

Sl. No.:

FAEVS

Register
Number

--	--	--	--	--	--	--	--	--	--

2018

ENVIRONMENTAL SCIENCE
(Degree Standard)

Time Allowed : 3 Hours]

[Maximum Marks : 300

Read the following instructions carefully before you begin to answer the questions.

IMPORTANT INSTRUCTIONS

1. The applicant will be supplied with Question Booklet 15 minutes before commencement of the examination.
2. This Question Booklet contains 200 questions. Prior to attempting to answer the candidates are requested to check whether all the questions are there in series and ensure there are no blank pages in the question booklet. **In case any defect in the Question Paper is noticed it shall be reported to the Invigilator within first 10 minutes and get it replaced with a complete Question Booklet. If any defect is noticed in the Question Booklet after the commencement of examination it will not be replaced.**
3. Answer all questions. All questions carry equal marks.
4. You must write your Register Number in the space provided on the top right side of this page. Do not write anything else on the Question Booklet.
5. An answer sheet will be supplied to you, separately by the Room Invigilator to mark the answers.
6. You will also encode your Question Booklet Number with Blue or Black ink Ball point pen in the space provided on the side 2 of the Answer Sheet. If you do not encode properly or fail to encode the above information, action will be taken as per commission's notification.
7. Each question comprises *four* responses (A), (B), (C) and (D). You are to select **ONLY ONE** correct response and mark in your Answer Sheet. In case you feel that there are more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each question. Your total marks will depend on the number of correct responses marked by you in the Answer Sheet.
8. In the Answer Sheet there are **four** circles (A), (B), (C) and (D) against each question. To answer the questions you are to mark with Blue or Black ink Ball point pen **ONLY ONE** circle of your choice for each question. Select one response for each question in the Question Booklet and mark in the Answer Sheet. If you mark more than one answer for one question, the answer will be treated as wrong. *e.g.* If for any item, (B) is the correct answer, you have to mark as follows :

(A) ● (C) (D)
9. You should not remove or tear off any sheet from this Question Booklet. You are not allowed to take this Question Booklet and the Answer Sheet out of the Examination Hall during the time of examination. After the examination is concluded, you must hand over your Answer Sheet to the Invigilator. You are allowed to take the Question Booklet with you only after the Examination is over.
10. The sheet before the last page of the Question Booklet can be used for Rough Work.
11. Do not tick-mark or mark the answers in the Question Booklet.
12. Applicants have to write and shade the total number of answer fields left blank on the boxes provided at side 2 of OMR Answer Sheet. An extra time of 5 minutes will be given to specify the number of answer fields left blank.
13. Failure to comply with any of the above instructions will render you liable to such action or penalty as the Commission may decide at their discretion.

SEAL

1. Point out the correct protective measure against the soil erosion by running water.
- (A) wind breaks (B) vegetation
(C) organic farming (D) modern agriculture
2. It is not an edaphic factor
- (A) rain (B) soil
(C) pH (D) minerals
3. Point out the tributaries of Thamirabharani river
- (A) Peyar, Ullar, Karaiar and Pambar
(B) Shimsha, Harangi and Arkavati
(C) Bhavani, Noyil and Amaravathi
(D) Amaravathi, Suvarnavathi and Shimsha
4. Soil profile refers
- (A) surface layer of soil at particular place
 (B) vertical section of soil at particular place
(C) cation exchange capacity of soil
(D) anion exchange capacity of soil
5. It is not a relevant function of organic matter in soil
- (A) to maintain soil fertility
(B) provides food for soil microorganisms
(C) it increase water holding capacity of the soil
 (D) produce silicate clays
6. Which of the following is wrong?
- (A) Sand stone – Sedimentary rock
 (B) Shales – Igneous rock
(C) Marble – Metamorphic rock
(D) Granite – Igneous rock

7. The sustainable development refers to
- (A) radioactive pollution
 - (B) preventive technology
 - (C) hazardous wastes
 - (D) chemical wastes
8. Many important environmental problems are not confined to an air, water or land system but involves
- (A) Interactions between systems
 - (B) Government agencies
 - (C) Atmospheric changes
 - (D) Geological changes
9. Point out the correct statement
- (A) Net production = Gross production + Respiration
 - (B) Chemoautotrophs live in where there is abundant oxygen
 - (C) Hubbard Brook experimental forest is located at New Hampshire
 - (D) Diatoms and Dinoflagellates are zooplanktons
10. Choose the correct statement :
- (A) C_4 plants are adapted to cold environment
 - (B) C_3 plants are adapted to hot environment
 - (C) CAM plants are adapted to very dry environment
 - (D) The average global net primary productivity was higher in Tundra

