

VISIONIAS

www.visionias.in

Test Booklet Series

TEST BOOKLET

C

GENERAL STUDIES (P) 2025 – Test – 4719

Time Allowed: Two Hours

Maximum Marks: 200

INSTRUCTIONS

- 1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS BBOOKLET DOES **NOT** HAVE ANY UNPRINTED OR TURN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
- 2. ENCODE CLEARLY THE TEST BOOKLET SERIES **A, B, C** OR **D** AS THE CASE MAY BE IN THE APPROPRIATE PLACE IN THE ANSWER SHEET.
- 3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside. **Do NOT** write anything else on the Test Booklet.
- 4. This Test Booklet contains 100 items (Questions). Each item is printed in English. Each item comprises four responses (answers). You will select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response with you consider the best. In any case, choose ONLY ONE response for each item.
- **5.** You have to mark all your responses ONLY on the separate Answer Sheet provided. See direction in the answers sheet.
- **6.** All items carry equal marks. Attempt all items. Your total marks will depend only on the number of **correct responses** marked by you in the answer sheet. For **every incorrect** response **1/3**rd**of the allotted marks** will be deducted.
- **7.** Before you proceed to mark in the Answer sheet the response to various items in the Test booklet, you have to fill in some particulars in the answer sheets as per instruction sent to you with your Admission Certificate.
- **8.** After you have completed filling in all responses on the answer sheet and the examination has concluded, you should hand over to Invigilator only the answer sheet. You are permitted to take away with you the Test Booklet.
- **9.** Sheet for rough work are appended in the Test Booklet at the end.

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE ASKED TO DO SO

1 www.visionias.in ©Vision IAS

- 1. Which of the following can aid in the cooling of earth?
 - 1. Sulphates from the volcanic eruption
 - 2. Salt particles
 - 3. Pure nitrates

- (a) 1, 2 and 3
- (b) 1 and 2 only
- (c) 2 only
- (d) 1 and 3 only
- Consider the following techniques of bioremediation:
 - 1. Bioventing
 - 2. Biosparging
 - 3. Composting
 - 4. Biopiles
 - 5. Bioaugmentation

Which of the bioremediation techniques given above are in-situ in nature?

- (a) 1, 2 and 5 only
- (b) 1, 4 and 5 only
- (c) 2, 3 and 4 only
- (d) 1, 2, 3, 4 and 5
- 3. Which of the following materials can be commercially recovered during recycling of e-waste?
 - 1. Gold
 - 2. Copper
 - 3. Glass
 - 4. Plastic

Select the correct answer using the code given below.

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

- **4.** Which of the following are indicators of paleoclimate or past climates?
 - 1. Fossilized pollen grains
 - 2. Annular rings of trees
 - 3. Cave deposits
 - 4. Lacustrine deposits

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 3 and 4 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4
- **5.** With reference to Radioactive pollution, consider the following statements:
 - 1. Radioactive pollution is caused only due to anthropological activities and thus is observed only on Earth.
 - 2. A radioactive pollutant with a longer half-life will have a greater impact on human health than the one with shorter half-life.
 - 3. Cobalt, Calcium and Iodine have radioactive isotopes that cause radioactive pollution and environmental degradation.

- (a) 3 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1 and 3 only
- **6.** 'Black Liquor', used as a fuel, is a:
 - (a) biofuel created as a by-product in the paper and pulp industry.
 - (b) derivative of the liquefaction of coal process.
 - (c) a crude oil which has very less amount of sulphur.
 - (d) form of natural gas derived from coal beds.

- 7. With reference to 'Extended Producer Responsibility', consider the following statements:
 - It is a policy approach in which producers take responsibility for management of the disposal of products after they are considered no longer useful by the consumers.
 - It shifts the economic burden of the cost of disposal from the government to the producer of the product.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 8. Dioxins and furans, the emerging air pollutant are classified highly contaminating toxic chemicals having serious effect on human health. Which of the following are the sources from which they are released?
 - 1. Cigarette smoking
 - 2. Dyes and pigments
 - 3. Municipal Solid waste burning
 - 4. Coal combustion for commercial purposes

Select the correct answer from the codes given below.

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

- **9.** Consider the following statements with reference to pyrolysis and gasification:
 - 1. While pyrolysis is the process of thermal conversion of organic matter in the presence of oxygen, gasification is a thermo-chemical process that converts biomass into a combustible gas in the absence of oxygen.
 - 2. The process of gasification generally needs more temperature than pyrolysis.

