



**Indian Association for the Cultivation of Science**  
(Deemed to be University under *de novo* Category)

*Integrated Bachelor's and Master's Program*  
*End-Semester Examination ( Semester II-2020)*

Subject: Know Your Environment

Subject Code: AEC 1201

Full Marks : 50 (0.5x100)

Time: 3 hour

Answer all questions

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1. Example of lentic water is (a) Sea water (b) Flowing water of river (c) Pond water
  2. Activated sludge process is linked with (a) waste water treatment, (b) solid waste management (c) noise pollution
  3. The amount of nitrogen in atmosphere is ....(a) 78.08% (b) 90.01% (c) 86.08%
  4. Jim Corbett National Park is located in (a) Uttarakhand (b) Bihar (c) Uttar Pradesh
  5. Ozone Day is celebrated on (a) 22<sup>nd</sup> April (b) 16<sup>th</sup> September (c) 11<sup>th</sup> July
  6. The source of fly ash is (a) agricultural land (b) thermal power project (c) hydroelectric project)
  7. Bharat Stage-II is related to the following (a) automobile emission (b) noise pollution... (c) river pollution
  8. The unit of ionizing radiation is (a) RAD (b) BOD (c) CAD
  9. Sandfly is responsible for the following disease (a) Kala-azar (b) typhoid (c) tuberculosis
  10. A species restricted at a particular place is known as (a) exotic (b) endemic (c) migratory
  11. Which of the following is not a renewable source of energy? (a) wind energy (b) fossil fuel (c) solar energy
  12. BCF is (a) bioconservation factor (b) bioconcentration factor (c) biochemical factor
  13. Which one of the following is an environment friendly agricultural system? (a) use of chemical fertilizer (b) use of pesticides (c) organic farming
  14. Reason behind Minamata disease is (a) methyl mercury (b) ethyl mercury (c) Lead
  15. 5<sup>th</sup> June is celebrated as (a) world environment day (2) wetland day (3) biodiversity day
  16. Vermicomposting is related with (a) earthworm, (b) silkworm (c) ants
  17. Which one of the following categories includes spore bank? (a) ex-situ conservation (b) in situ conservation (c) social and cultural conservation
  18. The Biodiversity Act in India was implemented in the year (a) 2000 (b) 2001 (c) 2002
  19. The unit of measuring intensity of sound is (a) metre (b) decibel (c) Dobson

20. "Arabari Model" in West Bengal is famous for (a) Joint Forest Management (b) Thermal Power Project (c) Rainwater harvesting
21. The term "hotspots" in the context of ecology was coined by (a) Norman Myers (b) A.G. Tansley (c) E.P. Odum
22. Project Tiger in India was launched in the year (1) 1973 (2) 1975 (3) 1979
23. Which one of the following book is written by Rachel Carson? (a) The Silent Spring (b) Fall of a Sparrow (c) Human Ecology
24. Kerala Shashtra Sahitya Parishad (KSSP) is related to (a) silent valley movement (b) Narmada Bachao Andolon (c) Chipko movement
25. Ecotone is (a) ecosystem (b) Intermediate zone between two ecosystems (c) ecological hotspots
26. Who gave the hypothesis that the problem of population growth and resource distribution will be solved by nature itself? (a) Rachel Carson (b) Paul Ehrlich (c) Malthus
27. Name the conference held in 1987 to discuss Ozone Hole of Stratosphere. (a) Montreal protocol (b) Rio Conference (c) Ramsar convention
28. What is the title of Stockholm conference? (a) United Nations Conference on Environment and Development (b) United Nations Conference on Environment and Pollution (c) United Nations Conference on Human Environment
29. Which movement was led by Medha Pathkar? (a) Silent valley movement (b) Chipko movement (c) Narmada Bachao movement
30. Which of the following is against the sustainable development? (a) Equal distribution of resources (b) development of socially oppressed people (c) Rapid growth of energy intensive civilization
31. The term renewable resources means, resources that (a) does not lead to pollution (b) never finished even after prolonged use (c) can be renewed again and again
32. Which of the following is a renewable resource? (a) Mineral resource (b) Plantation (c) Radioactive material
33. Which city of the world was declared as "Zero water city in 2018"? (a) New Delhi, (b) Paris (c) Cape town
34. Which of the following disease may be caused due to water pollution? (a) Dysentery (b) Hooping cough (c) Rabies
35. Which of the following can retain the soil fertility for a prolonged period? (a) Mechanized agriculture (b) Use of Chemical fertilizer (c) Use of biofertilizer
36. Which of the following is not a part of green revolution? (a) use of chemical fertilizers (b) High yielding crop varieties (c) use of organic fertilizers
37. Who led the green revolution in India? (a) Medha Pathkar (b) Ramchandra Guha (c) MS Swaminathan