11. Nitrogen fixing organisms are also called
- (A) Autotrophs (B) Diazotrophs
- (C) Heterotrophs (D) Saprotrophs
12. Range lands are related to
- (A) Coniferous forests (B) Tropical rain forests
- (C) Boreal forests (D) Grasslands
13. Which forests act like a shock absorbers to reduce damage from storms and tsunamis?
- (A) Boreal forests (B) Tropical rain forests
- (C) Coniferous forests (D) Mangrove forests
14. Find out the wrong statement in the following:
- (A) Tropical rain forests are dominated by broadleaf evergreen trees
- (B) Tropical rain forests have a low net primary and productivity
- (C) Although tropical rain forests cover only about 2% of the earth's land surface, they contain 50% of the earth's known species
- (D) Decomposition occurred quickly in tropical rain forests

15. Match the following :

Major biomes		Examples	
(a)	Coniferous forest	1.	Great plains
(b)	Desert	2.	Appalachian mountains
(c)	Prairie grassland	3.	Great American desert
(d)	Deciduous forest	4.	Sierra Nevada

	(a)	(b)	(c)	(d)
(A)	4	2	1	3
<input checked="" type="checkbox"/> (B)	4	3	1	2
(C)	2	3	4	1
(D)	4	3	2	1

16. _____ is the basic building block of the carbohydrates, fats, proteins, DNA and other organic compounds necessary for life.

(A) Oxygen

(B) Carbon

(C) Hydrogen

(D) Nitrogen

17. The average net primary productivity was higher in

(A) Temperate forest

(B) Savanna

(C) Tropical rain forest

(D) Tundra

18. Arrange the following components of ecosystem in an ascending order :

I. Decomposer

II. Producer

III. Consumer

(A) I, II and III

(B) III, II and I

(C) II, III and I

(D) III, I and II

19. Percentage of the volume of fresh water available for human use in the hydrosphere is

(A) 0.3%

(B) 1.3%

(C) 1.7%

(D) 2.1%

20. Find out the wrong statement.

(A) 97.5% of total water is salt water

(B) Polar ice caps and glaciers are larger than accessible fresh water

(C) Accessible fresh water is larger than polar ice caps and glaciers

(D) 2.5% of total water is fresh water

21. The approximate per capita forest land in India is given below.

(A) 1.5 ha

(B) 0.05 ha

(C) 0.10 ha

(D) 1.0 ha

22. The following sequence of process occur during Bio-gas generation?
- (A) Hydrolysis, Acetogenesis, Acidogenesis, Methanogenesis
 - (B) Hydrolysis, Methanogenesis, Acidogenesis, Acetogenesis
 - (C) Methanogenesis, Hydrolysis, Acidogenesis, Acetogenesis
 - (D) Hydrolysis, Acidogenesis, Acetogenesis, Methanogenesis
23. Indira Gandhi Canal irrigation project in which State of the following.
- (A) Haryana
 - (B) Rajasthan
 - (C) Tamil Nadu
 - (D) Kerala
24. What among the following steps would help in effective conservation of oil resources?
- (A) Reduction in consumption
 - (B) Development of advanced fuel-efficient engines
 - (C) Improve alternate methods
 - (D) Develop new techniques for rigging and refining
25. What was the Public Movement that promoted forest conservation?
- (A) Forest development programme
 - (B) Chipko movement
 - (C) Conservation Movement
 - (D) People's Forest Movement
26. Which one of the following agriculture land use pattern has effect on Environment?
- (A) Loss of natural ecosystems
 - (B) Nitrogen loading at global level
 - (C) Pesticidal inputs
 - (D) All of the above

27. Which of the following is not a renewable resource?
- (A) Fishes (B) Minerals
- (C) Forests (D) Crops
28. The first nuclear power stations established in India is:
- (A) Narora (B) Tarapur
- (C) Kalpakkam (D) Rawatbhata
29. Aquifer is defined as:
- (A) A geological formation that yields significant quantities of water
- (B) Specific yields for various geological materials
- (C) A geologic formation, which stores water but does not transmit
- (D) Water pollution with lead
30. Indus Water treaty is in between:
- (A) India and Bangladesh
- (B) India and China
- (C) India and Pakistan
- (D) India and Afghanistan
31. Most of the World's gold resource occurs in
- (A) North America
- (B) South America
- (C) Africa
- (D) India
32. Which one of the following does not contribute to conservation of water?
- (A) Waste Water treatment
- (B) Waste land development
- (C) Water Shed protection
- (D) Rainwater harvesting

33. The value of retaining options available for the future is called

- (A) Productive value
- (B) Existence value
- (C) Option value
- (D) Consumptive use value

34. The term Biodiversity was coined by

- (A) Odum. E.P
- (C) Walter G. Rosen
- (B) Transley
- (D) Odum. H.T

35. The Major Biogeographic Zones of India is

- (A) 10
- (B) 11
- (C) 9
- (D) 12

36. Fauna is referred as

- (A) Sps of Plant
- (B) Sps of Animal
- (C) Both (A) and (B)
- (D) None of these

37. Biosphere Reserve programme was launched by UNESCO in

- (A) 1961
- (B) 1971
- (C) 1981
- (D) 1991

38. Match the following :

- | | |
|-------------------|------------------------|
| (a) Anaimalai | 1. West Indian Deserts |
| (b) Andaman Coast | 2. Eastern Himalayas |
| (c) Indus plain | 3. Sholas |
| (d) Sikkim | 4. Mangroves |

