



VIDHVATH ACADEMY FOR COMPETITIVE EXAMS

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SUBJECT WISE TEST: VPT040 ENVIRONMENT & ECOLOGY TEST BOOKLET

Time Allowed: 120 mins

Maximum Marks: 200

INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS BOOKLET 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.
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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 1/3rd 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. Consider the following statements:

1. Statement I: Animals living near colder climates are generally bigger in size.
2. Statement II: Large body size increases blood flow to limbs, preventing frostbite.
3. Statement III: Larger organisms have smaller surface area to volume ratio than smaller organisms.

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

- (a) Both Statement-II and Statement-III are correct and both of them explain Statement-I.
- (b) Both Statement-II and Statement- III are correct, but only one of them explains Statement-I.
- (c) Only one of the Statements II and III is correct and that explains Statement-I.
- (d) Only one of the Statements II and III is correct, but that does not explain Statement-I.

2. With reference to population interactions in an ecosystem, consider the following statements:

1. An orchid growing as an epiphyte on a mango branch reflects commensalism.
2. Barnacles growing on the back of a whale are an example of amensalism.
3. Lichens represent mutualism between fungus and algae.

Which of the statements given above is/are correct?

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

3. A region 'X' is designated as a Biosphere Reserve by a country. Which of the following is the most likely impact on the management and usage of the region?

- (a) Strict protection of all human activities, with no access for local communities.

- (b) Promotion of sustainable development practices along with the conservation of biodiversity.
- (c) Complete prohibition of any economic activities, including agriculture and tourism.
- (d) Region comes under the shared jurisdiction of the national government and UNESCO for conservation oversight.

4. If you travel through the Sundarbans, you are likely to see which of the following species inhabiting naturally there?

1. Royal Bengal Tiger
2. Gangetic Dolphin
3. Irrawaddy dolphins
4. Lion-tailed macaque

Select the correct answer using the code given below:

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

5. Consider the following statements regarding Coral reefs:

1. Statement I: Shallow-water corals are typically brown or green in colour, whereas deep-sea corals are often bright white.
2. Statement II: Unlike shallow-water corals, deep-sea corals lack photosynthetic algae.

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.

6. Which of the following statements best describes the term “ecological footprint”?

- Ecosystem’s ability to support maximum number of species in an area.
- Amount of biologically productive land and water required to support the demands of a population.
- Capacity of ecosystems to regenerate what people demand from those surfaces.
- Total amount of energy required to sustain human activities.

7. Which of the following statements correctly differentiate between Gharial and Mugger?

- Gharial generally prefers slow-moving, shallow water bodies, while Mugger prefers deep and fast flowing waters.
- Gharial is a saltwater crocodile, whereas Mugger is a freshwater species.
- Gharial has a thin long snout, whereas Mugger has a broad snout.

Select the correct answer using the code below:

- 1 only
- 2 only
- 3 only
- None

8. Which of the following aspects can be understood by examining the ecological niche of a species in an ecosystem?

- The range of conditions necessary for the presence of species.
- The ecological role of a species.
- Interactions between the species and its environment.

Select the correct answer using the code given below:

- 1 only
- 1 and 2 only
- 2 and 3 only
- 1, 2 and 3

9. Which of the following are the potential benefits of controlled forest fires?

- Pest and insect control
- Nutrient addition
- Infiltration of rainwater
- Germination of new plants
- Promotes native vegetation

Select the correct answer using the code below:

- 1, 2 and 5 only
- 1, 3 and 4 only
- 1, 3 and 5 only
- 1, 2, 4 and 5 only

10. Consider the following statements:

- Statement I: Sea otters play a key role in maintaining the health of kelp forests.
- Statement II: Sea otters feed on sea urchins.

Which one of the following is correct regarding the above statements?

- Both Statement I and Statement II are correct and Statement II is the correct explanation for Statement I.
- Both Statement I and Statement II are correct, but Statement II is not the correct explanation for Statement I.
- Statement I is correct, but Statement II is incorrect.
- Statement I is incorrect, but Statement II is correct.

11. Consider the following Vertebrates:

- Fishes
- Amphibians
- Reptiles
- Aves

How many of the above vertebrates are cold-blooded?

- Only one
- Only two
- Only Three
- All Four

12. Meghalaya is well known for its living-root bridges. The roots of which of the following trees are generally used to construct these bridges?