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
- **10.** Consider the following statements with reference to bioindicators:
 - 1. They help in monitoring the progress of environmental clean up.
 - 2. They are those species which may survive in highly polluted water with low dissolved oxygen content.
 - 3. Tubifex, insect larvae and frog are examples of bioindicators.

- (a) 1 and 2 only
- (b) 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- **11.** What is Biomining?
 - (a) It is the process of storing carbon dioxide with the help of microorganism present in the soil.
 - (b) It is the process of using microorganisms to extract metals from rock ores or mine waste.
 - (c) It is the anaerobic decomposition of organic matter with the help of microorganism.
 - (d) It is a process to detect the presence of minor minerals in earth's surface with the help of certain plant species.

- **12.** Which of the following are the potential advantages of hydrogen fuel cells?
 - 1. They are cheaper and affordable
 - 2. They are easy to handle and store
 - 3. They do not produce harmful emissions
 - 4. They can be used as fuel in rockets
 Select the correct answer using the code given below
 - (a) 2 and 3 only
 - (b) 3 and 4 only
 - (c) 1, 2 and 4 only
 - (d) 1, 2, 3 and 4
- 13. What are the different application areas of Microbial fuel cells?
 - 1. Powering underwater monitoring devices
 - 2. Power supply to remote sensors
 - 3. Waste-water treatment
 - 4. Production of biohydrogen

- (a) 1, 3 and 4 only
- (b) 1 and 4 only
- (c) 2 and 3 only
- (d) 1, 2, 3 and 4
- 14. Which of the following is/are the commonly known effect/effects of temperature increase due to thermal pollution?
 - Reduction in the rate of metabolism of marine organisms
 - 2. Increased rate of decomposition of organic matter.
 - 3. Development of anaerobic condition in water bodies.

Select the correct answer using the code given below.

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

4

- **15.** United Nations Framework Classification for Resources (UNFC) deals with:
 - (a) classification of greenhouse gases based upon their global warming potential.
 - (b) Classification of biotic resources for access and benefit sharing.
 - (c) identification and monitoring of endemic diseases like ebola.
 - (d) classification and management of global mineral and various energy resources.
- **16.** With reference to the United Nations Decade on Ecosystem Restoration, consider the following statements:
 - 1. It covers ecosystem restoration in forests, grasslands, mountains, and oceans only.
 - Three goals underpin the vision of the United Nations Decade on Ecosystem Restoration.
 - 3. It involves a 10-point action strategy to revive the natural world that supports us all.

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- 17. Under India's Bio-medical Waste Management Rules, 2016, biomedical waste is required to be treated within how many hours of its generation to prevent contamination?
 - (a) 24 hours
 - (b) 48 hours
 - (c) 72 hours
 - (d) 12 hours

- **18.** With reference to phytoremediation, consider the following statements:
 - 1. Phytovolatilization converts contaminants into the gaseous state for release into the atmosphere.
 - 2. Phytoextraction uses plants' ability to accumulate contaminants in the aboveground, harvestable biomass.
 - 3. Sunflower and mustard are suitable for commercial phytoremediation techniques.

- (a) 1 and 2 only
- (b) 2 only
- (c) 3 only
- (d) 1,2 and 3
- 19. With reference to the "polluter pay" principle, consider the following statements:
 - 1. It was first introduced by the OECD (Organization for Economic Cooperation and Development).
 - 2. The polluter-pay principle is part of the 1992 Rio Declaration.
 - 3. Carbon tax is a policy instrument to enforce the polluter pay principle.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- **20.** With reference to ground-level Ozone, consider the following statements:
 - 1. Sunlight is essential for the formation of ground-level ozone.
 - Ozone causes lung damage by inducing oxidative damage in the pulmonary tissues.

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

- **21.** With reference to soil pollution, consider the following statements:
 - 1. Atmospheric weapon testing is a source of anthropogenic soil pollution.
 - 2. The Global Soil Partnership hosted by IUCN is a globally recognized mechanism to promote sustainable soil management.

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
- 22. Which of the following items are prohibited for import under the Hazardous Waste Management Rules, 2016?
 - 1. Waste edible fats
 - 2. Household waste
 - 3. Used critical care medical equipment for re-use
 - 4. Waste halogenated organic solvents Select the correct answer using the code given below.
 - (a) 1, 2 and 4 only
 - (b) 3 and 4 only
 - (c) 1 and 2 only
 - (d) 1, 2, 3 and 4
- **23.** Which of the following statements about lead pollution are correct?
 - 1. Lead is classified as a Persistent Organic Pollutant (POP).
 - 2. Phytoremediation can reduce lead pollution by using plants to absorb lead from contaminated soil.
 - 3. The World Health Organization (WHO) states that no known level of lead exposure that is safe.