- | | (a) | (b) | (c) | (d) |
|---|-----|-----|-----|-----|
| <input checked="" type="checkbox"/> (A) | 4 | 3 | 2 | 1 |
| (B) | 3 | 4 | 1 | 2 |
| (C) | 1 | 4 | 3 | 2 |
| (D) | 4 | 1 | 3 | 2 |

39. The Vedanthangal Bird Sanctuary was established in
(A) 1838 (B) 1848
 (C) 1858 (D) 1868
40. The term biological diversity was first defined by
(A) E.A. Norse (B) R.E. Mc Manus
 (C) Both (A) and (B) (D) None of these
41. Pre Investment Survey of Forest Reserve (PISFR) initiated by Government of India and sponsored by
 (A) FAO and UNDP (B) FAO and WWF
(C) FAO and MoEF (D) FAO and CBD
42. The highest rain fall in India is in
(A) Cape Camorin (B) Cherrapunji
(C) Andaman (D) None of these
43. Which of the following is correctly paired?
(A) Avicennia - Sandy Mangrove
 (B) Rizophora - Red Mangrove
(C) Bruguiera - Tagel Mangrove
(D) Ceriops - Black mangrove
44. The first marine biosphere reserve established in India at
(A) Great Nicobar Biosphere reserve
 (B) Gulf of Mannar Biosphere reserve
(C) Both (A) and (B)
(D) None of these
45. National Bureau of Animal Genetic Reserves (NBAGR) located in
(A) Lucknow (B) Delhi
 (C) Karnal (D) Chennai

46. Match the following :

List I – Causes

- (a) Soil organisms
- (b) Phosphorous assimilation
- (c) Water pollution
- (d) Air pollution

List II – Effects

- 1. Algal bloom
- 2. Chronic obstructive pulmonary disease
- 3. Decomposition
- 4. Complexing agent

- | | (a) | (b) | (c) | (d) |
|---|-----|-----|-----|-----|
| (A) | 1 | 2 | 3 | 4 |
| <input checked="" type="checkbox"/> (B) | 3 | 4 | 1 | 2 |
| (C) | 2 | 3 | 4 | 1 |
| (D) | 4 | 2 | 1 | 3 |

47. Climate stress is caused by insufficient and/or excessive regime of

- (A) Temperature
- (B) Humidity
- (C) Solar radiation
- (D) Vapour

48. Match the following

Disease

- (a) Arsenic
- (b) Fluorosis
- (c) Goitre
- (d) Asthma

Organ

- 1. Thyroid gland
- 2. Carcinogen and skin pathogen
- 3. Bone and teeth disease
- 4. Respiratory organs

- | | (a) | (b) | (c) | (d) |
|---|-----|-----|-----|-----|
| (A) | 1 | 2 | 3 | 4 |
| <input checked="" type="checkbox"/> (B) | 2 | 3 | 1 | 4 |
| (C) | 3 | 4 | 2 | 1 |
| (D) | 4 | 3 | 2 | 1 |

49. HBV and HCV are both causes of liver cancer that may arise many years after infection is called

- (A) Hepatitis
- (B) Herpes infection
- (C) Hippocampus
- (D) Hyperlipidemia

56. What is the expansion of NIDM?
- (A) National Institute of Disaster Management
 - (B) National Infrastructure for Disaster Management
 - (C) National Information System for Disaster Management
 - (D) National Intelligence System for Disaster Management
57. Provision of timely and effective information to avoid or reduce risk in
- (A) Post Disaster Action
 - (B) Post Recovery Action
 - (C) During disaster action
 - (D) Early Warning
58. What is Disaster Management?
- (A) Disaster Risk Management
 - (B) Disaster Preparedness
 - (C) Disaster Survey
 - (D) Disaster Monitoring
59. Which of the following section is worstly affects during the time of any disaster?
- (A) Rich
 - (B) Moderate
 - (C) Poor
 - (D) None of the above
60. What is the expansion of NDMA?
- (A) National Disaster Management Authority
 - (B) National Institutes of Disaster Management
 - (C) National Disaster Fire service Management Authority
 - (D) National Disaster Mitigation Authority
61. What is the another term for Tropical Cyclone?
- (A) Cyclone
 - (B) Tornado
 - (C) Giant waves
 - (D) Hail storm

62. What is a period of dry weather called?
- (A) Drought (B) Famine
(C) Cloud burst (D) Cyclone
63. What is defined as the deficiency of precipitation from expected or normal levels over an extended period of time?
- (A) Meteorological drought (B) Hydrological drought
(C) Agricultural drought (D) All the above
64. What is [the type of drought] defined as deficiencies in surface and subsurface water supplies leading to a lack of water for normal and specific needs?
- (A) Meteorological drought
(B) Drought
 (C) Hydrological drought
(D) Agricultural drought
65. What is DDMA?
- (A) District Disaster Management Authority
(B) District Disaster Mitigation Authority
(C) District Disaster Mitigation and Prevention Authority
(D) Development Disaster Management Authority
66. What is the expansion of NDRF?
- (A) National Disaster Response Force
(B) National Drought Response Force
(C) National Department of Meteorological Response
(D) National Defense Response Force
67. What is the expansion of SDRF?
- (A) State Disaster Response Force
(B) Static Disaster Retrospective Force
(C) State Drought Response Force
(D) State Drought and Famine Response Force

