component, regulates climate, supports ecosystems by providing oxygen through photosynthesis, and forms the basis of food chains.

Additional Information: Deforestation and degradation of vegetation disrupt ecosystems, contribute to climate change, and reduce biodiversity.

62. Why is dissolved oxygen (DO) in water important for aquatic life?

- a) It helps filter pollutants.
- b) It sustains the respiration of aquatic organisms.
- c) It regulates water temperature.
- d) It reduces soil erosion.

Answer: b) It sustains the respiration of aquatic organisms.

Explanation: Aquatic organisms, including fish and microorganisms, rely on dissolved oxygen for respiration. A low DO level can result in the death of aquatic life.

Additional Information: DO levels are affected by pollutants such as heavy metals, industrial waste, and agricultural runoff, leading to hypoxic conditions in water bodies.

63. Which reasoning best explains why acid rain damages aquatic ecosystems?

- a) Acid rain increases water temperatures.
- b) Acid rain lowers the pH of water bodies, making the environment too acidic for aquatic organisms to survive.
- c) Acid rain adds nutrients to the water, causing overgrowth of aquatic plants.
- d) Acid rain creates sedimentation in water bodies.

Answer: b) Acid rain lowers the pH of water bodies, making the environment too acidic for aquatic organisms to survive.

Explanation: Acid rain decreases the pH of water, creating an acidic environment harmful to aquatic organisms, affecting biodiversity.

Additional Information: Acid rain is primarily caused by sulfur dioxide and nitrogen oxides released from industrial activities, affecting both terrestrial and aquatic ecosystems.

64. What would be the most effective method for reducing sulfur dioxide (SO₂) emissions, a key contributor to acid rain?

- a) Increasing the use of fossil fuels
- b) Using scrubbers in industrial plants
- c) Encouraging deforestation
- d) Reducing the use of solar energy

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Answer: b) Using scrubbers in industrial plants

Explanation: Scrubbers in industrial plants remove sulfur dioxide from emissions before they are released into the atmosphere, reducing acid rain formation.

Additional Information: Acid rain can damage crops, buildings, and aquatic ecosystems, and effective emission control measures can help mitigate its effects.

65. Why is the promotion of drip irrigation in Rajasthan considered a critical water conservation method?

- a) It floods the fields with excessive water.
- b) It delivers water directly to plant roots, minimizing evaporation losses.
- c) It is only suitable for large-scale commercial farming.
- d) It reduces soil fertility.

Answer: b) It delivers water directly to plant roots, minimizing evaporation losses.

Explanation: Drip irrigation is an efficient water-saving method that reduces evaporation by delivering water directly to plant roots, making it ideal for arid regions like Rajasthan.

Additional Information: Drip irrigation is increasingly adopted in Rajasthan to conserve water and improve agricultural productivity in areas with scarce water resources.

66. What critical role does the Van Dhan Yojana play in the context of environmental conservation in Rajasthan?

- a) It promotes deforestation.
- b) It enhances the livelihoods of forest-dependent communities through sustainable forest use.
- c) It promotes industrial expansion in forest areas.
- d) It encourages the overuse of forest resources.

Answer: b) It enhances the livelihoods of forest-dependent communities through sustainable forest use.

Explanation: The Van Dhan Yojana focuses on empowering forest-dependent communities by promoting the sustainable use of forest

resources, thus ensuring environmental conservation.

Additional Information: This initiative helps maintain the ecological balance in Rajasthan while supporting the livelihoods of communities that depend on forest resources.

67. Which of the following best explains why Rajasthan is ideal for solar energy production?

- a) Its high rainfall and dense forests
- b) Its high solar insolation and vast stretches of barren land
- c) Its proximity to the ocean
- d) Its mountainous terrain

Answer: b) Its high solar insolation and vast stretches of barren land

Explanation: Rajasthan's high solar insolation (amount of sunlight received) and large barren land areas make it one of the best states for solar energy production.

Additional Information: The Bhadla Solar Park in Rajasthan is one of the largest solar parks globally, contributing significantly to India's renewable energy goals.

68. Why is the hybrid wind-solar model considered efficient for renewable energy generation in Rajasthan?

- a) It uses fossil fuels along with wind and solar.
- b) It combines wind and solar energy, optimizing energy generation throughout the day and night.
- c) It relies solely on wind energy.
- d) It increases the cost of energy production.

