

Test No.

08

— IAS 2022 —

Prelims/Mains

TEST SERIES

General Studies

GENERAL STUDIES**Time Allowed: Two Hour****Maximum Marks: 200****INSTRUCTIONS**

1. Immediately after the commencement of the examination, you should check that this booklet does not have any unprinted or torn or missing pages. If so, get it replaced by a new booklet.
2. Do NOT write anything else on the Test Booklet.
3. 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.
4. You have to mark all your responses ONLY on the separate Answer Sheet provided. See direction in the answers sheet.
5. 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 $\frac{1}{3}$ rd of the allotted marks will be deducted.
6. 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.
7. 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.
8. Sheet for rough work are appended in the Test Booklet at the end.
9. Penalty for wrong answers:
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY A CANDIDATE IN THE OBJECTIVE TYPE QUESTION PAPERS.
 - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, one-third of the marks assigned to that question will be deducted as penalty.
 - (ii) If a candidate gives more than one answer, it will be treated as a wrong answer even if one of the given answers happens to be correct and there will be same penalty as above to that question.
 - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be no penalty for that question.

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

1. Consider the following differences between Parasitism and Predation:

1. A parasite kills a prey whereas a predator does not cause death to the host.
2. In parasitism the weak feed on the strong while in predation the strong feed on the weak.

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

2. With reference to the productivity of an ecosystem, consider the following statements:

1. Gross primary productivity of an ecosystem is the rate of production of organic and inorganic matter.
2. Net primary productivity is the available biomass for consumption to heterotrophs.

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

3. Which of the following are the components of Photochemical Smog?

1. Ozone
2. Formaldehyde
3. Peroxyacetyl Nitrate (PAN)

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

4. Which of the following is the correct order of steps involved in Environmental Impact Assessment?

1. Decision making
2. Scoping
3. Screening
4. Impact Prediction

Select the correct answer using the code given below.

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

5. The species that invade a bare area are called pioneer species. In primary succession in water, which of the following species act as the pioneers?

1. Small phytoplanktons
2. Rooted-floating angiosperms
3. Reed-swamp
4. Marsh-meadow

Select the correct answer using the code given below.

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

6. Recently, the National Research Centre on Yak has tied up with National Insurance Company for insuring Himalayan Yak (*Bos grunniens*) against the risks posed by weather calamities, diseases, etc. Which of the following statements regarding Himalayan Yak is correct?

- (a) Its population in India has increased in the last decade.
- (b) It can survive temperatures as cold as minus forty degrees.
- (c) Adult Yaks weigh as much as five tonnes.
- (d) Yaks are endemic to India.

3. Which of the following are effective methods in dealing with air pollution?
1. Washing of coal
 2. Replacement of controlled oxygen furnaces with open-hearth furnaces
 3. Use of storage tanks with floating roof covers in petroleum refineries

Select the correct answer using the code given below.

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

19. Which of the following are the components of Photochemical Smog?

1. Ozone
2. Formaldehyde
3. Peroxyacetyl Nitrate (PAN)

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

7. In the context of ecology, Antibiosis refers to
- (a) competition between organisms of the same species.
 - (b) an association between two species, where one species kills to feed on the other.
 - (c) a relationship in which one organism is benefited by direct utilization of another.
 - (d) secretions by an organism which are harmful to others.

8. Which of the following statements is correct regarding the air pollution control device, scrubber?

- (a) It separates particulate matter from gases in electric power plants.
- (b) It allows settling of the pollutants in a gas to settle down due to the effect of gravity.
- (c) It employs spray of water to catch pollutants during emissions.
- (d) It imparts electrical charge to the particles that makes them stick to the metallic plates.

9. Which of the following is/are the features of Grassland Ecosystems?

1. Grasslands have a rich variety of animals.
2. Optimum conditions for the growth of trees
3. Soil in grasslands are characterized by thin podzols.

Select the correct answer using the code given below.

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

10. Consider the following statements with reference to the water harvesting potential of an area:

1. The total amount of water that is received in the form of rainfall over an area is known as water harvesting potential.
2. Unpaved surfaces have a relatively lower water harvesting potential than paved surfaces.