- (a) Banyan trees
- (b) Mahogany trees
- (c) Bamboo grass
- (d) Rubber trees

13. Consider the following regions:

- 1. Western Ghats
- 2. Himalayas
- 3. Gulf of Kutch
- 4. Indo-Burma region
- 5. Sunderban land

How many of the above are recognized as Biodiversity Hotspots in India?

- (a) Only two
- (b) Only three
- (c) Only four
- (d) All five

14. Which among the following is not a characteristic of Ecological succession?

- (a) Increased productivity from one stage to another
- (b) The shift of nutrients from reservoirs
- (c) The gradual decrease in the complexity of food webs
- (d) Change in diversity of organisms

15. Why is the plant "Senna spectabilis" often mentioned in the news?

- (a) Its extract is increasingly being used in traditional medicines for cardiovascular diseases.
- (b) It is widely used in afforestation programs on degraded lands.
- (c) It is an invasive species that threatens biodiversity in the Western Ghats.
- (d) It is being researched for its potential as a biofuel crop in tropical regions.

16. With reference to ecological pyramids, consider the following statements:

- 1. The pyramid of biomass in the sea is generally upright.
- 2. The pyramid of energy can never be inverted.

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. With reference to the tiger conservation efforts in India, consider the following statements:

- 1. Core areas in the tiger reserves have the legal status of a national park or a sanctuary.
- 2. National Tiger Conservation Authority (NTCA) is a statutory body established under the Environment (Protection) Act, 1986.
- 3. India currently hosts more than half of the world's wild tiger population.

How many of the statements given above are correct?

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

18. Which of the following are examples of in-situ biodiversity conservation?

- 1. National parks
- 2. Zoological parks
- 3. Sacred groves
- 4. Seed banks
- 5. Wildlife Safari Parks

Select the correct answer using the code given below:

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

19. With reference to biogeochemical cycles, consider the following statements:

- 1. The reservoir for the gaseous cycle exists in the atmosphere, but the sedimentary cycle has its reservoir in earth's crust.
- 2. The phosphorus cycle is an example of a gaseous cycle, while the carbon cycle is an example of a sedimentary cycle.

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

20. With reference to Gangetic Dolphins, consider the following statements:

1. They can survive only in fresh water.
2. They rely on echolocation to locate food due to their poor vision.
3. They have been declared as the National Aquatic Animal of India.

Which of the statements given above are correct?

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

21. Which of the following statements is/are correct with reference to the United Nations High Seas Treaty?

1. It regulates the exploitation of marine resources both within and beyond national jurisdictions.
2. It focuses on the conservation of marine biological diversity.
3. It does not address the transfer of marine technology to developing countries.

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

22. Ambergris is a valuable animal product used in making perfumes, but its possession is illegal in India. It is associated with which of the following animals?

- (a) Musk Deer
- (b) Sperm whale
- (c) Pangolin
- (d) Dolphin

23. Which one of the following organisms has the ability to regenerate an entirely new body from a severed arm?

- (a) Chameleons

- (b) Starfish
- (c) Salamander
- (d) Sharks

24. Which of the following statements is/are correct regarding global biodiversity?

1. There are more plant species than animal species globally.
2. Insects constitute more than half of all known animal species.

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

25. With respect to energy flow in an ecosystem, consider the following statements:

1. The grazing food chain is the primary conduit of energy flow in terrestrial ecosystems.
2. Bacteria are the saprotrophs in the detritus food chain.
3. Molluscs are classified as herbivores in an aquatic ecosystem.

How many of the statements given above are correct?

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

26. Which of the following is not a criterion for an area to be declared as a Biodiversity Hotspot?

- (a) The area must contain at least 1,500 species of vascular plants as endemics.
- (b) The area must have lost at least 70% of its original habitat.
- (c) The area must have a large population of keystone species.
- (d) The area must have a significant level of threat from human activities.

27. Consider the following statements:

1. Statement I: Jellyfish is not classified as a true fish.

2. Statement II: Jellyfish breathe through lungs, not gills.

Which of the following is correct regarding 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, but 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.