Answer: b) It combines wind and solar energy, optimizing energy generation throughout the day and night.

Explanation: Hybrid wind-solar models use solar energy during the day and wind energy at night, providing a continuous energy supply and optimizing land use.

Additional Information: Hybrid energy projects are becoming more popular in Rajasthan, helping to ensure reliable and sustainable energy production.

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69. How does promoting organic farming help in addressing soil degradation in Rajasthan?

- a) It increases the use of chemical fertilizers.
- b) It reduces the reliance on chemical fertilizers and pesticides, improving soil health.
- c) It decreases crop yield.
- d) It contributes to deforestation.

Answer: b) It reduces the reliance on chemical fertilizers and pesticides, improving soil health.

Explanation: Organic farming promotes the use of natural fertilizers and biopesticides, enhancing soil fertility and preventing the degradation caused by chemicals.

Additional Information: Rajasthan's Organic Agriculture Policy (2017) supports this shift to sustainable farming practices to protect the environment and improve crop quality.

70. What is the primary reasoning behind the implementation of Rajasthan's Atal Groundwater Scheme?

- a) To promote industrial expansion
- b) To recharge depleted groundwater levels and encourage sustainable water management practices
- c) To reduce agricultural activities
- d) To increase deforestation

Answer: b) To recharge depleted groundwater levels and encourage sustainable water management practices

Explanation: The Atal Groundwater Scheme focuses on recharging Rajasthan's rapidly depleting groundwater levels by promoting sustainable water management.

Additional Information: Groundwater is a critical resource in Rajasthan, especially in arid regions, and its conservation is vital for long-term water security.

71. What would be the most logical reasoning for constructing check dams in Rajasthan?

- a) To increase urbanization
- b) To store rainwater and recharge groundwater in rural areas

- c) To promote industrial waste disposal
- d) To reduce agricultural land

Answer: b) To store rainwater and recharge groundwater in rural areas

Explanation: Check dams are constructed to slow down water flow, allowing it to seep into the ground and recharge aquifers, which is crucial for water conservation in arid regions.

Additional Information: Check dams are widely used in Rajasthan to address water scarcity, particularly in rural areas that rely heavily on groundwater for agriculture.

72. Which analytical approach best explains the effectiveness of tree plantation programs in preventing desertification in Rajasthan?

- a) Trees increase soil erosion in desert areas.
- b) Tree plantation helps bind soil, prevent sand dune movement, and reduce desert expansion.
- c) Trees reduce groundwater recharge.
- d) Trees deplete natural resources.

Answer: b) Tree plantation helps bind soil, prevent sand dune movement, and reduce desert expansion.

Explanation: Trees stabilize the soil, prevent sand dune movement, and reduce the expansion of desert areas, making them an effective tool in combating desertification.

Additional Information: Rajasthan's Desert Plantation Program plays a vital role in preventing desertification by increasing forest cover in vulnerable areas.

73. Why is the conservation of Rajasthan's lakes critical for both urban and rural populations?

- a) Lakes are used for industrial waste disposal.
- b) Lakes serve as vital water sources, helping with groundwater recharge and providing water for agriculture, drinking, and industry.
- c) Lakes prevent deforestation.
- d) Lakes increase desertification.

Answer: b) Lakes serve as vital water sources, helping with groundwater recharge and providing water for agriculture, drinking, and industry.

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Explanation: The conservation of lakes ensures sustainable water supplies for both urban and rural areas, contributing to water security and ecosystem health.

Additional Information: The National Lake Conservation Plan in Rajasthan focuses on restoring lakes to support water needs, particularly in water-scarce regions.

74. What is the most logical explanation for promoting the use of renewable energy in Rajasthan?

- a) It increases air pollution.
- b) It reduces dependency on fossil fuels, decreases greenhouse gas emissions, and promotes sustainable development.
- c) It increases the cost of energy production.
- d) It depletes natural resources.

Answer: b) It reduces dependency on fossil fuels, decreases greenhouse gas emissions, and promotes sustainable development.

Explanation: Promoting renewable energy like solar and wind reduces reliance on fossil fuels, curbing emissions that contribute to climate change and air pollution.