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

11. *In these forests, there is no winter, and there are only two seasons (rainy and dry). They have the largest variety of life forms and tree species in all of nature. Trees are 25-35 m tall, with shallow roots and large dark green leaves. Animals in these forests are highly adapted to their diverse environment having developed strong defence mechanisms.*

Which of the following type of forest ecosystem is being described by the above passage?

- (a) Tropical Forests
- (b) Temperate Forests
- (c) Taiga Forests
- (d) None of the above

12. Consider the following statements:

1. Biochemical Oxygen Demand (BOD) is a measure of the amount of oxygen required to dissolve organic material in the water.
2. Highly polluted water has a very low BOD value.

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

- 13.** *Avicennia marina* whose genome has been sequenced recently is a
- (a) Tree
 - (b) Bacteria
 - (c) Bird
 - (d) Virus
- 14.** With reference to different levels of organizations in Ecology, consider the following statements:
1. Community only includes the organisms of the same species that are in proximity to one another.
 2. Population refers to all the species occupying in a given area.
 3. Biome is a large regional ecosystem characterized by similarity in vegetation and climate.
- Which of the statements given above is/are correct?
- (a) 1 and 2 only
 - (b) 2 and 3 only
 - (c) 3 only
 - (d) 1, 2 and 3
- 15.** Which of the following ecological pyramids is/are inverted?
1. Pyramid of numbers in a parasitic food chain
 2. Pyramid of biomass in grassland
 3. Pyramid of biomass in a pond
- Select the correct answer using the code given below.
- (a) 1 only
 - (b) 2 and 3 only
 - (c) 1 and 3 only
 - (d) 1 and 2 only

- 16.** Consider the following statements regarding the Coconut Development Board of India:
1. It is a statutory body established under the Ministry of Agriculture and Farmers Welfare.
 2. Its headquarters is located at Thiruvananthapuram.
- 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
- 17.** A climate agenda called 'Fit for 55' to combat climate change has been launched recently by
- (a) Coalition of G-7 countries
 - (b) European Union
 - (c) United States of America
 - (d) Germany
- 18.** Which of the following are potential benefits of coastal marshes and wetlands?
1. They act as migration areas for birds and animals.
 2. They purify and recharge groundwater.
 3. They prevent contamination of wells in the coastal areas.
 4. They protect the coastlines from storms and cyclones.
- Select the correct answer using the code given below.
- (a) 1, 2, 3 and 4
 - (b) 1, 2 and 4 only
 - (c) 2, 3 and 4 only
 - (d) 1 and 3 only

19. Which of the following are effective methods in dealing with air pollution?

1. Washing of coal
2. Replacement of controlled oxygen

furnaces with open-hearth furnaces

3. Use of storage tanks with floating roof covers in petroleum refineries

Select the correct answer using the code given below.

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

20. Consider the following statements with respect to ozone depletion:

1. Chlorofluorocarbons (CFCs) are non-toxic organic molecules that help in ozone depletion.
2. Polar stratospheric clouds provide a surface for the reactions causing ozone depletion.
3. Free Chlorine radicals form when CFCs are broken down by UV radiations.

Which of the statements given above are correct?

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

21. Which of the following are the sources of Nitrogen in an ecosystem?

1. Agricultural land
2. Fossil fuel
3. Livestock
4. Urban waste

Select the correct answer using the code given below.

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

22. India's single largest solar park by NTPC (National Thermal Power Corporation) is set to come up in the state of

- (a) Gujarat
- (b) Rajasthan
- (c) Tamil Nadu
- (d) Uttar Pradesh

23. Which of the following is/are greenhouse gases (GHG)?

1. Water vapor
2. Carbon Dioxide
3. Nitrous Oxide

Select the correct answer using the code given below.

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

24. Consider the following statements with respect to oxides of carbon:

1. Carbon Monoxide is produced as a result of the incomplete combustion of carbon.
2. Carbon dioxide forms approximately 3% by volume of the atmosphere.

Which of the statements given above is/are correct?

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

25. Consider the following statements with respect to ozone:

1. Tropospheric ozone is a greenhouse gas.
2. Ozone in the stratosphere is a product of UV radiation acting on dioxygen (O₂) molecules.
3. Ozone is thermodynamically stable than oxygen.