38. Which of the following energy is the main energy source in India? (a) Thermal power (b) Solar power (c) Wind power
39. What is fly ash? (a) a special kind of water pollutant (b) a light weight ash from thermal power plant that leads air pollution (c) a type of aerosol from chemical industries
40. Forest can be called as (a) carbon source (b) carbon neutral area (c) carbon sink
41. The first layer of atmosphere above the earth surface is (a) stratosphere (b) troposphere (c) mesosphere
42. Most harmful particulate air pollutant is (a) suspended particulate matters (b) respirable suspended particulate matter (c) Fine particulate matter (PM<sub>2.5</sub>)
43. Which of the following is not considered as a greenhouse gas? (a) carbondioxide (b) methane (c) sulfur dioxide
44. Which of the following parameter is not a physico-chemical indicator of a pond ecosystem? (a) alkalinity (b) biochemical oxygen demand (3) pH
45. Chlorofluoro carbon (CFCs) are harmful for environment, because it is a/ an (a) anthropogenic gas (b) ozone depleting gas (c) non-reactive gas
46. Human activities can greatly accelerate eutrophication is known as (a) invasion (b) succession (c) cultural eutrophication
47. The amount of a particular pollutant that a water body can receive from both point and non-point source is known as (a) residual pollution (b) organic pollution (c) total maximum daily loads
48. Which of the following is not true regarding biodiversity? (a) biodiversity provides food and medicines (b) coral reefs are rich in biodiversity (c) Habitat destruction can aid ecosystem stability
49. Benthic communities occur (a) on the surface of ocean (b) in the interphase between light penetrating and dark zone (c) bottom region
50. A declining population will have (a) higher percentage of individuals in age group 5-15 years (b) higher percentage of older generation and more death (c) zero population growth.
51. Which of the following example does not represent the concept of sustainability? (a) Combating poverty and controlling population growth (b) The affluent lifestyle of richer countries enjoy major consumption of world's natural resource (c) Afforestation and protecting biodiversity
52. The recipient of Noble Peace Prize winner and leader in Green belt movement (a) Rachel Carson (b) Wangari Maathai (c) Barry Commoner
53. In an ecosystem, after disturbance, population fluctuations may return to its original position, the ability known as (a) emergent properties (b) resilience (c) conservation
54. A rock poised at the top of a hill is an example of (a) kinetic energy (b) potential energy (c) Chemical energy

55. Organisms lying deep at the ocean bed or in hot spring, gain their energy from (a) Photosynthesis (b) chemosynthesis (c) cannibalism
56. Find out the mismatches of the animals with their corresponding function in an ecosystem:  
(a) crows, scavengers (b) beetles, detritivores (c) ants, decomposers
57. Which of the following statement regarding Nitrogen cycle is wrong? (a) Plant can use nitrogen directly from atmosphere (b) Green algae and cyanobacteria can fix nitrogen (c) nitrogen fixing bacteria accumulate more in the roots of bean family plants
58. Complete competitors cannot co-exist. To survive they need (a) severe fighting (b) Resource partitioning (c) geographic isolation
59. Two virtually identical tree frogs live in similar habitats of North-East India, but have different mating call. This behavioural isolation may develop into (a) sympatric speciation (b) allopatric speciation (c) species extinction
60. Fighting within the species are example of (a) intraspecific competition (b) interspecific competition (c) Predation
61. The distasteful monarch and benign viceroy butterflies are classical example of (a) Mullerian mimicry (b) Batesian mimicry (c) symbiosis
62. The particular species that demonstrates its critical role in a biological community, out of proportion to its abundance is (a) symbionts (b) keystone species (c) detritivores
63. Which of the following is not a characteristic of r-selected species? (a) rapid growth (b) vast quantities of offspring (c) high parental care
64. k-selected survivorship curve is typically (a) concave (b) straight line (c) convex
65. Net primary productivity refers to the (a) overall productivity (b) the amount of biomass after respiration (c) annual output of biomass or energy
66. Plants colonized in a landscape of volcanic flow, can be regarded as (a) pioneer community (b) mature community (c) climax community
67. Anthropogenic impact over environment can be measured as (a) Product of Population (P) times Affluence (A) and Technology (T) (b) Product of Population (P) and Affluence (A) over Time period (T) (c) Product of Pollution (P) times Resource (R) and Time (T)
68. Emergent diseases are those (a) which are rapidly spreading in world in recent times (b) those are not previously known or that have been absent for last 20 years (c) confined to a specific location only
69. Mutagens are agents that (a) alter genetic material in cell (b) alter chromosomal numbers (c) targets telomere
70. Regarding 'Teratogens' which statement is wrong? (a) cause abnormalities during fetal development (b) alcohol is a teratogen that causes fetal alcohol syndrome (c) cause sick building syndrome