Select the correct answer using the code given below.

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

- **24.** Consider the following statements regarding Montreal protocol:
 - 1. The Global Environment Facility which aims to assist the developing countries was established under this protocol.
 - 2. The Protocol phases down Ozone Depleting Substances (ODS) in a stepwise manner, with different timelines for developed and developing countries.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- **25.** Which of the following statements about the Rotterdam Convention are correct?
 - 1. It lacks a binding mechanism to enforce penalties for non-compliance.
 - A country that has listed a pesticide under Annex III can continue to produce and use it domestically under the Rotterdam Convention.
 - 3. The convention covers industrial chemicals as well as pesticides.

Select the correct answer using the code given below.

- (a) 1 and 3 only
- (b) 2 and 3 only
- (c) 1 and 2 only
- (d) 1, 2 and 3
- **26.** Consider the following:
 - 1. Decrease reproduction in animals
 - 2. Reduction in crop production
 - 3. Damage to buildings

Which of the above are the effects of noise pollution?

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

- 27. Consider the following statements about the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal:
 - 1. The United States has not ratified the Basel Convention.
 - 2. Radioactive waste is not covered under the Basel Convention.
 - 3. The Basel Ban Amendment prevents the export of hazardous waste from developed to developing countries.

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None
- **28.** In which way does autoclaving contribute to effective bio-medical waste management?
 - (a) It recycles plastic waste into usable forms
 - (b) It sterilizes infectious waste through high-pressure steam, reducing pathogen transmission
 - (c) It separates organic and inorganic waste for composting.
 - (d) It converts biomedical waste to energy through combustion.
- **29.** Consider the following statements about the Battery Waste Management Rules, 2022:
 - 1. The rules do not apply to Electric Vehicle Batteries.
 - 2. Extended Producer Responsibility (EPR) does not apply to importers of Batteries
 - 3. The rules prohibit disposal of batteries in landfills and incineration.

How many of the statements given above are correct?

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

- **30.** Under the latest Plastic Waste Management Rules in India which of the following single-use plastic items are prohibited?
 - 1. Earbuds with plastic sticks
 - 2. Cutlery items like plastic forks, spoons, and straws
 - 3. Plastic bags above 120 microns
 - 4. Polystyrene used for decoration purposes Select the correct answer using the code given below.
 - (a) 1, 2 and 3 only
 - (b) 1, 2 and 4 only
 - (c) 2, 3 and 4 only
 - (d) 1, 3 and 4 only
- 31. Which of the following plastics are highly conducive to recycling?
 - 1. Polystyrene (PS)
 - 2. High-Density Polyethylene (HDPE)
 - 3. Polyethylene Terephthalate (PET)
 - 4. Polyvinyl Chloride

- (a) 1 and 2 only
- (b) 1, 2 and 4 only
- (c) 1 and 4 only
- (d) 2 and 3 only
- 32. Consider the following statements about the Stockholm Convention on Persistent Organic Pollutants (POPs):
 - 1. Once a POP is listed under the Convention, its use is immediately banned without exemptions.
 - 2. The Stockholm Convention has three annexes that classify chemicals and specify how they should be controlled.
 - 3. Persistent Organic Pollutants (POPs) are entirely anthropogenic (man-made) and cannot occur naturally.

How many of the statements given above are correct?

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

- 33. In the context of Solid Waste Management (SWM) Rules, 2016, what is the minimum number of segregation categories required to be maintained by waste generators?
 - (a) Two (Biodegradable and Non-Biodegradable Waste)
 - (b) Three (Biodegradable, Non-Biodegradable, and Domestic Hazardous Waste)
 - (c) Five (Biodegradable, Non-Biodegradable, Domestic Hazardous Waste, E-Waste, and Sanitary Waste)
 - (d) Seven (Biodegradable, Non-Biodegradable, Domestic Hazardous Waste, E-Waste, Sanitary Waste, Construction Waste, and Industrial Waste)
- **34.** With reference to plastic pollution, consider the following statements:
 - 1. The End Plastic Pollution International Collaborative is a public-private partnership hosted by the World Wide Fund for Nature.
 - 2. The Great Pacific Garbage Patch is the largest accumulation of plastic in the world.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- **35.** The Bamako Convention which is often seen in the news primarily deals with
 - (a) the transboundary movement of hazardous waste into and within African nations.
 - (b) the regulation of greenhouse gas emissions.
 - (c) the conservation of biodiversity in Africa.
 - (d) the promotion of renewable energy in African countries.