Which of the statements given above are correct?

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

26. Which of the following are examples of intraspecific interactions?

1. Aggregation
2. Colonisation
3. Proto-cooperation
4. Symbiosis

Select the correct answer using the code given below.

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

27. Which of the following can be the causes of depletion of resources?

1. Non-equitable distribution of resources
2. Technological and Industrial development
3. Overpopulation

Select the correct answer using the code given below.

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

28. The term 'Zero-Day Vulnerability' often seen in news is related to

- (a) cyber security
- (b) water scarcity in urban areas
- (c) earth's vulnerability to asteroid collision
- (d) black hole collapse

29. Which of the following conditions is/are suitable for high rate of decomposition?

1. High Temperature
2. Low Moisture content
3. Detritus rich in nitrogen

Select the correct answer using the code given below.

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

30. Harit Dhara, which was developed by Indian Council of Agricultural Research recently is a

- (a) new basmati rice variety.
- (b) feed supplement for livestock.
- (c) drought resistant wheat variety.
- (d) biogas plant with cow dung as feedstock.

31. Consider the following statements with reference to the conservation of soil:

1. Alternate cropping using grains and legumes increases the fertility of the soil.
2. Use of excess water on farmland can lead to leaching in the soil.
3. Growth of earthworms aids in soil fertility by making the soil more receptive to rainfall.

Which of the statements given above is/are correct?

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

32. Consider the following statements:

1. Littoral zone is topmost zone near the shore of a lake or pond.
2. Limnetic zone is well-lit and is dominated by planktons.
3. Profundal zone is much colder and denser than the other zones.

Which of the statements given above is/are correct?

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

33. Consider the following statements regarding Biogas:

1. It is produced by the fermentation of biodegradable materials such as biomass, manure, municipal waste and green waste in the presence of air.
2. It primarily consists of methane and carbon dioxide.
3. It has very low calorific value and cannot be used as a fuel

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

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

34. Consider the following pairs:

<i>Type of Pollutant</i>	<i>Disease Caused</i>
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- | | |
|------------|--------------------|
| 1. Arsenic | : Cholera |
| 2. Mercury | : Itai-Itai |
| 3. Cadmium | : Minamata Disease |

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

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) None

35. Consider the following:

1. Styrofoam CD and DVD cases
2. Leather bags
3. Plastic toys
4. Synthetic pesticides

Which of the above mentioned waste products fall in the category of non-biodegradable wastes?

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

36. India has been ranked 10th in the latest Global Cybersecurity Index (GCI), 2020. GCI is released by

- (a) Global Cyber Alliance
- (b) International Telecommunication Union
- (c) Internet Society
- (d) International Cyber Security Protection Alliance

37. "It is a Greenhouse gas. It is released in large amounts in paddy fields, coal mines, from rotting garbage dumps. It is associated with chemical reactions leading to the destruction of ozone. It is also used as biogas." It is

- (a) Nitrous Oxide
- (b) Methane
- (c) Chlorofluorocarbon
- (d) Carbon dioxide

38. Consider the following statements about the National Board for Wildlife:

1. It is a statutory body, established under the Wildlife Protection Act, 1972.
2. It is headed by the Minister-in-charge of Environment, Forest, and Climate Change (MoEFCC).

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

39. Which of the following organisms act as a biological agent in increasing the plant growth of farmland?

1. Praying Mantis
2. Desert Locusts
3. Chalcid Wasps
4. Soldier Beetle

Select the correct answer using the code given below.

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

40. Which of the following measures can be taken to avoid over-exploitation of resources?

1. Use of bio-fertilisers and bio-pesticides
2. Use of high yielding variety seeds
3. Avoiding use of non-degradable materials

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

41. Consider the following statements about the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES):

1. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.
2. It is legally binding on the Parties and it does not take the place of national laws.

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

42. Homeostasis phenomenon is related to which of the following?

- (a) The ability of an organism to achieve stability through change.
- (b) Self-regulating process by which an organism tends to maintain stability.
- (c) A state of minimal activity and metabolic depression.
- (d) The unidirectional flow of energy through the ecosystem.

