

203/2015

1. Panspermia is related with :  
(A) Life originates from outer space  
(B) Mode of sperm movement  
(C) Theory on the evolution of gymnosperms  
(D) An epidemic
2. Of the following diseases, which is not caused by water pollution ?  
(A) Malaria            (B) Dysentery            (C) Typhoid            (D) Jaundice
3. The permissible level of Ozone in the atmosphere of rural areas as per National Ambient Air quality standards is :  
(A)  $200 \mu\text{g}/\text{m}^3$             (B)  $60 \mu\text{g}/\text{m}^3$             (C)  $100 \mu\text{g}/\text{m}^3$             (D)  $20 \mu\text{g}/\text{m}^3$
4. Suppose rice plant converts 100 g of  $\text{CO}_2$  per day into glucose. How many litres of  $\text{O}_2$  at STP are produced ?  
(A) 14.02 L  $\text{O}_2$             (B) 50.9 L  $\text{O}_2$             (C) 66.12 L  $\text{O}_2$             (D) 26.44 L  $\text{O}_2$
5. More prominent and destructive natural disaster in Kerala :  
(A) Earthquake            (B) Landslide            (C) Flood            (D) Lightning
6. As per EPA 1986, the permissible limit of BOD (3 day  $27^\circ\text{C}$ ) in the effluents discharged into the inland surface waters :  
(A)  $100 \text{mgO}_2/\text{l}$             (B)  $40 \text{mgO}_2/\text{l}$             (C)  $10 \text{mgO}_2/\text{l}$             (D)  $30 \text{mgO}_2/\text{l}$
7. Who is known as the Patron Saint of Ecology ?  
(A) St. Francis of Assissi            (B) St. Vincent de Paul  
(C) St. Francis Sales            (D) St. Marcellinus
8. Of the following, which one is not a category B project as per EIA Notification 2006 :  
(A) Ports having  $< 5$  million TPA of cargo handling capacity  
(B) Thermal power plant with  $< 500$  MW  
(C) Sugar industry with  $> 5000$  tcd cane crushing capacity  
(D) Mining project  $\geq 50$  ha. of mining lease area

9. Which of the following is act as natural sources of methane ?  
 (i) Buffallo (ii) Biogas plants (iii) Wetlands (iv) Oceans (v) landfills  
 Choose the correct code :
- (A) All are correct (B) (i), (ii), (iii) are correct  
 (C) (i), (ii), (iii) and (iv) are correct (D) (i), (iii) and (iv) are correct
10. What volume of 12 m HCl is required to prepare 750 mL of 3 m HCl solution ?  
 (A) 450 mL (B) 190 mL (C) 260 mL (D) 440 mL
11. The members of BTEX group are :  
 (A) Bromide, Thalium, Ethylbenzene and Xenon  
 (B) Benzene, Toluene, Ethylbenzene and Xylene  
 (C) Benzene, Thorium, Ethylacetate and Xylene  
 (D) Benzene, Toluene, Ethylchloride, Xenon
12. Phycoremediation is the process of :  
 (A) Waste water treatment using emergent plants  
 (B) Waste water treatment using algae  
 (C) Waste water treatment using GM bacteria  
 (D) Waste water treatment using fungus
13. China clay zone in Kerala is :  
 (A) between Aluva and Chavakkad  
 (B) between Aluva and Munnar  
 (C) between Thiruvananthapuram and Kundara  
 (D) between Thrissur and Walayar
14. The maximum limit of noise in the commercial area during day time as per CPCB guidelines :  
 (A) 45 dB (A) Leq (B) 75 dB (A) Leq (C) 65 dB (A) Leq (D) 80 dB (A) Leq
15. The total mass of water on planet earth is :  
 (A)  $1.5 \times 10^{18}$  tonnes (B)  $2.2 \times 10^{13}$  tonnes  
 (C)  $1.2 \times 10^7$  tonnes (D)  $24.2 \times 10^{18}$  tonnes