75. Arsenic poisoning causes
(A) Fluorosis
(B) Methaemoglobin
(C) Eutrophication
 (D) Keratosis
76. Which of the following is favourable for minimizing the load of pollution?
(A) Fumigation
(B) Trapping
(C) Coning
 (D) Lofting
77. The oxides of nitrogen and volatile organic compounds reacts in the presence of sunlight and produce
(A) Chlorofluro carbon
(B) Smog formation
(C) Ozone depletion
 (D) Photo chemical oxidants
78. Title II of National Environmental Policy Act (NEPA) establishes
 (A) National Goal of Environmental Policy
(B) Council for Environmental Quality
(C) Protection of Natural Resources
(D) EIA and EIS
79. NRCP stands for
(A) National River Concept Policy
(B) National River Corporation and Programme
 (C) National River Conservation Plan
(D) National River Conservation Party
80. Harming endangered species listed in schedule I of the Act and is prohibited throughout India enacting by
 (A) The Wildlife (Protection) Act of 1972
(B) The Wildlife Preservation and Conservation Act 1972
(C) The Forest (Conservation) Act of 1980
(D) The Indian Forest Act of 1927

81. EMS stands for
- (A) Environment Monitoring System
 - (B) Environment Management System
 - (C) Eco system Management System
 - (D) Environment Man System
82. The Central and State Pollution Control Board were first constituted under
- (A) The water (Prevention and Control of Pollution) Cess Act 1978
 - (B) The water (Prevention and Control of Pollution) Act 1974
 - (C) The Air (Prevention and Control of Pollution) Act 1981
 - (D) The Environmental (Protection) Act 1986
83. What was the huge iceberg that broke apart from Antarctica in 2013?
- (A) C-19
 - (B) C-18
 - (C) B-22
 - (D) B-15
84. Which is not an objective of Environment impact assessment?
- (A) Risk assessment and disaster management
 - (B) Recycling and reduction of waste
 - (C) Assessment of international funding
 - (D) All of the above
85. What are carbon sinks?
- (A) the natural processes that remove CO₂
 - (B) the systems that generate green house gases
 - (C) the fabricated systems to reduce emission
 - (D) detection of carbon sources

86. Strategic Environmental Assessment (SEA) is a formalized systematic and comprehensive of evaluating the environmental impact of
- (A) a policy, plan and programme
 - (B) people, pollution, programme
 - (C) public or private firm
 - (D) none of the above
87. What does the ozone layer protect us from?
- (A) UV radiation
 - (B) Meteorites
 - (C) Gamma radiation
 - (D) X ray
88. What elements are said to interfere with ozone in stratosphere?
- (A) Sulphur particles
 - (B) Atomic halogens
 - (C) Carbon monoxide
 - (D) Dust
89. What devices is used in smoke stack of industries to remove SO_2 ?
- (A) Injectors
 - (B) Scrubbers
 - (C) Mixers
 - (D) Crushers
90. Which among the following is not related to acid rain?
- (A) Wet and dry deposition
 - (B) Cleanup smoke stacks
 - (C) SO_2 and NO_x
 - (D) Ozone layer
91. What does the term wet deposition refer to?
- (A) Ozone depletion
 - (B) Radiative forcing
 - (C) Acid rain
 - (D) Deforestation

92. Which among the following statement on Green house effect is correct?

- (A) Green house effect is a natural effect
- (B) Global warming causes green house effect
- (C) All atmospheric gases are green house gases
- (D) High energy short waves cause green house effect

93. Who popularized the term global warming?

- (A) Milankovitch
- (B) Wally Broecker
- (C) Bill Clinton
- (D) Rajendra Paturi

94. What among the following is not an internal factor affecting climate?

- (A) Ocean
- (B) Atmosphere
- (C) Sea ice
- (D) Solar radiation

95. Match the following :

- | | |
|-------------------------|-------------------------|
| (a) Little ice age | 1. Oscillations orbital |
| (b) Tree rings | 2. Green house gas |
| (c) Milankovitch cycles | 3. 1400-1850 A.D. |
| (d) Methane | 4. Climatic proxies |

- | | (a) | (b) | (c) | (d) |
|---|-----|-----|-----|-----|
| <input checked="" type="checkbox"/> (A) | 3 | 4 | 1 | 2 |
| (B) | 3 | 1 | 2 | 4 |
| (C) | 3 | 2 | 1 | 4 |
| (D) | 2 | 1 | 3 | 4 |