28. The terms HDPE, Polyvinyl Chloride, and Polystyrene are related to:

- (a) Polymers used in chemotherapy
- (b) Harmful chemicals used in pesticides
- (c) Types of plastics
- (d) Secondary ozone depleting gasses

29. Consider the following statements regarding "Neelakurinji," recently in the news:

- 1. It blooms once every 12 years.
- 2. It is a shrub species endemic to the Western Ghats of India.
- 3. Although a tourist attraction, its flowers are considered poisonous to humans.

Which of the statements given above is/are correct?

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

30. This protected area is located in the Nallamala hill ranges. Two wildlife Sanctuaries, namely Rajiv Gandhi Wildlife Sanctuary and Gundla Brahmeswaram Wildlife Sanctuary constitute the protected area. River Krishna traverses through it. The above paragraph describes which of the following protected areas?

- (a) Sathyamangalam Tiger Reserve
- (b) Sunabeda Tiger Reserve.

- (c) Nagarhole Tiger Reserve
- (d) Nagarjunsagar-Srisailem Tiger Reserve

31. Which of the following best describes the term "Ecocide" often seen in the news?

- (a) Destruction of the natural environment by deliberate human action.
- (b) Practice of using toxic chemicals in agriculture and plantation.
- (c) Collapse of ecosystem due to wildlife population explosion.
- (d) Extinction of an endemic species from its original habitat.

32. With reference to ecological succession, consider the following areas:

- 1. Abandoned farm lands
- 2. Uplifted marine deposits
- 3. Newly created reservoir
- 4. Bare rocks
- 5. Flooded lands
- 6. Dunes

Which of the areas given above can be classified as primary succession sites?

- (a) 1, 2, 3 and 5 only
- (b) 1, 2, 4 and 6 only
- (c) 2, 3 and 5 only
- (d) 2, 3, 4 and 6 only

33. With reference to the Greater One-horned Rhinoceros, consider the following statements:

- 1. It is the only species of Rhino with a single horn.
- 2. Greater One-horned Rhinos are generally solitary animals.
- 3. Wallowing is an important activity for Rhinos to regulate their body temperature.

How many of the statements given above are correct?

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

34. With respect to the productivity of an ecosystem, consider the following statements:

1. Primary productivity depends on the plant species inhabiting a particular area.
2. Net primary productivity is the available biomass for the consumption of heterotrophs.
3. Secondary Productivity is the rate of assimilation of food energy by the consumers.

Which of the statements given above are correct?

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

35. Which of the following statements correctly differentiates between a National Park and a Wildlife Sanctuary?

1. Wildlife Sanctuaries are managed with a perspective of the ecosystem, whereas National Parks are managed with a species-specific perspective.
2. National Parks have a greater degree of restrictions on human activities compared to Wildlife Sanctuaries.

Select the correct answer using the code below:

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

36. Consider the following statements regarding the Global Biodiversity Framework Fund:

1. It was launched during the 2023 United Nations Climate Change Conference (COP28) in Dubai.
2. The fund is intended to support the implementation of the Kunming-Montreal Global Biodiversity Framework.

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

37. Consider the following statements:

1. Fungi are a diverse group of prokaryotic cells that lack a true nucleus and membrane bound organelles.
2. Fungi are autotrophic as they obtain energy by process of photosynthesis.

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

38. Consider the following statements regarding Homeostasis of the ecosystem:

1. It is the state when an ecosystem maintains a biological equilibrium between the different components.
2. It continues to remain static with the time and is not subject to any change as it would lead to catastrophic imbalances in the ecosystem.

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. Certain species of which of the following organisms make sacrifices of themselves to protect their offspring by releasing toxic chemicals from their bodies?

- (a) Hawks
- (b) Ants
- (c) Bats
- (d) Dolphins

40. With reference to the Convention on Biological Diversity, consider the following Pairs:

- | Protocol | Mechanism |
|--------------------|----------------------------|
| 1. Nagoya Protocol | : Biosafety Clearing House |

2. Cartagena Protocol : Advance Informed Agreement
3. Nagoya-Kuala Lumpur: Access and Benefit-sharing Clearing House Protocol

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

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

41. With reference to the Great Indian Bustard, consider the following statements:

1. Desert National Park is a natural habitat of Great Indian Bustard.
2. They are endemic to the state of Rajasthan.
3. They generally prefer grasses taller than themselves to hide from predators.

How many of the statements given above are correct?