71. Regarding POPs the false statement is (a) degrade easily when exposed to sun, air and water (b)PVC plastics are examples of POPs (c) POPs often accumulate in food web and reach higher predators through biomagnification
72. Regarding Pthalate and Bisphenols, which of the following explanation is not right (a) persistent in nature and cause adverse impact on environment (b) prime ingredients of plastic and endocrine disruptors in nature (c) known to affect adversely on environment but not humans
73. Toxic chemicals even at low dose can have harmful effect on prolonged exposure. This is termed as (a) acute toxicity (b) chronic toxicity (c) antagonistic toxicity
74. The word Troposphere was coined from a Greek work “tropein” that means (a) ground (b)convection current (c) Change
75. Tropopause is a zone intermediate between (a) thermosphere and troposphere (b) stratosphere and mesosphere (c) stratosphere and troposphere
76. IPCC stands for (a) Intra-govermental panel on climate change (b) Intergovernmental panel on climate change (c) International Project on Climate Convention
77. Secondary pollutants are (a) released in environment in harmful condition (b) become hazardous after reaction in the air (c) all kind of non-point emissions
78. Regarding acid precipitation, which statement is wrong? (a) SO<sub>x</sub> and NO<sub>x</sub> play major role in precipitation (b) pH of rainfall remains around 7.1-7.3 (c) acid deposition destroys ecosystem
79. Which of the following parameter will indicate ponds health to be good, if (a) DO is high (b) BOD is high ..(c) COD is very high
80. Itai itai disease is associated with exposure from (a)Lead (b) cadmium (c) Mercury
81. Advantages of Three way catalytic converters over two-way converter as it controls (a) CO<sub>2</sub> emission (b) NO<sub>x</sub> emission (c) unburned hydrocarbons
82. A symbiotic relationship in which one member is benefited and the second is neither harmed nor benefited, is known as (a) mutualism (b) parasitism (c) commensalism
83. Carrying capacity refers to (a) maximum number of individuals of any species that can be supported by a particular ecosystem on a long term basis (b) capacity to carry most varied and diverse species for a particular ecosystem (c) ecosystem of a hotspot biodiverse zone
84. Coral bleaching indicates (a) adding chemical bleaching powder to coral (b) viral infection to coral and consequent discolouring (c) whitening of corals due to thermal stressors
85. Coriolis effect refers to (a) The Coriolis effect describes the pattern of deflection taken by objects firmly connected to the ground (b) tendency for air above the earth to appear to be deflected to the right in the Northern Hemisphere (c) tendency for air above the earth to appear to be deflected to the right in the Southern Hemisphere

86. The functional role and position of a species in its ecosystem is known as (a) habitat (b) niche (c) footprint
87. Epiphytes are (a) Plants that grow on a substrate other than soil like surface of another organism (b) plants that grow under the sea (c) plants that grow in static water body
88. Regarding 'Blind experimental design' which one is wrong? (a) a researcher may not know which subjects are getting treatments until all the data is gathered and analyzed (b) case and control subjects for the particular study are not revealed to the researcher (c) all information are known but the experiment is analysed by differently abled person
89. IUCN stands for (a) International Union for Conservation of Nature and Natural resources (b) International Union for convention on Nature (C) Integrated union for conserving Nature
90. Limnology is the study of (a) invertebrates (b) inland waters (c) soil microbes
91. The hadal zone is known as the (a) deepest region of the ocean lying within oceanic trenches (b) photosynthetic zone of ocean (c) a specific zone in desert area
92. Regarding an ecological island, the false statement is (a) it is necessarily an island, surrounded by land all over (b) Scientists claim that Mount Kilimanjaro is turning into an "ecological island" (c) An ecological island is a biodiverse microhabitat that is located within a larger environment.
93. To maintain and restore the 'wholesomeness' of our aquatic resources, Water Act was initiated on (a) 1974 (b) 1984 (c) 1994
94. The Environment (Protection) Act is also known as Umbrella act, was passed in the year (a) 1974 (b) 1976 (c) 1986
95. World water Day is celebrated on (a) March 2 (b) March 22 (c) June 5
96. The significance of Ramsar site is related to (a) sanctuary (b) wetland (c) sacred groves
97. Population of India in 2020 is closely (a) 100 crores (b) 138 crores (c) 195 crores
98. Which of the following is an example of anthropogenic disaster? (a) The 1984 Bhopal Gas tragedy (b) The 2001 Gujarat earthquake (c) The 2020 cyclone Amphan
99. Which of the following action plays an important role in pre- disaster management? (a) relief (b) rescue (c) preparedness
100. Chintamani Kar sanctuary, situated at south Kolkata is famous as (a) bird sanctuary (b) conservation of reptiles (c) conservation of crocodiles.