96. The important organic compounds in soil is
- (A) Humus (B) Clay
 (C) Silt (D) Sand
97. The floor bed of the ocean are formed by
- (A) silicon and aluminium (B) iron oxides
 (C) silicon and magnesium (D) granite rocks
98. The pH of Normal rain water is slightly acidic due to mixing of
- (A) Methane (B) CFC's
 (C) CO₂ (D) H₂S
99. A reservoir that uptakes a chemical element or compounds from other parts of cycle is called
- (A) Biogeochemical cycle (B) Sink
 (C) Natural indicators (D) Biomagnification
100. Match the following :
- | | |
|----------------------|----------------------------|
| (a) London smog | 1. Photochemical oxidation |
| (b) Los Angeles smog | 2. Coal burning |
| (c) Smog | 3. Particulate pollutant |
| (d) Smoke | 4. Smoke and fog |
- | | | | |
|---|-----|-----|-----|
| (a) | (b) | (c) | (d) |
| (A) 4 | 3 | 2 | 1 |
| (B) 3 | 4 | 1 | 2 |
| <input checked="" type="checkbox"/> (C) 2 | 1 | 4 | 3 |
| (D) 1 | 4 | 2 | 3 |
101. Why Pedosol soil, horizon-B is fertile?
- (A) rainfall is less insignificant leaching of nutrients
 (B) rainfall is high so efficient leaching of nutrients
 (C) the layer is very near to the top soil
 (D) the layer is thick

102. The ability of the pathogen to inflict damage on the host is termed as
- (A) Virulence (B) Shigellosis
(C) Salmonellosis (D) Botulism
103. The following pathogenic diseases is not caused by the bacteria (or) The disease caused by the viruses is
- (A) tuberculosis (B) typhoid
(C) dysentery (D) small pox
104. Find out the wrong statement in the following :
- (A) Anaerobic bacteria can grow with free oxygen
(B) Anaerobic bacteria can grow without free oxygen
(C) Aerobic bacteria can grow with free oxygen
(D) Facultative bacteria can grow with (or) without free oxygen
105. The 'aquifers' is the source of
- (A) surface water (B) underground water
(C) lake water (D) sea water
106. The albedo refers to
- (A) the reflecting property of solar radiation by clouds and suspended particles
(B) the absorbing property of light radiation
(C) the evaporation process
(D) the photochemical dissociation of chemicals
107. Which gases compositions are covered by 99% volume of atmosphere?
- (A) Oxygen and Carbon-di-oxide
 (B) Nitrogen and Oxygen
(C) Oxygen and Argon
(D) Oxygen and Ozone

108. Match the following :

List I		List II	
Successions		Habitats	
(a)	Xerosere	1.	Salty
(b)	Halosere	2.	Dry
(c)	Psammosere	3.	Rock
(d)	Lithosere	4.	Sandy

	(a)	(b)	(c)	(d)
(A)	4	3	1	2
<input checked="" type="checkbox"/> (B)	2	1	4	3
(C)	2	4	1	3
(D)	4	3	2	1

109. According to ocean basis, _____ zone comprising continental shelf, aphotic zone and abyssal zone

- (A) Littoral (B) Pelagic
 (C) Benthonic (D) Aphotic

110. Which kind of pyramid can never be inverted in any stable ecosystem?

- (A) Biomass (B) Number
 (C) Energy (D) Both (A) and (B)

111. The graphic representation of relationship between the various trophic levels of a food chain is called

- (A) Energy floor (B) Energy pyramids
(C) Ecological niche (D) Ecological pyramids

112. What are the common producers found in ponds and lakes in India?

- (A) Typha and Hydrilla (B) Terminalia and Salmalia
(C) Prosopis and Picea (D) Ficus and Cynodon

118. Mangrove forest is not found in the following state
 (A) Madhya Pradesh (B) Tamil Nadu
(C) Orissa (D) West Bengal
119. Which of the following day is celebrated as the World Environment Day?
(A) April, 22 (B) April, 21
 (C) June, 5 (D) December, 24
120. Select the major use of forest wood in India
(A) Pulp wood (B) Timber
(C) Medicine (D) Fire wood
121. Agrostological method to check soil erosion is as follows.
(A) Construction of small basins
(B) Growing vegetation alongside
 (C) Growing of grasses as soil binders
(D) Planting vegetation cover
122. Which of the following is an example for Abiotic resource?
(A) Forest (B) Water
(C) Fish (D) Wildlife
123. What is the minimum requirement of forest cover to maintain the ecological balance of a country?
(A) 50% (B) 67%
 (C) 33% (D) 17%
124. Over utilization of ground water does not cause the following problem
(A) Drying up of wells (B) Flood
(C) Earthquake (D) Pollution of water

125. Match the following

- | | |
|------------------|---------------------------------|
| (a) Wedding | 1. Removal of same species |
| (b) Thinning | 2. Enrich soil with nutrients |
| (c) Brushing | 3. Elimination of weeds |
| (d) Accumulators | 4. Removal of leafless branches |