36. Consider the following pairs:

Range of PollutionIndustrialIndexCategorization1. 21-40: White

1. 21-40 : White 2. 41-59 : Orange 3. Above 60 : Red

How many of the pairs given above are correctly matched?

- (a) Only one pair
- (b) Only two pairs
- (c) All three pairs
- (d) None
- 37. In the context of waste management, downcycling refers to
 - (a) Recycling materials into products of equal or higher quality and value
 - (b) The process of reusing materials without any alteration
 - (c) Recycling materials into products of lower quality and reduced functionality
 - (d) The complete elimination of waste through advanced recycling methods
- **38.** Consider the following statements regarding the handling of Nuclear Waste in India:
 - Radioactive waste management in nuclear power plants is under the purview of the Atomic Energy Regulatory Board (AERB).
 - Radioactive waste generated from medical facilities using radioactive sources is exempt from AERB regulations.
 - The radioactive wastes are covered under the provisions of Hazardous Waste Management Rules, 2016.

How many of the statements given above are correct?

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

- **39.** Consider the following statements regarding 'Central Pollution Control Board ':
 - It is an autonomous body established under the Environment Protection Act, 1986.
 - It coordinates the activities of state pollution control boards and resolves disputes among them.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 40. With reference to the Climate Finance
 Leadership Initiative (CFLI), consider the
 following statements:
 - 1. It is a group of leading financial institutions led by the World bank.
 - India has partnered with CFLI to boost public sector financing of sustainable infrastructure projects in low-carbon sectors.

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

- 41. Recently OECD released a report highlighting aggregate trends of annual climate finance mobilized by developed countries. In this context, consider the following statements:
 - More than half of the total climate finance provided and mobilized by developed countries is allocated to adaptation finance.
 - Grants and equity investment constitute the largest portion of climate finance followed by loans given by developed countries to developing nations.
 - 3. The private sector mobilizes more climate finance than the public sector.

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None
- **42.** With reference to Biofuels, consider the following statements:
 - Unlike solar and wind energy, biofuel is more suitable for meeting the demands of the transportation sector.
 - 2. Biodiesel can be blended with petroleum diesel in any proportion.
 - 3. Biobutanol has a higher energy content than ethanol despite both being produced from the same feedstock.

Which of the statements given above is/are correct?

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

9

- **43.** Consider the following statements:
 - 1. Grey hydrogen is traditionally produced from the splitting of methane.
 - 2. Turquoise hydrogen is obtained from pyrolysis of methane.

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
- **44.** With reference to synthetic fuel, consider the following statements:
 - 1. Synthetic fuels are produced from nonpetroleum sources through chemical processes.
 - 2. Captured carbon dioxide serves as a feedstock for synthetic fuels.
 - 3. Synthetic fuels have a higher carbon footprint compared to traditional fossil fuels.

How many statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None
- **45.** Consider the following statements:

Statement I: Ocean Thermal Energy is mainly viable in equatorial areas of the earth.

Statement II: In the equatorial regions, the thermal gradient between surface water and deep ocean water is sufficiently high throughout the year.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II explains Statement-I
- (b) Both Statement-I and Statement-II are correct but Statement-II does not explain Statement-I
- (c) Statement-I is correct, but Statement-II is incorrect
- (d) Statement-I is incorrect, but Statement-II is correct

- 46. With reference to Baku Initiative for Climate Finance, Investment & Trade Dialogue (BICFIT), consider the following statements:
 - It is an Azerbaijan-led initiative officially launched during COP 29 of the United Nations Framework Convention on Climate Change.
 - 2. It aims to encourage the creation of national, regional, and sub-regional platforms to enhance the nexus of climate finance, investment, and trade nexus.
 - 3. It is supported by the World Trade Organization (WTO) and UN Trade and Development.

How many statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None
- 47. With reference to fuel cells, consider the following statements:
 - 1. In fuel cells, electrical energy is generated by the electrochemical reaction between a fuel and oxidant.
 - Only liquid electrolytes can be used in a fuel cell.
 - 3. Fuel cells have higher efficiency and lower emissions than combustion engines.