43. In the carbon cycle, which of the following processes add carbon dioxide to the atmosphere?

1. Decomposition of organic matter
2. Respiration by plants
3. Burning of fossil fuels
4. Photosynthesis by plants

Select the correct answer using the code given below.

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

44. Which of the following conditions are favourable for the development of hydroelectricity?

1. A mountainous area or an upland region.
2. Silt free and uniform source of water.
3. Presence of industrial zones in the close vicinity.

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

45. Which of the following may be the implications of the destruction of forest cover?

1. Reduction in the oxygen
2. Loss of biodiversity
3. Lowering of water table

Select the correct answer using the code given below.

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

46. These are called the "*rainforests of the ocean*". They cannot survive above water level and are mostly confined between 25 degrees North and South on the globe. They are generally attached to submarine platforms of islands that are submerged.

Which of the following is best described by the passage given above?

- (a) Phytoplanktons
- (b) Mangroves
- (c) Coral Reefs
- (d) Seagrass

47. Which of the following measures can be taken for the abatement of soil pollution?

- 1. Sanitary Landfills
- 2. Increased use of pesticides
- 3. Composting

Select the correct answer using the code given below.

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) None of the above

48. With reference to the ecosystem, which of the following correctly describes the 'standing state'?

- (a) Amount of dry biomass present in an ecosystem at any given time
- (b) The total number of microorganism species in an ecosystem.
- (c) Amount of inorganic nutrients found in an ecosystem.
- (d) Amount of annual rainfall received within the boundaries of an ecosystem.

49. Which of the following is/are the adaptation features found in plants and animals of the Desert ecosystem?

- 1. Hard and thick waxy leaves.
- 2. Long and spreading root systems
- 3. Concentrated body fat
- 4. Overactive sweat glands

Select the correct answer using the code given below.

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

50. Which of the following can be determined by counting the pugmarks in a defined area?

- 1. Presence of different species in the area.
- 2. Age of different species.
- 3. Sex ratio of different species
- 4. Identification of Individual animals

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

51. With reference to Genetic Biodiversity, consider the following statements:

- 1. It refers to the variation of genes among different species.
- 2. Higher genetic biodiversity leads to lesser flexibility in adaptation to environmental changes.

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

52. Discharge of which of the following into waterbodies can cause Eutrophication?

1. Domestic Sewage
2. Industrial effluents
3. Agricultural fertilizers

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

53. The Mekedatu project which is recently seen in the news is a proposed project on the river

- (a) Beas
- (b) Cauvery
- (c) Krishna
- (d) Mahanadi

54. Consider the following statements about Central Pollution Control Board (CPCB):

1. It can advise the Central Government on any matter related to the prevention and control of water and air pollution.
2. It has a network of Zonal offices called State Pollution Control Boards.

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

55. Uttar Pradesh, the largest populated state of India has recently brought out a draft bill on population control and has ignited a debate on population control. In this context, arrange the population of the following states as per census 2011 in the increasing order.

1. Tamil Nadu
2. Bihar
3. Karnataka
4. Madhya Pradesh

Select the correct answer using the code given below.

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

56. Consider the following statements about the Wildlife Protection Act, 1972:

1. It provides for the appointment of Chief Wildlife Warden by the Central Government.
2. It prohibits the development of new ex-situ conservation areas like new Zoological and Botanical Gardens.
3. It was enacted for the protection of both plants and animal species.

Which of the statements given above is/are correct?