- | | (a) | (b) | (c) | (d) |
|---|-----|-----|-----|-----|
| (A) | 1 | 3 | 4 | 2 |
| (B) | 1 | 4 | 3 | 2 |
| <input checked="" type="checkbox"/> (C) | 3 | 1 | 4 | 2 |
| (D) | 3 | 4 | 1 | 2 |

126. Which one of the following is incorrectly paired?

- (A) Water — Aquifers
(B) Phosphate — Earth crust
(C) Salt — Sea water
 (D) Manganese — Biogenous deposits

127. What element is abundant in Sea water?

- (A) Sodium
(B) Magnesium
 (C) Chlorine
(D) Sulphur

128. Arrange the following according to the percent of water resource in ascending order.

- (I) Oceans
(II) Earth's crust
(III) Ice caps
(IV) Lakes and rivers
- (A) I, III, IV, II
(B) II, I, III, IV
 (C) II, III, I, IV
(D) I, II, III, IV

129. Project Tiger in Mudhumalai Tiger Rescue was approved by National Tiger Conservation Authority on
- (A) 16 July 2010
 - (B) 16 August 2010
 - (C) 16 September 2010
 - (D) 16 October 2010
130. Mudhumalai Sanctuary is famous for
- (A) Birds
 - (B) Tiger
 - (C) Elephant
 - (D) Bisons
131. The Forest Conservation Rules and Amendment 1987 and 1989 for
- (A) Protection and Conservation of Forests
 - (B) Protection and Conservation of Forest Product
 - (C) Protection and Conservation of Plants
 - (D) Protection and Conservation of Animals
132. In which state Pullicat lake Bird Sanctuary is located
- (A) Kerala
 - (B) Karnataka
 - (C) Andhra Pradesh
 - (D) Orissa
133. Lantana Camera is
- (A) Native plant
 - (B) Common weed
 - (C) Exotic plant
 - (D) Both (A) and (B)
134. The wet savannahs are otherwise called _____.
- (A) Xerophilous
 - (B) Hygrophilous
 - (C) Mesophilous
 - (D) None of these

135. Earth summit was held at Riode Janeiro in
(A) 1982
(B) 1992
(C) 2002
(D) 2012
136. Biotic province of Western Ghats regions are
(A) Malabar coasts and Western Ghats mountain
(B) West coasts regions
(C) Malabar coasts only
(D) All of the above
137. Nilgiri tahr is endemic animal is
(A) Western Ghats
(B) Himalayas
(C) Swamp
(D) Desert
138. Who is chairmanship of Indian Board of Wild life Board in 1991?
(A) The President
(B) The Prime Minister
(C) The Chief Justice of India
(D) The Vice President
139. Zoological survey of India have brought out Red Data Books on
(A) Indian endangered plant species
(B) Indian endangered animal species
(C) Both (A) and (B)
(D) None of these
140. Kalakkadu-Mundanthurai Tiger Reserve forms part of
(A) Nilagiri Biosphere reserve
(B) Agasthyamalai Biosphere reserve
(C) Mudhumalai National Park
(D) None of these

141. The formula for average annual population growth rate in % is
- (A) $[P_2 - P_1 / P_1 \times N] \times 100$
 - (B) $[P_1 - P_2 / P_1 \times N] \times 100$
 - (C) $[P_2 \times 100] / P_1$
 - (D) $[P_2 - P_3 / P_1 \times N] \times 50$
142. Which of the following groups of individuals is at the lowest risk of adenovirus disease?
- (A) Young children
 - (B) AIDS patients
 - (C) Healthy Adults
 - (D) Bone marrow transplant recipients
143. The Vibrio Cholerae factor causes diarrhea is a toxin which
- (A) Yields increased intracellular levels of - cAMP
 - (B) Blocks EF-2.
 - (C) Blocks EF-1 dependent binding of amino acyl - tRNA to ribosomes
 - (D) Cleaves VAMP
144. What does the phrase environment sustainability imply?
- (A) A shared global responsibility is necessary for quality of life
 - (B) The actions of human directly impacting the well being of the natural environment
 - (C) Future generations will have the resources necessary for quality of life
 - (D) A, B, C and D (or) all of the above
145. Assertion (A) : Natural populations are capable of an enormous and rapid increase in numbers but for the most part remain relatively constant in size.
Reason (R) : Human interference has led to constancy in the size of the natural population
- (A) Both (A) and (R) are true and (R) is the correct explanation of (A)
 - (B) Both (A) and (R) are true, but (R) is not the correct explanation of (A)
 - (C) (A) is true, but (R) is false
 - (D) (A) is false, but (R) is true