Additional Information: Rajasthan's favorable climate for solar and wind energy makes it a leading state in India's transition to renewable energy.

75. Which critical factor makes Rajasthan's wind energy sector particularly successful?

- a) High solar radiation
- b) Low wind speeds
- c) Consistently high wind speeds in desert regions
- d) Dense vegetation

Answer: c) Consistently high wind speeds in desert regions

Explanation: Rajasthan's desert regions, particularly in Jaisalmer, experience high wind speeds, making them ideal locations for wind energy generation.

Additional Information: The Jaisalmer Wind Park is one of the largest wind energy projects in

India, contributing significantly to Rajasthan's renewable energy output.

76. How does deforestation contribute to desertification in Rajasthan?

- a) It improves soil fertility.
- b) It leads to soil erosion and loss of vegetation, which accelerates desertification.
- c) It increases water retention in the soil.
- d) It promotes sustainable agriculture.

Answer: b) It leads to soil erosion and loss of vegetation, which accelerates desertification.

Explanation: Deforestation removes vegetation that binds soil, leading to erosion and desertification, especially in arid regions like Rajasthan.

Additional Information: Preventing deforestation through afforestation programs is a key strategy in combating desertification in Rajasthan.

77. Which reasoning best explains the importance of groundwater recharge techniques in Rajasthan?

- a) Groundwater is naturally abundant in Rajasthan.
- b) Groundwater is scarce and critical for agriculture and drinking water, so recharge techniques help sustain these resources.
- c) Groundwater depletion has no impact on water availability.
- d) Groundwater recharge reduces soil fertility.

Answer: b) Groundwater is scarce and critical for agriculture and drinking water, so recharge techniques help sustain these resources.

Explanation: Rajasthan faces severe groundwater depletion, making recharge techniques vital for ensuring the availability of water for agriculture and domestic use.

Additional Information: Initiatives like the Atal Groundwater Scheme promote groundwater recharge to address water scarcity in the state.

78. Why is the adoption of renewable energy crucial for Rajasthan's future development?

- a) It depletes natural resources.

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- b) It reduces environmental degradation, mitigates climate change, and ensures energy security.
- c) It leads to over-reliance on fossil fuels.
- d) It decreases biodiversity.

Answer: b) It reduces environmental degradation, mitigates climate change, and ensures energy security.

Explanation: Renewable energy reduces environmental impacts, decreases greenhouse gas emissions, and provides a sustainable solution to meet future energy demands.

Additional Information: Rajasthan's policies on solar and wind energy reflect its commitment to renewable energy and sustainable development.

79. How does water pollution impact agriculture in Rajasthan?

- a) It increases crop yields.
- b) It reduces soil fertility and contaminates water sources used for irrigation.
- c) It has no impact on agriculture.
- d) It promotes sustainable farming.

Answer: b) It reduces soil fertility and contaminates water sources used for irrigation.

Explanation: Water pollution introduces harmful chemicals into water bodies, which are then used for irrigation, reducing soil fertility and affecting crop quality.

Additional Information: Reducing water pollution is crucial for maintaining the health of agricultural ecosystems in Rajasthan.

80. What critical impact does global warming have on Rajasthan's environmental conditions?

- a) It leads to increased rainfall.
- b) It intensifies desertification and water scarcity by raising temperatures and altering rainfall patterns.
- c) It promotes reforestation.
- d) It decreases temperatures.

Answer: b) It intensifies desertification and water scarcity by raising temperatures and altering rainfall patterns.

Explanation: Global warming raises temperatures and disrupts rainfall patterns, exacerbating desertification and water scarcity in Rajasthan.

Additional Information: Rajasthan is particularly vulnerable to the impacts of climate change, making mitigation and adaptation strategies essential for its future.

81. What critical reasoning supports the use of rainwater harvesting systems like Bawdi in Rajasthan?

- a) Bawdis increase groundwater depletion.
- b) Bawdis store rainwater, making it available for use during dry periods, particularly in arid regions.
- c) Bawdis reduce forest cover.
- d) Bawdis increase soil erosion.

Answer: b) Bawdis store rainwater, making it available for use during dry periods, particularly in arid regions.

Explanation: Bawdis, or stepwells, are traditional rainwater harvesting systems that help store water during the rainy season, ensuring water availability during droughts.