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

57. Consider the following statements with regard to the harmful effects of chemicals in drinking water:
1. Excessive sulfate in drinking water causes the blue baby syndrome.
 2. Deficiency of Fluorine in drinking water causes tooth decay.
 3. High concentration of Lead in drinking water can damage the kidney and liver.
- Which of the statements given above is/are **not** correct?
- (a) 1 only
 - (b) 3 only
 - (c) 2 and 3 only
 - (d) 1 and 2 only
58. Which of the following international organizations, categorises the animal species and publishes the Red List of Threatened Species?
- (a) UNEP
 - (b) World Wide Fund for Nature
 - (c) International Union for Conservation of Nature
 - (d) CITES
59. Which of the following explains the shorter ears and limbs of mammals from colder climates to minimize heat loss?
- (a) Bergman's rule
 - (b) Gause's Hypothesis
 - (c) Allen's Rule
 - (d) Gloger's rule
60. Consider the following statements regarding the Kumbhalgarh Wildlife Sanctuary often seen in the news:
1. It is a tiger reserve with the highest density of tigers in India.
 2. It is located in Rajasthan.
- 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
61. Near-Earth Asteroid Scout or NEA Scout is a spacecraft set to be launched by
- (a) European Space Agency
 - (b) National Aeronautics and Space Administration
 - (c) CNES, France
 - (d) JAXA, Japan
62. The newly proposed Lemru Elephant Reserve to reduce man-elephant conflict is located in:
- (a) Jharkhand
 - (b) Chhattisgarh
 - (c) Maharashtra
 - (d) Odisha
63. Which of the following is/are the department(s) of the Ministry of Finance?
1. Department of Public Enterprises
 2. Department of Investment and Public Asset Management
 3. Department for Promotion of Industry and Internal Trade
- Select the correct answer using the code given below.
- (a) 2 only
 - (b) 1 and 2 only
 - (c) 1 and 3 only
 - (d) 1, 2 and 3
64. Which of the following best defines the term Biomagnification?
- (a) Depletion of oxygen from water bodies occurring both due to natural and anthropogenic reasons
 - (b) Increase in concentration of toxic substances along the food chain
 - (c) Increase in heat loss at every stage in the foodchain
 - (d) Increase in the nitrogenous waste in the water bodies due to waste water from the agricultural sector

- 65.** Consider the following phases of disposal of waste using sanitary landfill system:
1. Aerobic bacteria deplete the available oxygen
 2. Establishment of Methanogenic activity
 3. Establishment of Anaerobic conditions
 4. Depletion of organic matter
- Arrange the above phases in the correct chronological order of their occurrence.
- (a) 1-2-3-4
 - (b) 2-1-3-4
 - (c) 1-3-2-4
 - (d) 3-2-1-4
- 66.** Consider the following statements with reference to the flow of energy in a food chain:
1. Energy flow in a food chain is always unidirectional in nature
 2. The loss of energy at each trophic level is in the range of 10-15 percent.
 3. Higher the trophic level the greater is the available energy.
- Which of the statements given above is/are correct?
- (a) 1 and 2 only
 - (b) 2 and 3 only
 - (c) 1 only
 - (d) 1, 2 and 3
- 67.** Which of the following characteristics are associated with a eutrophic lake?
1. Low amount of nutrients
 2. Loss of Biodiversity
 3. High amount of dissolved oxygen
 4. Excessive growth of algae
- Select the correct answer using the code given below.
- (a) 2 and 4 only
 - (b) 1 and 3 only
 - (c) 1, 2 and 4 only
 - (d) 2, 3 and 4 only
- 68.** The Animal Welfare Board was established under which of the following Act?
- (a) The Wildlife Protection Act, 1972
 - (b) The Biological Diversity Act, 2002
 - (c) The Prevention of Cruelty to Animals Act, 1960
 - (d) The Environment Protection Act, 1986
- 69.** Mahananda river which is an important tributary of river Ganga flows through the states of
1. Bihar
 2. Uttar Pradesh
 3. West Bengal
- Select the correct answer using the code given below.
- (a) 1 only
 - (b) 2 only
 - (c) 1 and 3 only
 - (d) 1, 2 and 3
- 70.** Which of the following causes are responsible for Desertification?
1. Lack of vegetation cover
 2. Water erosion
 3. Slash and burn agriculture
 4. Overgrazing
- Select the correct answer using the code given below.
- (a) 1, 2 and 3 only
 - (b) 2 and 4 only
 - (c) 1, 3 and 4 only
 - (d) 1, 2, 3 and 4