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

42. With reference to Eco-sensitive zones, consider the following statements:

1. They act as a buffer zone around protected areas.
2. They are notified under the Wildlife Protection Act, 1972.

Which of the following statements given above is/are correct?

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

43. Which of the following is often referred to as the “Barometer of Life” because it tracks health of the world’s biodiversity?

- (a) Global Biodiversity Outlook
- (b) Living Planet Index
- (c) IUCN Red List
- (d) Global Environment Outlook

44. Consider the following statements regarding Bonn Convention:

1. It is the only global convention specializing in the conservation of migratory species.
2. United Nations Environment Programme (UNEP) hosts the secretariat for the convention.

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

45. Which of the following statements is not correct regarding the Wildlife Protection (Amendment) Act, 2022?

- (a) Plant species have been listed under schedule III of the Act.
- (b) The earlier existing schedule for vermin species has been removed.
- (c) Species protected under Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) are listed under Schedule II of the Act.
- (d) Anyone possessing wild animals listed under Schedule IV of the Act must obtain a registration certificate from the concerned State Chief Wildlife Warden.

46. Consider the following pairs:

- | Wetland/lake | Location |
|----------------------|----------------------|
| 1. Aghanashini Lake: | Kerala |
| 2. Tawa Reservoir: | Karnataka |
| 3. Nanjarayan Bird: | Tamil Nadu Sanctuary |

Which of the pairs given above is/are correct?

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

47. Consider the following statements:

1. Statement I: Bamboo and medicinal plants are considered as Minor Forest Produce in India.
2. Statement II: As per Indian Forest Act 1927, all non- timber forest produce of plant origin are minor forest produce.

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.

48. Consider the following statements regarding Mangroves:

1. Mangroves are found in all the coastal states of India.
2. They cannot withstand freezing temperatures.
3. Kharai camels primarily feed on mangroves.

How many of the above statements are correct?

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

49. In the context of ecology, the term 'Bioprospecting' is best described as:

- (a) The systematic study of biodiversity to understand its ecological role.
- (b) The systematic identification and utilization of biological resources for commercial purposes.
- (c) The conservation of endangered species to protect biodiversity.
- (d) The genetic engineering of organisms to create new species.

50. Consider the following Biosphere Reserves:

1. Achanakmar-Amarkantak
2. Agasthyamala
3. Nilgiri
4. Dibru-Saikhowa
5. Dehang-Debang

How many of the above Biosphere Reserves in India span across more than one state?

- (a) Only two
- (b) Only three
- (c) Only four
- (d) All five

51. With reference to the difference between Asiatic lions and African lions, consider the following statements:

1. Asiatic lions are generally larger than African lions.
2. Asiatic lions have a more pronounced longitudinal belly fold compared to African lions.
3. While African lions are listed as vulnerable in the IUCN Red List, Asiatic lions are classified as endangered.

Which of the statements given above is/are correct?

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

52. Consider the following statements regarding Conservation Reserves and Community Reserves:

1. They are protected areas introduced under Environment Protection Act, 1986.
2. Conservation Reserves are completely owned by the Government, whereas Community reserves involve atleast partial private ownership.

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

53. Consider the following statements regarding Clean Plant Program, recently launched by the Government of India:

1. It is primarily aimed at improving the air quality in the country.
2. It has been launched as a part of 'LiFE Movement'.

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

54. Consider the following statements regarding the United Nations Convention to Combat Desertification (UNCCD):

1. It is the only legally binding framework set up to address desertification.
2. UNCCD hosts the secretariat for the International Drought Resilience Alliance.
3. The Changwon initiative of UNCCD deals with land degradation.

Which of the statements given above are correct?

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

55. Consider the following statements with respect to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) convention:

1. It prohibits international trade in specimens of wild animals.
2. It is legally binding on the parties signatory to it.
3. It replaces the national laws if ratified by the parties.

How many of the statements given above are not correct?

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

56. With reference to Biological Diversity (Amendment) Act 2023, consider the following statements:

1. It aims to regulate the access to biological resources without compromising the objectives of the Nagoya protocol.
2. It criminalizes use of biological resources by AYUSH practitioners who have been practicing indigenous medicines.
3. It is mandatory for the AYUSH practitioners to share benefits for accessing the biological resources.

Which of the statements given above is/are correct?