Additional Information: Rajasthan's traditional water harvesting systems, like Bawdi, have been critical in addressing water scarcity in the desert regions.

82. Which analytical reasoning best explains why noise levels above 80 dB are considered harmful to human health?

- a) They increase productivity.
- b) They lead to hearing loss, stress, and reduced cognitive performance over time.
- c) They improve mental health.
- d) They enhance communication skills.

Answer: b) They lead to hearing loss, stress, and reduced cognitive performance over time.

Explanation: Prolonged exposure to noise levels above 80 dB can cause permanent hearing damage and lead to stress, anxiety, and decreased focus.

Additional Information: Noise pollution is a major environmental issue in urban areas,

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especially around industries and transportation hubs.

83. Why is the promotion of tree plantation programs in desert regions critical for Rajasthan's environmental sustainability?

- a) Trees deplete water resources.
- b) Trees help stabilize soil, reduce desert expansion, and improve local climates.
- c) Trees increase soil erosion.
- d) Trees reduce groundwater levels.

Answer: b) Trees help stabilize soil, reduce desert expansion, and improve local climates.

Explanation: Tree plantation programs in Rajasthan combat desertification by stabilizing soil, preventing sand dunes from moving, and contributing to carbon sequestration.

Additional Information: Afforestation initiatives like the Desert Plantation Program aim to reverse desertification trends and restore ecological balance.

84. What reasoning explains the role of sulfur dioxide (SO₂) in the formation of acid rain?

- a) SO₂ reacts with carbon dioxide to form sulfuric acid.
- b) SO₂ combines with water vapor in the atmosphere to form sulfuric acid, which falls as acid rain.
- c) SO₂ dissolves in water to form ozone.
- d) SO₂ increases the temperature of rain.

Answer: b) SO₂ combines with water vapor in the atmosphere to form sulfuric acid, which falls as acid rain.

Explanation: Sulfur dioxide (SO₂) reacts with water vapor and oxygen in the atmosphere to produce sulfuric acid, leading to acid rain that harms ecosystems.

Additional Information: Acid rain damages crops, aquatic life, and infrastructure, and it is a major environmental concern in industrial areas.

85. What is the critical reasoning behind promoting the use of renewable energy over fossil fuels in Rajasthan?

- a) Renewable energy increases pollution.
- b) Renewable energy reduces greenhouse gas emissions and dependence on fossil fuels, promoting long-term sustainability.
- c) Renewable energy decreases productivity.
- d) Renewable energy is less efficient than fossil fuels.

Answer: b) Renewable energy reduces greenhouse gas emissions and dependence on fossil fuels, promoting long-term sustainability.

Explanation: Renewable energy sources like solar and wind energy are cleaner alternatives to fossil fuels, reducing greenhouse gas emissions and environmental degradation.

Additional Information: Rajasthan's climate makes it an ideal location for harnessing renewable energy, which is essential for addressing climate change.

86. Why is it critical for Rajasthan to adopt water-efficient irrigation methods like sprinkler and drip irrigation?

- a) It reduces water availability for industry.
- b) It conserves water by minimizing evaporation and runoff, making agriculture more sustainable in water-scarce areas.
- c) It increases the need for fertilizers.
- d) It increases the cost of farming.

Answer: b) It conserves water by minimizing evaporation and runoff, making agriculture more sustainable in water-scarce areas.

Explanation: Water-efficient irrigation methods reduce water waste and ensure that crops receive adequate water, crucial in arid regions like Rajasthan.

Additional Information: These techniques are vital for Rajasthan's agriculture, given the limited water availability and the need to maximize resource use.

87. Which reasoning best explains the role of traditional water conservation systems like Kund in Rajasthan?

- a) Kund systems increase water waste.
- b) Kund systems store rainwater, providing a crucial water source in desert areas during dry seasons.

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c) Kund systems reduce agricultural productivity.

d) Kund systems promote soil erosion.

Answer: b) Kund systems store rainwater, providing a crucial water source in desert areas during dry seasons.

Explanation: Kunds are circular rainwater storage tanks that help collect and store rainwater, providing water for drinking and irrigation in arid regions.

Additional Information: Kund systems are a vital part of Rajasthan's traditional methods for managing water in desert environments, where water scarcity is a constant challenge.