71. Consider the following statements with reference to the Indian Forest Act, 1927:
1. It regulates the movement of forest produce, and the duty leviable on forest produce.
 2. It explains the procedure to be followed for declaring an area as Reserved Forest.
 3. The State Government can assign to any village community the rights of government over any land of a reserve forest.
- Which of the statements given above is/are correct?
- (a) 3 only
(b) 1 and 3 only
(c) 1 and 2 only
(d) 1, 2 and 3
72. Which of the following pollutants can be classified as toxic particulate material?
1. Lead
 2. Cadmium
 3. Mercury
 4. Asbestos
 5. Nickel
- Select the correct answer using the code given below.
- (a) 1, 3 and 5 only
(b) 1, 2, 3 and 4 only
(c) 1, 4 and 5 only
(d) 1, 2, 3, 4 and 5
73. Which of the following statements is **not** correct with respect to acid rain?
- (a) Acid rain is resulted from the emission of oxides of sulphur and nitrogen.
(b) Acid rain dissolves and washes away nutrients needed for the growth of crops.
(c) Acid rain has a pH value of between 6 and 7.
(d) Acid rain corrodes water pipes resulting in the leaching of heavy metals into drinking water.

74. Which of the following states in India have potential for wind energy generation?
1. Andhra Pradesh
 2. Gujarat
 3. Maharashtra
 4. Tamil Nadu
- Select the correct answer using the code given below.
- (a) 1, 2 and 3 only
(b) 2 and 3 only
(c) 3 and 4 only
(d) 1, 2, 3 and 4
75. Which of the following statements is/are correct about biodiversity hotspots?
1. It represents floral and faunal endemism in a region.
 2. It is declared by the World Wide Fund for Nature (WWF) in association with the International Union for Conservation of Nature (IUCN).
- Select the correct answer using the code given below.
- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
76. Consider the following statements about the effect of frost on the growth of plants:
1. It increases the concentration of salts in the cell.
 2. It leads to the formation of canker disease.
- 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

77. Which of the following are examples of a lotic water ecosystem?

1. Springs
2. Swamps
3. Marshes
4. Streams

Select the correct answer using the code given below.

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

78. With reference to the various steps involved in the process of decomposition, consider the following pairs:

<i>Process</i>	<i>Description</i>
1. Leaching	: Percolation of inorganic nutrients into the soil
2. Mineralisation	: Degradation of detritus into simpler inorganic substances
3. Catabolism	: Degradation of humus by microbes

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

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

79. Which of the following are the likely impacts of ecosystem destruction?

1. Increasing evapo-transpiration
2. Declining levels of underground water-table
3. Loss of species and biomass

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

80. Consider the following pairs:

<i>Biotic Interactions</i>	<i>Example</i>
1. Predation	: Pitcher plant consuming insect
2. Competition	: Plants in evergreen forest
3. Parasitism	: Cattle egret and grazing cattle
4. Amensalism	: Sparrow eating seeds

Which of the pairs given above are correctly matched?

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

81. Consider the following statements about The Water (Prevention and Control of Pollution) Act, 1974:

1. It defines both, water pollution and water quality standards.
2. It provides for maintenance and restoration of quality of all types of surface and groundwater.
3. It authorizes the Department of Water Resources, River Development & Ganga Rejuvenation to implement the work for the objectives of the Act.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) None

82. Which of the following countries shares a border with the Black Sea?

- (a) Greece
- (b) Georgia
- (c) Azerbaijan
- (d) Macedonia

83. With reference to ecological food chains, consider the following statements:

1. A grazing food chain starts with the decomposition of organic wastes and dead matter.
2. The energy transmitted remains constant at each trophic level throughout a food chain.

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

84. Which of the following countries are the members of Mekong-Ganga Cooperation?

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

Select the correct answer using the code given below.

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

85. In an ecological succession, the entire sequence of communities that successively change in a given area is called sere. In the successive seral stages, which of the following parameters witness an increase?

1. Number of species
2. Number of organisms
3. Total biomass

Select the correct answer using the code given below.

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

86. Consider the following statements regarding Monkey B virus or Herpes B virus :

1. It is transmitted only through contaminated monkey blood.
2. Currently, there is no vaccine against this virus.

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

87. Consider the following statements about Wildlife Crime Control Bureau:

1. It is a statutory body created under the Ministry of Environment, Forest, and Climate Change.
2. It assists foreign authorities and international organizations concerned to facilitate coordination and universal action for wildlife crime control.