How many statements given above are correct?

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

- **48.** With reference to types of non-renewable energy, consider the following statements:
 - Coal is formed from the remains of plant fossils and is primarily used for electricity generation.
 - 2. Petroleum products like gasoline, diesel are derived from crude oil.
 - 3. Natural gas is mainly composed of ethane and is primarily used for heating and cooking.

How many of the above given statements are *not* correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None
- **49.** The concept of "energy transition" refers to:
 - (a) the shift from fossil fuel-based energy systems to renewable energy sources.
 - (b) the energy redistribution to maximize global supply and minimize dependency on specific regions.
 - (c) the transition from centralized to decentralized energy systems, enabling local generation and distribution of energy.
 - (d) the conversion of primary energy into usable forms for consumption.
- 50. Which of the following factors influences the amount of energy that can be generated by a hydroelectric power plant?
 - 1. The height of the water column
 - 2. The density of the water
 - 3. The temperature of the water
 - 4. The quality of the water

Select the correct answer using the code given below.

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

- **51.** The concept of "geothermal gradient" refers to the:
 - (a) rate at which the Earth's temperature increases with depth.
 - (b) geographical variation in the distribution of geothermal energy across the planet.
 - (c) rate at which geothermal energy can be extracted in a specific area.
 - (d) amount of heat that can be used in electricity generation from geothermal sources.
- 52. How many of the following factors most significantly affect the efficiency of wind turbines in generating electricity?
 - 1. The wind speed at the location of the turbine
 - 2. The height of the wind turbine tower
 - 3. The type of material used for the turbine blades
 - 4. The temperature of the surrounding air Select the correct answer using the code given below.
 - (a) Only one
 - (b) Only two
 - (c) Only three
 - (d) All four
- 53. Arrange the following energy sources in India based on their contribution to total installed energy generation capacity, from highest to lowest:
 - (a) Coal > Small Hydropower > Natural Gas > Wind
 - (b) Natural Gas > Coal > Small Hydropower> Wind
 - (c) Small Hydropower > Wind > Coal > Natural Gas
 - (d) Coal > Wind> Natural Gas > Small Hydropower

- **54.** Consider the following statements regarding the renewable energy in India:
 - 1. The share of renewable energy in India is more than 50% of the total installed capacity.
 - 2. India ranks fourth globally in renewable energy capacity.
 - 3. India's renewable energy capacity grew to 500 GW in 2024.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None
- **55.** Consider the following projects:
 - 1. Highway projects of strategic importance
 - 2. 25-megawatt biomass-based thermal power plants
 - 3. Ports exclusively dealing in fish handling
 - 4. Toll plaza construction

In India, how many of the above are exempted from the Environment Impact Assessment?

- (a) 2, 3 and 4 only
- (b) 1 and 2 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4
- **56.** Which of the following are disadvantages faced by solar energy?
 - 1. High initial investment for productive use
 - 2. Non dependency on seasons or weather
 - 3. Bulky Solar panels

How many of the above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None of the above

- 57. How many of the following are solid biomass fuels?
 - 1. Wood logs and wood pellets
 - 2. Agricultural waste like stalks and plant debris
 - 3. Animal waste such as cow dung
 - 4. Synthetic natural gas

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four
- 58. The "Climate Neutral Now Initiative," sometimes mentioned in climate discussions, refers to a/an
 - (a) initiative by UNFCCC promoting climate action with non-party stakeholders.
 - (b) program focusing on mandatory regulations to cut global carbon emissions.
 - (c) partnership between governments and businesses for greenhouse gas management.
 - (d) mechanism used solely by national governments to monitor climate impacts.
- **59.** Consider the following statements with reference to Carbon Border Adjustment Mechanism:
 - 1. It is a part of the EU's "Fit for 55 in 2030" package aimed at reducing greenhouse gas emissions.
 - 2. The obligations imposed by the CBAM do not apply to gifts of goods imported in the EU from outside the EU.
 - 3. CBAM was introduced in 2015 by the EU on the sidelines of the Paris Climate deal.

How many of the statements given above are correct?

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

- **60.** Which of the following processes is/are associated with the function of carbon sinks?
 - 1. Direct air capture (DAC)
 - 2. Ocean Iron fertilization
 - 3. Soil carbon sequestration
 - 4. Ocean Alkalinity Enhancement

Select the correct answer using code given below.