146. HDV (Delta agent) is found only in patients who have either acute (or) chronic infection with HBV. Which of the following is correct?
- (A) HDV is a defective mutant of HBV
 - (B) HDV depends on HBV surface antigen for virus formation
 - (C) HDV induces immune response
 - (D) HDV contains a circular genome
147. The principal reservoir for the antigenic shift variants of influenza virus appears to be which of the following?
- (A) Chronic human carriers of the virus
 - (B) Sewage
 - (C) Pigs, horses and fowl
 - (D) Mosquitoes
148. Which of the following would be the best epidemic influenza specimen for isolating the virus responsible for this infection?
- (A) Nasopharyngeal swab
 - (B) Tears
 - (C) Blood and Bone marrow
 - (D) Nervous tissue
149. Environmental Impact Assessment is an objective analysis of the people changes in
- (A) Physical characteristics of the environment
 - (B) Bio – physical characteristics of the environment
 - (C) Socio – economic characteristics of the environment
 - (D) (A), (B) and (C)
150. Heart murmur causes
- (A) Rheumatic fever
 - (B) Typhoid
 - (C) Cholera
 - (D) Filariasis
151. Number of population explosions occurred in human beings is
- (A) 1
 - (B) 2
 - (C) 3
 - (D) Indefinite

152. The Zamindari (or) permanent settlement system is prevailed in most of
 (A) Northern Indian States (B) Southern Indian States
(C) Eastern Indian States (D) Central Indian States
153. World's AIDS day is celebrated on
(A) 1st January (B) 5th June
(C) 28th February (D) 1st December
154. Long term carriage and shedding is most likely to occur after gastrointestinal infection with which of the following species?
 (A) Salmonella typhi (B) Escherichia Coli 0157:H7
(C) Shigella dysenteriae (D) Campylobacter jejuni
155. HIV infection has become a world wide epidemic that continues to grow. The geographic area with the largest number of HIV infected people after sub Saharan Africa is
 (A) South/South East Asia
(B) North America
(C) Namakkal
(D) South America and Caribbean Islands
156. Which of the below is an example for environmental hazards?
 (A) Environmental pollutants
(B) Earth quake
(C) Tsunami
(D) Drought
157. What is the purpose of "Food for work programme – started"?
(A) To ensure food security (B) To provide relief employment
(C) To use man power (D) Both (A) and (B)
158. What is the percentage (%) of area prone to cyclone?
 (A) 68% (B) 40%
(C) 20% (D) 72%

159. What is a term used for the centre of a cyclone?
(A) Epic centre (B) Epy centre
(C) Ephic centre (D) Eye of the cyclone
160. What is the name of the tide which would result from gravitational effects ex. of the earth, sun and moon without any atmospheric influences?
 (A) Astronomical tides (B) Tsunami
(C) Aazhi peralai (D) Waves
161. Whose inhabitants land is more prone to all types of disasters?
 (A) Poor
(B) Rich
(C) Both (A) and (B)
(D) None of the above
162. What is a suspension of killed or attenuated bacteria for use as a vaccine called?
 (A) Bacterin
(B) Anti-microbial susceptibilities
(C) Biological agents
(D) Bio weapon
163. _____ is the malicious use of plant or animal pathogens to cause devastating diseases in the agricultural sector.
 (A) Agroterrorism (B) Bacterin
(C) Biological agents (D) Bio risk
164. What is an event or series of events? Which gives rise to casualties and damage or loss or properties, infrastructures, environment, etc.?
 (A) Disaster (B) Tsunami
(C) Cyclone (D) Volcano
165. What is the name of the earthquake with the magnitude is greater than 3.5 M?
 (A) Macro (B) Micro
(C) Intermediate (D) Shallow

166. NPDM stands for
- (A) National Policy on Drought Management
 - (B) National Policy on Disaster Management
 - (C) National Policy on Defence Management
 - (D) National Policy on Disaster Mitigation
167. NCRMP stands for what?
- (A) National Cyber Risk Mitigation Project
 - (B) National Cyclone Risk Mitigation Project
 - (C) New Cyclone Risk Mitigation Proforma
 - (D) New Cyclone Risk Management Proforma
168. NDMA was formally constituted in accordance with _____ section of _____ act on 27, Sep, 2006.
- (A) Section-3(1), DM Act, 2005
 - (B) Section-3(2), Disaster Management Act, 2005
 - (C) Section-1(1), DM Act, 2005
 - (D) Section-3(3), Disaster Management Act, 2005
169. Very fine solid or liquid particulates suspended in the atmosphere are
- (A) Particulate matter
 - (B) Crystals
 - (C) Nanoparticles
 - (D) Aerosols
170. National Oceanic and Atmospheric Administration (NOAA) is located at
- (A) Hawaii
 - (B) New York
 - (C) Washington
 - (D) New Hampshire
171. Find out the incorrect method for hazardous waste disposal.
- (A) Deep-well disposal
 - (B) Surface impoundments
 - (C) Plasma arc torch
 - (D) Ocean dumping