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

57. With reference to the Cyanobacteria, consider the following statements:

1. They are photosynthetic autotrophs.
2. They can fix atmospheric nitrogen.
3. They serve as an important biofertilizer.

How many of the statements given above are correct?

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

58. Consider the following schemes launched by Government of India:

1. Amrit Dharohar Capacity Building Scheme
2. MISHTI scheme
3. PM-DevINE Scheme

How many of the above schemes will have a direct impact on biodiversity conservation?

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

59. Consider the following statements regarding the Indo-Pacific Economic Framework for Prosperity (IPEF):

1. Clean Economy and Fair Economy form two of the main pillars of the framework.
2. India recently joined the 'Fair and Resilient Trade' pillar of IPEF.
3. All the QUAD nations are IPEF partners.

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

60. Consider the following statements regarding species diversity:

1. Statement I: Tropical regions exhibit higher species diversity compared to temperate or Polar Regions.
2. Statement II: Tropical regions have experienced relatively stable and predictable environmental conditions over millions of years.

Which of the following is correct with respect to 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, but 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.

61. Consider the following statements:

1. Statement I: Oceans have higher productivity than terrestrial ecosystems.
2. Statement II: Oceans cover a larger portion of the Earth's surface than land.

Which of the following is correct with respect to 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, but 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.

62. Consider the following statements regarding The Forest (Conservation) Amendment Act, 2023:

1. The State Government requires prior approval of the Governor of the state to assign any forest land to a private entity.
2. The Act specifies some activities that cannot be carried out in forests, such as running zoos, safaris and eco-tourism facilities.
3. The Bill exempts certain types of land from the provisions of the Act, such as forest land along a rail line, land situated within 100 km from international borders etc.

How many of the statements given above are correct?

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

63. With reference to Eutrophication, consider the following statements:

1. It is a condition of excess nutrients that leads to a decline in algal growth.
2. It increases the pH of seawater and slows down the growth of fish.
3. It leads to hypoxic conditions, affecting aquatic ecosystems.

Which of the statements given above is/are correct?

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

64. Consider the following statements:

1. Ecotone is a zone of transition between two ecosystems.
2. Edge effect reflects a high number of species in the transition area between two ecosystems.

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

65. Consider the following statements:

1. Biomagnification is the gradual accumulation of pollutants in an organism.
2. Bioaccumulation is the increase in pollutant concentration across trophic levels.

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

66. Consider the following statements:

1. Statement I: Zooplanktons make a significant contribution to ocean carbon sequestration.
2. Statement II: Zooplanktons transfer carbon to deeper waters through their waste products.

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

67. With reference to the Nitrogen Cycle, consider the following statements:

1. Most living organisms directly utilize nitrogen gas from the atmosphere.
2. Nitrogen gas in the atmosphere is fixed by natural processes such as lightning and volcanic activity.
3. Industrial nitrogen fixation converts atmospheric nitrogen into ammonia at high temperatures and pressures.

How many of the statements given above are correct?

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

68. An increase in Biological Oxygen Demand (BOD) in a water body indicates which of the following?

- (a) A higher concentration of dissolved oxygen, signifying better water quality.
- (b) A greater amount of organic matter, suggesting increased microbial activity.
- (c) Lower levels of nutrients, leading to reduced aquatic plant growth.
- (d) A decrease in the population of decomposers due to contamination.

69. With reference to Biomes, consider the following pairs:

Biomes : Flora

1. Boreal forest : Scanty vegetation
2. Temperate Steppe : Grasses
3. Tropical forest : Multi-layered canopy
4. Coastal desert : Evergreen conifers

How many of the pairs given above are correctly matched?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

70. Consider the following statements:

1. Statement I: Tantalum is a corrosion resistant metal used in electronics and semiconductor industries.
2. Statement II: Tantalum's resistance to corrosion is due to its natural aversion

to reacting with oxygen, preventing the initiation of corrosion processes.

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 not correct
- (d) Statement-I is incorrect but Statement-II is correct

71. Consider the following statements regarding the Atmospheric Rivers:

- 1. Atmospheric rivers are long, narrow corridors of concentrated water vapor transport.
- 2. Most atmospheric rivers are weak systems that often provide beneficial rain or snow.
- 3. Atmospheric rivers primarily occur during summer of the respective hemisphere

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

72. Consider the following pairs:

Rare variants Found in of Tiger

- 1. Black Tiger : Similipal Tiger Reserve
- 2. Golden Tiger : Kaziranga National Park
- 3. White Tiger : Hemis National Park

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

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

73. Which of the following terms best describes the rate at which species are

replaced due to changes in communities or habitats?