- (a) 1 and 4 only
- (b) 2 and 3 only
- (c) 1, 2 and 3 only
- (d) 1, 2, 3 and 4
- **61.** Consider the following statements with reference to Kigali Agreement:
 - The Kigali Amendment is an international agreement to reduce the production and consumption of Chlorofluorocarbons.
 - 2. The Kigali Amendment is an international agreement to protect the ozone layer by phasing out ODS.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- **62.** With reference to the Commission for Air Quality Management (CAQM), which one of the following statements is *not* correct?
 - (a) It is a statutory authority established for air quality management.
 - (b) It was established by replacing the Environment Pollution (Prevention and Control) Authority.
 - (c) It is responsible for the implementation of the Graded Response Action Plan in NCR and adjoining areas.
 - (d) It is chaired by the Minister of Environment, Forest and Climate Change of India.

- 63. Consider the following statements with reference to Climate Forcing:
 - Solar irradiance has more positive climate forcing effects as compared to any other anthropogenic climate forcings.
 - Decrease in polar ice albedo due to melting is an example of negative climate forcing.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 64. Consider the following statements regarding the Climate Change Performance Index (CCPI):
 - India has risen in the rankings to become one of the top three climate performers globally.
 - 2. It is published by the United Nations Environment Programme.
 - It focuses solely on greenhouse gas emission reduction targets of developing countries.

How many of the above statements are correct?

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

65. Consider the following statements with reference to Global Warming Potential (GWP):

Statement I: Nitrous oxide has a much higher global Warming Potential (GWP) than carbon dioxide.

Statement II: Nitrous oxide has a shorter atmospheric lifetime than CO2.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- (b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- (c) Statement-I is correct but Statement-II is incorrect
- (d) Statement-I is incorrect but Statement-II is correct
- **66.** Which one of the following is the main difference between Conservation agriculture and organic farming?
 - (a) While Organic Farming is Climate Smart Agriculture, Conservation Agriculture is not Climate Smart Agriculture.
 - (b) While Organic Farming requires soil tillage, Conservation Agriculture doesn't require tillage of the soil.
 - (c) While Conservation Agriculture requires soil tillage, Organic Farming doesn't require tillage of the soil.
 - (d) There is no difference between Conservation Agriculture and Organic Farming.

- 67. Consider the following statements regarding the New Collective Quantified Goal on Climate Finance (NCQG):
 - 1. It is a new annual climate finance target for developing countries starting in 2025.
 - 2. It replaces the earlier commitment of USD 100 billion per year that was pledged in 2009.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 68. Consider the following statements with reference to Renewable Energy Certificates (RECs):
 - 1. On-shore Wind and Solar energy projects have the highest revenue multiplier among all the renewable energy projects.
 - 2. The REC issued remains valid for one year from the date of issuance of REC.
 - 3. Any entities generating renewable energy shall apply for REC within Six months after corresponding generation from eligible renewable energy projects.

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None
- **69.** Consider the following statements with reference to Global River Cities Alliance:
 - 1. It was launched at the world water summit in 2023.
 - 2. India is one of the founding members of Global River Cities Alliance.

Which of the statements given above is/are correct?

www.visionias.in

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

- 70. In the context of the Alliance for Transformative Action on Climate and Health (ATACH), consider the following statements:
 - ATACH is to realize the ambition set at COP26 to build climate resilient and sustainable health system.
 - 2. ATACH includes participation from both governmental and non-governmental organizations.
 - 3. It is a distinct legal entity and it derives its legal status from WHO.

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None
- **71.** Consider the following pairs:

Ramsar site State

1. Karaivetti Bird Sanctuary : Kerala

2. Aghanashini Estuary : Tamil Nadu

3.Ankasamudra Bird

: Karnataka

Conservation Reserve

How many pairs given above are correctly matched?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None
- **72.** Consider the following statements with reference to Carbon Credits:
 - 1. The price of carbon credits is fixed by the World Bank.
 - 2. In India carbon credits are traded on Multi Commodity Exchange (MCX).

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

- **73.** Consider the following initiative with reference to Methane Emission:
 - Global Methane Tracker is a tool developed by IPCC to track global emission of methane.
 - Methane emission from wetlands is the largest source of methane emission in the world.
 - 3. The Oil and Gas Methane Partnership 2.0 (OGMP 2.0) is the flagship programme of the United Nations Environment Programme (UNEP).