88. Which critical explanation highlights the need for laws like the Water Pollution Prevention and Control Act (1974) in Rajasthan?

- a) To regulate water use for agriculture
- b) To prevent the discharge of pollutants into water bodies, ensuring clean and safe water for consumption and agriculture
- c) To promote deforestation
- d) To increase groundwater depletion

Answer: b) To prevent the discharge of pollutants into water bodies, ensuring clean and safe water for consumption and agriculture

Explanation: The Water Pollution Prevention and Control Act regulates the discharge of industrial and agricultural pollutants into water bodies, preserving water quality.

Additional Information: Clean water is essential for public health, agriculture, and industry, making pollution control critical in a water-scarce state like Rajasthan.

89. Which reasoning supports the necessity of Rajasthan's Organic Agriculture Policy (2017) in addressing soil degradation?

- a) Organic farming depletes soil nutrients.
- b) Organic farming improves soil health by reducing the reliance on chemical fertilizers and promoting the use of natural compost and biopesticides.
- c) Organic farming increases chemical runoff.

d) Organic farming leads to soil erosion.

Answer: b) Organic farming improves soil health by reducing the reliance on chemical fertilizers and promoting the use of natural compost and biopesticides.

Explanation: Organic farming practices restore soil fertility and prevent the degradation caused by overuse of chemical fertilizers and pesticides.

Additional Information: Rajasthan's shift towards organic farming is a sustainable approach to improve soil quality, reduce environmental damage, and promote healthier crop yields.

90. Which critical impact does global warming have on the water availability in Rajasthan?

- a) It increases groundwater recharge.
- b) It reduces rainfall, depletes water resources, and intensifies droughts.
- c) It reduces temperatures.
- d) It increases river flow.

Answer: b) It reduces rainfall, depletes water resources, and intensifies droughts.

Explanation: Global warming alters rainfall patterns and increases evaporation rates, exacerbating water scarcity in already arid regions like Rajasthan.

Additional Information: Rajasthan is highly vulnerable to the effects of climate change, with its agriculture and water resources particularly at risk.

91. What is the reasoning behind the promotion of biomass energy in Rajasthan?

- a) Biomass energy increases fossil fuel use.
- b) Biomass energy utilizes agricultural residues, reducing waste and providing a renewable energy source.
- c) Biomass energy depletes forest resources.
- d) Biomass energy contributes to air pollution.

Answer: b) Biomass energy utilizes agricultural residues, reducing waste and providing a renewable energy source.

Explanation: Biomass energy converts organic

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materials like crop residues into usable energy, reducing agricultural waste and contributing to cleaner energy production.

Additional Information: Rajasthan has significant biomass energy potential, which, if fully utilized, can complement its solar and wind energy resources.

92. Why is afforestation in the Aravalli region critical for Rajasthan's environmental health?

- a) It leads to deforestation.
- b) It helps in restoring ecological balance, preventing soil erosion, and improving local microclimates.
- c) It promotes industrial development.
- d) It reduces biodiversity.

Answer: b) It helps in restoring ecological balance, preventing soil erosion, and improving local microclimates.

Explanation: The Aravalli Plantation Program aims to restore forest cover in the Aravalli mountains, reducing soil erosion and enhancing the region's environmental stability.

Additional Information: The Aravalli mountain range plays a vital role in Rajasthan's ecosystem, helping regulate water flow and preventing desertification.

93. What is the most logical reasoning for the development of the National Green Tribunal in India?

- a) To promote industrialization
- b) To adjudicate environmental disputes and ensure compliance with environmental laws
- c) To reduce public participation in environmental protection
- d) To increase deforestation

Answer: b) To adjudicate environmental disputes and ensure compliance with environmental laws

Explanation: The National Green Tribunal (NGT) is responsible for hearing cases related to environmental protection and ensuring that environmental regulations are followed.

Additional Information: The NGT helps enforce environmental laws and provides swift

resolutions to issues involving pollution, deforestation, and resource management.

94. Which reasoning supports the implementation of the Jal Swavlamban Yojana in Rajasthan?

- a) To reduce water storage capacity
- b) To make villages self-reliant in water by promoting rainwater harvesting and groundwater recharge
- c) To reduce agricultural productivity
- d) To increase industrial water use

Answer: b) To make villages self-reliant in water by promoting rainwater harvesting and groundwater recharge

Explanation: The Jal Swavlamban Yojana focuses on building local water storage systems and recharging groundwater, helping villages become self-sufficient in water resources.