- (a) Species Equitability
- (b) Beta Diversity
- (c) Ecological Invasion
- (d) Gamma Diversity

74. Consider the following environmental organizations in India:

- 1. National Board for Wildlife
- 2. National Tiger Conservation Authority
- 3. National Ganga Council
- 4. Central Pollution Control Board

How many of the above organizations are chaired by the Prime Minister of India?

- (a) Only one
- (b) Only two
- (c) Only three
- (d) All four

75. With reference to the lichens, consider the following statements:

- 1. Statement I: Lichens are considered as a good indicator of air pollution.
- 2. Statement II: Lichen blooms are a common sight in the areas having poor air quality.

Which one of the following is correct with 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.

76. The Sanchi Stupa is a significant Buddhist monument. Which of the following dynasties played a crucial role in its development and expansion?

- (a) Maurya
- (b) Gupta
- (c) Kushana
- (d) Satavahana

77. Consider the following statements regarding the Hornbill Festival:

1. The Hornbill Festival is named after the bird Hornbill.
2. It is celebrated exclusively by the Angami tribe of Nagaland.
3. The festival is held at the heritage village of Kisama.

Which of the statements given above are correct?

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

78. With reference to the Belagavi Session of the Indian National Congress (INC), consider the following statements:

1. It was presided over by Mahatma Gandhi, the only time he served as the Congress president.
2. Mahatma Gandhi reiterated his commitment to non-cooperation and civil disobedience as effective tools against British rule.

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

79. Which of the following statements is correct about the Index of Eight Core Industries (ICI)?

- (a) It is released by the Reserve Bank of India.
- (b) It is a leading indicator of economic growth.
- (c) It is calculated on a quarterly basis.
- (d) It includes all sectors of the Indian economy.

80. With reference to the Coastal Shipping Bill (2024), consider the following statements:

1. It proposes the creation of a National Database for coastal shipping to

ensure transparency and facilitate information sharing.

2. It permits inland vessels to engage in coastal trading under certain conditions.

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

81. With reference to the Minimum Support Price, consider the following statements:

1. It is a form of market intervention by the Government to insure agricultural producers against any sharp fall in farm prices.
2. The Government of India fixes MSP for 16 mandated agricultural crops.

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

82. With reference to the Persons with Disabilities in India, consider the following statements:

1. The Rights of Persons with Disabilities Act of 2016 mandated the establishment of State Commissioners for Disabilities having quasi-judicial functions.
2. The National Trust Act of 1999 aims to provide legal guardianship for persons with autism, cerebral palsy, mental retardation, and multiple disabilities.

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

83. The sixth schedule of the constitution of India is related to which of the following?
- Division of Powers between the Union and State Governments.
 - Official Languages of India.
 - List of laws that are protected from judicial review.
 - Administration of tribal areas.

84. Consider the following statements about a No-trust motion/ No-confidence motion in the context of the Indian Parliament:

- A No-Trust Motion can only be moved against the Presiding officer of the Rajya Sabha.
- Article 67(b) governs the removal of the Vice-President and Chairperson of the Rajya Sabha through this motion.
- Approval of the No-Trust Motion requires a majority vote in both Houses of Parliament.

Which of the statements given above is/are correct?

- 1 and 2 only
- 2 and 3 only
- 2 only
- 1, 2, and 3

85. Which of the following best distinguishes "Adjournment Sine Die" from "Prorogation"?

- Adjournment sine die is decided by the President, while prorogation is decided by the Speaker.
- Adjournment sine die refers to indefinite suspension, while prorogation marks the formal end of a Parliamentary session.
- Adjournment sine die dissolves the House, while prorogation merely ends a session.
- Adjournment sine die and prorogation are identical in meaning.

86. With reference to the National Human Rights Commission (NHRC), which of the following statements is/are correct?

- It is a statutory body that aims to promote and protect human rights in accordance with the Paris Principles.
- The Chairperson and Members of the NHRC are appointed by the Prime Minister.