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

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

88. Consider the following statements with reference to solar energy:

1. Solar energy can be directly converted into electricity using a photovoltaic cell.
2. Solar energy in the form of thermal energy can be used for water heating systems, dryers and refrigeration.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 or 2

89. With reference to marine ecosystems, consider the following statements:

1. The aphotic zone in the marine ecosystem is absolutely devoid of traces of life.
2. The waves and tides produced by the pull of the moon have no influence over marine ecosystems.

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

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

90. Which of the following are the reasons/factors for exposure to Particulate Matter (PM) pollution?

1. Tobacco smoke
2. Pulverization of Coal
3. Spraying of Pesticides
4. Dust storms
5. Sandblasting

Select the correct answer using the code given below.

- (a) 1, 2 and 3 only
- (b) 2 and 4 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3, 4 and 5

91. Consider the following pairs:

***Traditional Water
Harvesting system***

- | | | |
|--------------|---|-------|
| 1. Karnataka | : | Kere |
| 2. Rajasthan | : | Kunds |
| 3. Nagaland | : | Zing |

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

- (a) 1 and 2 only
- (b) 3 only
- (c) 1 and 3 only
- (d) None

92. Which of the following components are included in the Integrated Watershed Management?

1. Management of soil and water
2. Development of Agro-forestry
3. Development of fodder for cattle

Select the correct answer using the code given below.

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

93. Project BOLD which aims to create bamboo-based green patches in arid and semi-arid areas of India has been launched by

- (a) Arid Forest Research Institute, Jodhpur
- (b) Forest Research Institute, Dehradun
- (c) Indian Institute of Forest Management
- (d) Khadi and Village Industries Commission

94. Which of the following are the applications of Phosphorus mineral?

1. Fertilizers
2. Detergents
3. Medicines
4. Steel Production
5. Safety matches

Select the correct answer using the code given below.

- (a) 1, 2 and 4 only
- (b) 2, 3 and 5 only
- (c) 1, 3, 4 and 5 only
- (d) 1, 2, 3, 4 and 5

95. The systematic search for biochemical and genetic information in nature in order to develop commercially valuable products for pharmaceutical, agricultural, cosmetic and other applications refers to:

- (a) Bio-piracy
- (b) Bioprospecting
- (c) Biopatenting
- (d) None of the above

96. Consider the following statements regarding the Revamped Distribution Sector Scheme for DISCOMs :

1. Private sector DISCOMs are not included for assistance under this scheme.
2. Indian Renewable Energy Development Agency (IREDA) is the nodal agency for implementing this scheme.

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

97. Which of the following cities in India is/are selected by UNESCO under its 'Historic Urban Landscape' project?

1. Jodhpur
2. Gwalior
3. Orchha

Select the correct answer using the code given below.

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

98. This National Park was formed by including the areas of erstwhile Venugopala Wildlife Park. It was brought under Project Tiger in 1973. It together with Mudumalai Wildlife Sanctuary and Wayanad Wildlife Sanctuary constitute Nilgiri Biosphere Reserve. It is also home to species like gaur, mouse deer, sloth bear, and Malabar squirrel, etc.

The above-mentioned passage refers to which of the following National Park?

- (a) Bandipur National Park
- (b) Nagarhole National Park
- (c) Bannerghatta National Park
- (d) Mathikettan Shola National Park

99. Which of the following statements is *not* correct about The Air (Prevention and Control of Pollution) Act, 1981?

1. It provides for the establishment of the Central Pollution Control Board.
2. It includes noise as an air pollutant.
3. Any air pollutant into the atmosphere by a ship or aircraft does not come under the purview of this Act.

Select the correct answer using the code given below.

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

100. Consider a situation in which a parasitic bird lays its eggs in the nest of its host and lets the host incubate them. During the course of evolution, the eggs of the parasitic bird have evolved to resemble the host's egg in size and color to reduce the chances of the host bird detecting the foreign eggs and ejecting them from the nest.

Which type of parasitism is being described in the above situation?

- (a) Endoparasitism
- (b) Brood parasitism
- (c) Ectoparasitism
- (d) Obligate Parasitism