16. Gaia hypothesis proposed by :
- (A) James Lovelock (B) Charles Darwin  
(C) Stephen Hawking (D) Alexander Von Humboldt
17. Appiko movement led by :
- (A) Panduranga Hegde (B) Sunderlal Bahuguna  
(C) Chandi Prasad Bhatt (D) Medha Patkar
18. Expansion of OTEC :
- (A) Oil and Thermal Energy Conversion  
(B) Oil and Thermal Energy Coefficient  
(C) Oceanic Tidal Energy Coefficient  
(D) Ocean Thermal Energy Conversion
19. Bioplastic is :
- (A) Polyurethanes (B) Polystyrene  
(C) Polyvinyl chloride (D) Polylactic acid
20. Bioluminescence is related with :
- (A) Kelp (B) Dianoflagellates  
(C) Monitor lizard (D) Achatina fulica
21. DDT is a :
- (A) Weedicide (B) Insecticide (C) Herbicide (D) Fungicide
22. Name the chemical that contributes to photochemical smog :
- (A)  $\text{NO}_3$  (B)  $\text{NO}_2$  (C)  $\text{SO}_2$  (D)  $\text{SO}_3$
23. As per CPCB standards, the quality of outdoor bathing water should be :
- (A) Total Coliforms (MPN/100 ml) shall be 100 or less; pH between 6.5 and 8; Dissolved Oxygen 4 mg/l or more and BOD 10 mg/l or less  
(B) Total Coliforms (MPN/100 ml) shall be 200 or less; pH between 4 and 8; Dissolved Oxygen 5 mg/l or more and BOD 20 mg/l or less  
(C) Total Coliforms (MPN/100 ml) shall be 500 or less; pH between 6.5 and 8.5; Dissolved Oxygen 5 mg/l or more and BOD mg/l or less  
(D) Total Coliforms (MPN/100 ml) shall be 1000 or less; pH between 4 and 8; Dissolved Oxygen 3 mg/l or more and BOD 10 mg/l or less

24. The minimum stack height of Biomedical Incinerators should be :  
 (A) 100 m above ground (B) 15 m above ground  
 (C) 30 m above ground (D) 50 m above ground
25. In India, the Ecomarking scheme started in :  
 (A) 2001 (B) 1986 (C) 2002 (D) 1991
26. Among the following, which standard provides the management of Green House gas emissions.  
 (A) ISO 14063 (B) ISO 14062 (C) ISO 14001 (D) ISO 14064
27. As per Wild Life Protection Act, King Cobra belongs to the category :  
 (A) Schedule III (B) Schedule I (C) Schedule IV (D) Schedule II
28. Who was the first scientist who discovered the 'Green House Effect' ?  
 (A) Joseph Fourier (B) Neils Bohr (C) Marie Curie (D) James Hansen
29. The Ayers Rock (Uluru) in Australia is an example of :  
 (A) Igneous rock (B) Sedimentary rock  
 (C) Metamorphic rock (D) Remnants of Meteorite
30. Peroxyacetyl Nitrates (PAN) are formed by the reaction of :  
 (A)  $N_2$  with CO (B)  $N_2$  with VOCs  
 (C)  $NO_2$  with VOCs (D)  $NO_2$  with CFCs
31. Geysers are :  
 (A) The hotwater springs  
 (B) The jet of boiling water and steam that erupt from earth  
 (C) Artificial hot water ponds of temperate regions  
 (D) The natural ponds where cold water and hot water mixes
32. The albedo of charcoal is :  
 (A) 0.9 (B) 0.04 (C) 0.52 (D) 0.66
33. The Legal provision is to provide for damages to victims of an accident which occurs as a result of handling any hazardous substance :  
 (A) E waste (Management and Handling) Rules, 2011  
 (B) Environment Protection Act, 1986  
 (C) Hazardous Waste (Management, handling, Trans boundary movements) Rules, 2008  
 (D) Public Liability Insurance Act, 1991