Select the correct answer using the code given below:

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

87. Consider the following statements about Latakia Port:

- It is a major port city located on the Red Sea coast of Syria.
- It serves as a crucial hub for Syria's agricultural exports, including cotton and cereals.

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

88. The Ring of Fire, associated with Vanuatu, is best described as:

- A region with extreme climatic events.
- An area with significant coral reef activity.
- An arc of high tectonic activity around the Pacific Basin.
- A volcanic chain surrounding the Indian Ocean.

89. With reference to the Chilika Lake, consider the following statements:

- It is the world's largest brackish water lagoon located in Odisha.
- It was designated Ramsar Wetland of International Importance in 1981 making it the first Ramsar Site of India.

Which of the statements given above is/are correct?

- 1 only
- 2 only

- (c) Both 1 and 2
- (d) Neither 1 nor 2

90. With reference to the Siang River, consider the following statements:

1. It originates near Mount Kailash in Tibet, where it is known as the Yarlung Tsangpo.
2. It passes through Arunachal Pradesh only.

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

91. Which of the following best describes the Sugamya Bharat Abhiyan?

- (a) A program focused on increasing employment opportunities for persons with disabilities in government offices.
- (b) A campaign aimed at making public infrastructure such as buildings, transport, and information accessible to persons with disabilities.
- (c) A scheme to provide financial aid to individuals with disabilities for starting businesses.
- (d) A campaign to provide financial support for the education of persons with disabilities.

92. Recently the Union government launched the Anna Chakra platform. What is the primary objective of this platform?

- (a) Increase the production of food grains in India.
- (b) Optimize the supply chain for food grain distribution.
- (c) Promote organic farming practices among Indian farmers.
- (d) Enhance nutritional quality through fortified food distribution.

93. With reference to the PM Surya Ghar Muft Bijli Yojana (PMSGMBY), consider the following statements:

1. It is implemented by the National Programme Implementation Agency (NPIA) at national and state levels.
2. Applicants must be Indian citizens and own a house with a suitable roof for solar panel installation under 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

94. AGNI WARRIOR, is a Joint Military Exercise between India and which one of the following countries?

- (a) Australia
- (b) Malaysia
- (c) Thailand
- (d) Singapore

95. Which among the following can be the reasons for the rise of Hybrid Warfare in the contemporary world?

1. Avoiding Direct Confrontation with the Enemy State.
2. Rise of Social Media.
3. High Cost associated with Conventional Warfare.

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

96. Which of the following statements about the New Development Bank (NDB) is/are correct?

1. Its membership is limited to BRICS nations.
 2. The initial subscribed capital is \$50 billion with equal contributions from founding members.
 3. It primarily focuses on projects in developed countries.
- (a) 1 and 2 only
 - (b) 2 only

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

97. With reference to the Indo-Pacific Economic Framework for Prosperity (IPEF), consider the following statements:

1. The framework is structured around four pillars relating to Trade, Supply Chain Resilience, Clean Economy, and Fair Economy.
2. Australia and New Zealand are not members of the IPEF.

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. Which among the following organizations have jointly launched the International Advisory Body for Submarine Cable Resilience?

- (a) International Telecommunication Union (ITU) and the International Cable Protection Committee (ICPC)
- (b) International Maritime Organization (IMO) and the World Trade Organization (WTO)
- (c) United Nations Development Programme (UNDP) and International Energy Agency (IEA)
- (d) World Economic Forum (WEF) and the International Data Corporation (IDC)

99. Which of the following statements regarding Extrachromosomal DNA (ecDNA) is/are correct?

1. ecDNA is circular DNA that exists independently of the chromosomal DNA in the nucleus.
2. ecDNA formation is often associated with DNA damage, such as chromothripsis, or errors during DNA replication.
3. ecDNA is found only in a few cancer types, such as breast cancer and liposarcomas.

4. The amplification of oncogenes on ecDNA can promote tumor growth and contribute to drug resistance in cancer cells.

Select the correct answer using the code below:

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

100. Which of the following statements is/are correct regarding Haemophilia?

1. It is a rare genetic disorder that impairs the body's ability to control blood clotting.
2. Haemophilia A is caused by a deficiency of clotting Factor VIII.
3. India has the world's largest number of haemophilia patients.
4. Gene therapy offers a potential one-time solution for haemophilia, unlike traditional treatments that require frequent injections.

Select the correct answer using the code given below:

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