172. Ozone layer is present in the _____ region of atmosphere
(A) Thermosphere (B) Troposphere
 (C) Stratosphere (D) Mesosphere
173. Contaminated liquid draining from a sanitary land fill is called
(A) Saturated water (B) Run off
 (C) Leachates (D) Colloidal jel
174. The following method is recommended for disposal of radioactive nuclear waste
(A) Ocean dumping (B) Salt mines
(C) River bed dumping (D) Land fill
175. Which one of the following processes used to remove suspended solids from waste water?
(A) Filtration
 (B) Gravity settling (or) (gravitational settling)
(C) Screening
(D) Flootation
176. Which of the following pollution affects the hatching of fish eggs?
(A) Air pollution (B) Thermal pollution
(C) Marine pollution (D) Radio active pollution
177. Which of the following chemical is not used for disinfections purpose?
(A) Chlorine gas
(B) Calcium hypochlorite
 (C) Sodium hydroxide
(D) Sodium hypochloride
178. The particulate air pollutants size can be described by an equivalent to
 (A) aerodynamic diameter (B) percentage
(C) nanometer (D) cm/min

179. Landsat satellite images replaced now a days by the sensors like MODIS and MERIS with better accuracy in the estimation of
- (A) Water Quality Parameters
 - (B) Soil Quality Parameters
 - (C) Air Quality Parameters
 - (D) Forest Quality Parameters
180. Remote sensing technology can help us by
- (A) Identifying areas of crowded population
 - (B) Monitoring man made disasters
 - (C) Assessing the human population growth and control
 - (D) Identifying disaster prone areas, assessing the damages and providing into and monitoring natural phenomena
181. _____ is an organisational approach to facilitate environmental evaluation and management
- (A) EMS such as ISO 14001
 - (B) EMS such as ISO 1405
 - (C) EMS such as ISI 14001
 - (D) EMS such as ISI 1375
182. A voluntary method of environmental performance certification and labelling is otherwise known as
- (A) Eco-labelling
 - (B) E- labelling
 - (C) Environmental science labelling
 - (D) E-waste labelling method
183. The correct pair is
- (A) The Institute of Remote sensing → Anna University
 - (B) Institute of Remote sensing (CSIR) → Delhi
 - (C) The institute of Remote sensing → India Science → Centre
 - (D) Institute of Remote sensing → Korakpur
184. Identify the correct sequence/structure of the ISO 14001 Environmental Management system standard
- (A) Plan-Do-Check-Act
 - (B) Check-Plan-Do-Act
 - (C) Act-Check-Plan-Do
 - (D) Plan-Act-Check-Do

185. The Environmental Impact Assessment (EIA) is applied in
- (A) Existing projects
 - (B) Completed projects
 - (C) New projects and expansion of the existing projects
 - (D) All the above
186. In USA, NEPA stands for
- (A) National Environmental Protection Act
 - (B) Natural Environmental Protection Act
 - (C) National Environmental Planning Act
 - (D) National Environmental Pollution Assessment
187. The area that are ecologically sensitive and the geomorphologic features which play a role in the maintaining the integrity of the coast comes under
- (A) CRZ-I
 - (B) CR-Z-II
 - (C) CR-Z-III
 - (D) CR-Z-IV
188. In remote sensing, water quality parameters are estimated by measuring changes in the
- (A) Optical properties of water caused by the presence of contaminants
 - (B) Optical properties of water caused by the presence of fluorides
 - (C) Water parameters and quality management
 - (D) Water current, odour, color and O₂ level
-
189. ISO 14040 is related to
- (A) Environmental Audit
 - (B) Energy Audit
 - (C) Environmental Agency
 - (D) Life cycle analysis

190. Which of the following is not a trace gas in the atmospheric gases?

- (A) Argon
- (B) Neon
- (C) Ozone
- (D) Helium

191. What is the proportion of nitrogen in the atmosphere?

- (A) 85%
- (B) 80%
- (C) 70%
- (D) 78%

192. The connection cell in the atmosphere is run by

- (A) Solar energy
- (B) Gravitational force
- (C) Pressure variation
- (D) None of the above

193. Where among the atmospheric layer does the temperature decreases with altitude?

- (A) Troposphere and Mesosphere
- (B) Troposphere and Thermosphere
- (C) Troposphere and Stratosphere
- (D) Troposphere and Exosphere

194. What is IPCC?

- (A) International Presentation on Climate Change
- (B) Intergovernmental Panel on Climate Change
- (C) International Program on Climate Change
- (D) Intercontinental projects on Climate Change

195. Who coined the term acid rain?

- (A) Robert Brown
- (B) Robert Angus Smith
- (C) Einstein
- (D) Robert Hooke

196. Which of the following is described as seasonal air flow?

- (A) Fronts
- (C) Monsoons
- (B) Jet streams
- (D) Cyclones

197. Where was the phenomenon of El Nino originally recognized?

- (A) South America
- (B) North America
- (C) Africa
- (D) Australia

198. What happens during "positive feedback" of Green house effect?

- (A) Traps more heat
- (B) Reduces the heat
- (C) Decrease in gas absorption
- (D) Releases cooling components

199. Which among the following is responsible for the emission of methane?

- (A) Livestock and rice cultivation
- (B) Industries
- (C) Burning of fossil fuels
- (D) Air conditioners and refrigerators

200. What process is responsible for the release of Nitrous oxide into the atmosphere?

- (A) Burning of fossil fuels
- (B) Intensive agriculture practice
- (C) Deforestation
- (D) Use of refrigerants