34. A solid material obtained from thermochemical conversion of biomass in an oxygen limited environment is :  
 (A) Charcoal (B) Activated Carbon (C) Biochar (D) Pyruvate
35. International day for Biodiversity is on :  
 (A) May 22 (B) April 21 (C) March 22 (D) June 5
36. Plumbism is due to the toxicity of :  
 (A) Cadmium (Cd) (B) Lead (Pb) (C) Copper (Cu) (D) Nitrate
37. Liana is :  
 (A) Woody vines (B) An invasive insect  
 (C) An epidemic of West Africa (D) Genetically modified potato
38. Enthalpy of an exothermic reaction is :  
 (A) Always negative (B) Always zero  
 (C) Always positive (D) Either positive or negative
39. Pedogenesis is :  
 (A) the formation of potholes  
 (B) study on the formation and science of petroleum  
 (C) the science and study on the formation of soil  
 (D) scientific study on the genetic variation among newborn babies
40. The instrument used for the detection of fluoride in water is :  
 (A) Spectroradiometer (B) Flourimeter  
 (C) Spectrophotometer (D) Flame photometer
41. The following is not a low cloud :  
 (A) Stratocumulus (B) Cirrocumulus (C) Cumulonimbus (D) Stratus
42. The instrument used for the detection of pesticides is :  
 (A) AAS (B) PCR (C) GC-MS (D) ICPMS
43. Among the following, one is not a phytoremediation process :  
 (A) Phytoextraction (B) Phytostabilization  
 (C) Phytovolatilization (D) Phytoscreening

44. Energy intensity is measured by the :
- (A) quantity of energy required per unit output or activity
  - (B) quantity of energy used by the activity
  - (C) quantity of energy produced by an action
  - (D) quantity of energy used by unit volume of mass
45. The role of nebuliser in Atomic Absorption Spectroscopy is :
- (A) Converts the liquid sample into small bubbles
  - (B) Heat and push the sample to the detector
  - (C) Converts the liquid sample into a fine spray or aerosol
  - (D) Homogenizing the solutes
46. An example of neuston is :
- (A) fish
  - (B) chironomous larvae
  - (C) water strider
  - (D) copepod
47. The instrument which records the vibration of earth :
- (A) Seismogram
  - (B) Clinometer
  - (C) Seismometer
  - (D) Richter scale
48. The point in the earth where the seismic waves originate :
- (A) Seismic area
  - (B) Hypocentre
  - (C) Epicentre
  - (D) Fault
49. The set of biotic and abiotic conditions in which a species is able to persist and maintain stable population sizes is known as :
- (A) Ecological niche
  - (B) Habitat
  - (C) Community
  - (D) Ecotone
50. In oceans, down welling occurs in the areas of :
- (A) High current and salinity
  - (B) Surface convergence
  - (C) High offshore winds
  - (D) Surface divergence
51. The following is not an application of HPLC :
- (A) Detection of vitamin D levels in urine
  - (B) Estimation of bioethanol production
  - (C) Detection of heavy metals
  - (D) Drug detection in water samples
52. Third generation biofuels are derived from :
- (A) Pongamia
  - (B) Jatropha
  - (C) Animal fat
  - (D) Algae





61. The bioluminescence phenomenon at Alappuzha coast during July 2015 was due to :  
(A) *Chlorella vulgaris* (B) *Noctiluca scintillans*  
(C) *Photobacterium phosphoreum* (D) *Mesocyclops*
62. Ramsar Convention is related with :  
(A) Wetlands (B) Mountain ecosystems  
(C) Marine pollution (D) Radioactive waste
63. King Cobra belongs to the category :  
(A) Vulnerable (B) Endangered (C) Near threatened (D) Least concern
64. The specialised freshwater wetlands in the forest of Kerala are known as :  
(A) Potholes (B) Ecotone  
(C) Reed valley (D) *Myristica* swamps
65. Which of the following is an example of in situ conservation ?  
(A) Seed bank (B) Gene bank  
(C) Wild life sanctuary (D) Zoos
66. Permanent Hardness of drinking water is due to the presence of :  
(A) Carbonates and bicarbonates  
(B) Nitrate ions  
(C) Calcium and magnesium ions  
(D) Potassium and phosphate
67. In which layer of the atmosphere, the auroras (Northern lights) occur ?  
(A) Stratosphere (B) Thermosphere (C) Troposphere (D) Exosphere
68. The dominant vegetation of Chinnar wild life sanctuary is :  
(A) Southern moist deciduous forest  
(B) Southern wet evergreen forest  
(C) Southern tropical dry deciduous forest  
(D) Southern tropical thorn forest