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None
- **74.** Consider the following statements with reference to the Antarctic ozone hole:
 - 1. The Antarctic ozone hole has been increasing in area and depth since the last two decades.
 - 2. Presence of a strong polar vortex over Antarctica can lead to an increase in size of the Ozone hole.

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
- **75.** Which of the following publishes the Asia Pacific Climate Report?
 - (a) World Bank
 - (b) Asian Development Bank
 - (c) Asian Infrastructure Investment Bank
 - (d) The Intergovernmental Panel on Climate Change

- 76. Recently, the United Nations Climate Change Conference or Conference of the Parties (COP) of the UNFCCC, COP29 was held which marked the adoption of Article 6 of the Paris Agreement after nine years of negotiations. The conference was held at
 - (a) Geneva, Switzerland
 - (b) Baku, Azerbaijan
 - (c) Dubai, United Arab Emirates
 - (d) Sharm El Sheikh, Egypt
- 77. Which of the following is used to make 'Bioderived Foam'?
 - (a) Recycled rubber
 - (b) Plant-based oils
 - (c) Spider webs
 - (d) Wasp secretions
- **78.** Consider the following statements about pathogen spillover and spillback in bees:
 - 1. Pathogen spillover involves the transmission of pathogens from domesticated honey bees to wild pollinators in shared habitats.
 - 2. Pathogen Spillback happens when wild pollinators pass a virus to managed honey bees.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- **79.** With reference to the lesser mealworm larvae, consider the following statements:
 - 1. They are plastic-eating insects.
 - 2. They are natives to the Western Ghats. 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

- **80.** Recently, 'Titan Arum' a rare species was seen in the news. It is a species of a
 - (a) flower
 - (b) tree
 - (c) sea cow
 - (d) tiger
- **81.** 'Adamya' and 'Akshar', which were in the news recently, are:
 - (a) indigenous tanks developed by the Indian Army.
 - (b) fast patrol vessels launched by the Indian Coast Guard.
 - (c) missile systems tested by the Indian Navy.
 - (d) indigenous guns used by the paramilitary forces.
- **82.** With reference to the concept of 'swing states in U.S. elections, consider the following statements:
 - 1. They are those states where one party consistently wins, leading to little variation in election outcomes.
 - 2. They are significant in the electoral college as their votes go entirely to the winning candidate in that state.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 and 2
- 83. The "Musaned Platform," which was recently in the news, is a/an:
 - (a) new missile system developed by Iran for defense.
 - (b) indigenous tank developed by Israel for military purposes.
 - (c) program aimed at developing advanced shipbuilding technology by South Africa.
 - (d) digital platform for wage protection and better conditions for foreign domestic workers in Saudi Arabia.

- **84.** "Mechazilla," a term recently seen in the news is a/an
 - (a) new type of satellite developed by SpaceX for space communication.
 - (b) rocket-catching structure at SpaceX's Starbase to catch the Super Heavy booster in midair.
 - (c) experimental space propulsion system developed by SpaceX.
 - (d) robotic arm used in spacecraft assembly and maintenance.
- **85.** Recently, the 'Ossification test' was seen in the news in the context of determining the
 - (a) age of fossils.
 - (b) content of pollutants and pesticides in the soil.
 - (c) age of a person by assessing the development in the bones.
 - (d) drug levels in the blood.
- **86.** Consider the following statements regarding Nafithromycin:
 - 1. It is the first indigenous antibiotic developed in India for treating antibiotic resistant infections.
 - 2. It has been developed by the Serum Institute of India.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- **87.** Which of the following statements regarding the 'Commission for Air Quality Management' are *not* correct?
 - (a) It coordinates efforts to improve air quality and control pollution in Delhi-NCR.
 - (b) It has replaced the Environment Pollution (Prevention and Control) Authority (EPCA).
 - (c) It is a statutory body.
 - (d) Minister of Environment, Forest and Climate Change is the chairperson.

- **88.** The "Digital Euro," which was recently seen in the news, is a:
 - (a) new cryptocurrency developed by the European Union for digital transactions.
 - (b) central bank digital currency issued directly by the European Central Bank to enable digital transactions without intermediaries.
 - (c) digital payment platform introduced by EU member states for cross-border transactions.
 - (d) government initiative aimed at promoting cashless payments in the European Union.
- **89.** Consider the following statements:
 - Recently, the Convention on Migratory Species published State of the World's Migratory Species report.
 - 2. While Convention on Migratory Species covers avian and terrestrial species within its ambit, it does not include aquatic species within its ambit.
 - 3. More than three-fourth of Key Biodiversity Areas identified as important for CMS-listed migratory animals have protected status.