Additional Information: Community involvement is key to the success of this initiative, which addresses water scarcity in Rajasthan's rural areas.

95. What reasoning explains the importance of renewable energy policies like the Rajasthan Solar Energy Policy (2019)?

- a) To increase reliance on fossil fuels
- b) To promote large-scale solar power generation, reduce emissions, and attract investment in clean energy
- c) To reduce solar energy capacity
- d) To increase industrial emissions

Answer: b) To promote large-scale solar power generation, reduce emissions, and attract investment in clean energy

Explanation: The Rajasthan Solar Energy Policy (2019) aims to harness the state's vast solar potential, reducing reliance on fossil fuels and encouraging sustainable energy development.

Additional Information: Rajasthan has set ambitious goals for solar energy capacity, positioning itself as a leader in India's renewable energy landscape.

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96. Which critical explanation highlights the benefits of the KUSUM scheme in Rajasthan?

- a) It increases dependence on fossil fuels.
- b) It promotes decentralized solar energy generation, particularly for irrigation, reducing farmers' energy costs.
- c) It reduces solar energy production.
- d) It increases groundwater depletion.

Answer: b) It promotes decentralized solar energy generation, particularly for irrigation, reducing farmers' energy costs.

Explanation: The KUSUM scheme encourages farmers to install solar pumps, reducing their dependence on grid electricity and fossil fuels, and lowering energy costs.

Additional Information: The scheme supports rural energy independence and promotes sustainable water use through solar-powered irrigation systems.

97. What is the reasoning behind the development of the Indira Gandhi Canal in Rajasthan?

- a) To increase desertification
- b) To provide irrigation water to the arid and desert regions of northwestern Rajasthan
- c) To promote urbanization
- d) To reduce agricultural productivity

Answer: b) To provide irrigation water to the arid and desert regions of northwestern Rajasthan

Explanation: The Indira Gandhi Canal supplies water to the desert areas of northwestern Rajasthan, transforming barren land into productive agricultural areas.

Additional Information: The canal has been a lifeline for Rajasthan's agricultural development, bringing water to regions with scarce natural water sources.

98. Why is groundwater recharge considered a critical strategy for combating water scarcity in Rajasthan?

- a) It depletes water resources.

- b) It increases the availability of water by replenishing groundwater aquifers, crucial for agriculture and drinking water.

- c) It promotes soil erosion.

- d) It reduces water availability.

Answer: b) It increases the availability of water by replenishing groundwater aquifers, crucial for agriculture and drinking water.

Explanation: Groundwater recharge helps replenish depleted aquifers, ensuring that water is available for future use in agriculture, industry, and domestic needs.

Additional Information: Rajasthan's groundwater levels have been declining rapidly, making recharge strategies essential for long-term water sustainability.

99. Which reasoning supports the need for Rajasthan's afforestation programs to combat desertification?

- a) Afforestation reduces soil fertility.

- b) Afforestation prevents soil erosion, stabilizes sand dunes, and increases biodiversity.

- c) Afforestation reduces biodiversity.

- d) Afforestation increases desertification.

Answer: b) Afforestation prevents soil erosion, stabilizes sand dunes, and increases biodiversity.

Explanation: Afforestation programs help bind soil, reduce the movement of sand dunes, and promote biodiversity, making them essential for combating desertification.

Additional Information: Desertification is a significant threat to Rajasthan's environment, and afforestation is one of the most effective ways to reverse its effects.

100. Which critical reasoning explains the role of the Biodiversity Act (2002) in Rajasthan?

- a) To promote industrialization in forest areas

- b) To conserve biodiversity, ensure sustainable use of biological resources, and share benefits with local communities

- c) To reduce environmental protection

- d) To increase deforestation

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Answer: b) To conserve biodiversity, ensure sustainable use of biological resources, and share benefits with local communities

Explanation: The Biodiversity Act (2002) aims to protect India's rich biodiversity, ensuring that biological resources are used sustainably and that local communities benefit from their use.

Additional Information: Rajasthan's biodiversity is under threat from industrialization and habitat loss, making conservation efforts critical for the region's ecological balance.



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