How many of the statements given above are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None
- 90. With reference to the term DANA or "gota fría" (cold drop), which one of the following statements is correct?
 - (a) It is a type of tropical cyclone that mainly affected the Caribbean region.
 - (b) It has been linked to climate changes impacting rainfall patterns in the Mediterranean region.
 - (c) It is a phenomenon that occurs exclusively during winter and causes droughts.
 - (d) It is a tropical cyclone that impacted West Bengal and Odisha in India.

- **91.** 'Mayong Village' often seen in the news is in which state/union territory?
 - (a) Ladakh
 - (b) West Bengal
 - (c) Assam
 - (d) Nagaland
- 92. The term "carotenoids," sometimes seen in the news, refers to a/an:
 - (a) plant-derived pigments that create red, orange, and yellow colors in bird feathers.
 - (b) unique pigment synthesized by parrots for green feather coloration.
 - (c) synthetic pigment used in bird diets to enhance color vibrancy.
 - (d) enzyme in birds that regulates genetic shifts in feather coloring.
- 93. With reference to the recently launched Humsafar Policy, which one of the following statements correctly describes its aim and objective?
 - (a) It aims to provide relaxation in norms regarding adoption of children in India.
 - (b) It aims to enhance passenger experience at airports.
 - (c) It aims to enhance wayside amenities on national highways while fostering environmental sustainability.
 - (d) It aims to modernize urban mobility systems in metropolitan cities.

- 94. Consider the following statements with respect to National Mission on Natural Farming (NMNF):
 - 1. It aims to promote natural farming across the country through mission mode based projects.
 - 2. It intends to create a single national brand for naturally grown chemical-free produce.
 - At the national level, the mission will be implemented through a National Steering Committee under the chairmanship of the Prime Minister.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) None
- 95. Blue line, which was recently seen in the news, is a demarcation line between, which one of the following countries?
 - (a) Lebanon and Israel
 - (b) Iran and the United Arab Emirates
 - (c) Japan and China
 - (d) South and North Korea
- **96.** Consider the following statements about Global Alliance Against Hunger and Poverty:
 - 1. It is an initiative of the G-20 group of countries.
 - 2. It aims to eradicate hunger and poverty by 2030 through sharing of good practices among member states.
 - 3. It has a dedicated fund to provide financial support to member countries.

Which of the statements given above is/are correct?

www.visionias.in

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

- 97. The Government of India recently launched a national campaign called "Bal Vivah Mukt Bharat" that focuses on making the country child marriage free. In this context, consider the statements with respect to child marriage:
 - 1. In India, the Prohibition of Child Marriage Act 2006, defined child marriage as the marriage of males below the age of 21 years, and females below 18 years.
 - The Universal Declaration of Human Rights does not specify a minimum age of marriage for males and females.

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
- **98.** Consider the following pairs:

Tribes Belongs to State/UT of

1. Koraga : Tripura

2. Jarawa : Andaman & Nicobar

3. Reang : Kerala

How many of the pairs given above are correctly matched?

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

99. Consider the following statements:

Statement-I: Recently, the United Nations Industrial Development Organization (UNIDO) and the Climate Club have recently launched a 'Global Matchmaking Platform'. Statement-II: The UNIDO and the Climate Club claims that through this platform they are trying to decarbonise some of the heaviest emitting industries in emerging and developing economies.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- (b) Both Statement-I and Statement-II are correct and Statement-11 is not the correct explanation for Statement-I
- (c) Statement-I is correct but Statement-II is incorrect
- (d) Statement-I is incorrect but Statement-II is correct

100. What is "Global Appeal 2025", which is recently seen in the news?

- (a) It is a \$100 billion fund appeal made by developing nations to developed nations at COP 29 of United Nations Framework Convention on Climate Change for climate resilient infrastructure.
- (b) It is a global appeal made by European countries to reduce greenhouse gas emissions and adopt eco-friendly solutions.
- (c) It is a \$10 billion appeal made by the United Nations High Commissioner for Refugees to implement sustainable solutions for millions of refugees and displaced persons.
- (d) It is a \$50 million appeal made by the United Nations Convention to Combat Desertification to member states to restore and enhance forest cover through local communities participation.

19 www.visionias.in ©Vision IAS