69. Bhopal gas tragedy was due to :  
 (A) Sulphur dioxide (B) Carbon monoxide  
 (C) Methyl cyanide (D) Methyl isocyanate
70. Which one of the following is the 'east flowing' river in Kerala ?  
 (A) Bhavani (B) Periyar (C) Chalakkudy (D) Kallada
71. The wind system in the tropical regions are known as :  
 (A) Cyclones (B) Trade winds (C) Westerlies (D) Hurricanes
72. The main cause of lung diseases is :  
 (A) Carbon dioxide (B) Ozone (C) Nitrous oxide (D) RSPM
73. Select the false statement :  
 (A) Rainwater contains pollens (B) Rainwater contains dust  
 (C) Rainwater is acidic in nature (D) Rainwater contains essential minerals
74. Select the false statement :  
 (A) The organic matter in the soil increases the Cation Exchange Capacity (CEC)  
 (B) If a soil have higher CEC, it is highly fertile  
 (C) If a soil have higher CEC, it is less fertile  
 (D) CEC is measured in milliequivalents per 100 grams of soil
75. The primitive and last remaining hunter and gatherer tribal community of Kerala is :  
 (A) Mala Araya (B) Kuruma (C) Kurichiar (D) Cholanaikkans
76. The first National Park in India :  
 (A) Jim Corbett NP (B) Silent Valley NP (C) Kaziranga NP (D) Bandipur NP
77. Following is an example of Zoonotic epidemic :  
 (A) SARS (B) Malaria  
 (C) Japanese encephalitis (D) Jaundice
78. In a waste water, the  $BOD_5/COD_{cr}$  ratio is  $> 0.6$ , which treatment is fairly cost effective :  
 (A) Addition of alum (B) Trickling filters  
 (C) Phytoremediation (D) Oxidation ponds

79. Modified Jacob and Hochheiser method is used for the measurement of :
- (A) Sulphur dioxide in air (B) Nitrate in water  
(C) Phosphate in water (D) Nitrogen dioxide in air
80. The Chairman of WGEEP is :
- (A) Madhav Gadgil (B) Kasturirangan  
(C) V. S. Vijayan (D) Oommen V. Oommen
81. An eminent Social Reformer of Kerala known as *Vidyadhiraja* :
- (A) Sree Narayana Guru (B) Chattampi Swamikal  
(C) Vagbhadanandan (D) Vakkam Abdul Khadar Maulavi
82. The person who was known as "*Bharat Kesari*" :
- (A) Bala Gangadhara Tilak (B) Veluthampi Dalwa  
(C) Mannathu Padmanabhan (D) Dr. Palpu
83. Who was the volunteer captain of Guruvayur Satyagraha ?
- (A) E.M.S. Namboothiripad (B) G.P. Pillai  
(C) E.K. Nayanar (D) A.K. Gopalan
84. Which one was considered the mouth piece of Abstention Movement ?
- (A) Al Ameen (B) Kerala Kesari  
(C) Swadeshabhimani (D) Malayala Manorama
85. *Unni Namboothiri* is the publication of :
- (A) Nayar Service Society (B) Sreenarayana Dharma Paripalana Yogam  
(C) Sadu Paripalana Sangam (D) Yogakshema Sabha
86. The Temple Entry Proclamation was on :
- (A) 12<sup>th</sup> November 1936 (B) 12<sup>th</sup> November 1932  
(C) 12<sup>th</sup> January 1950 (D) 1<sup>st</sup> November 1951
87. "*Muslim Janavum Vidhyabyasavum*" a notable work of :
- (A) Makthi Thangal (B) Dr. C.K. Kareem  
(C) Veliyamkode Umer Khasi (D) Vakkam Abdul Khadar Maulavi



88. The founder of Famous Islamic Seminary *Darul Uloom Vazhakkad* :
- (A) Sayyid Alavi Thangal (B) Chalilakath Kunahmed Haji  
(C) Komukutty Maulavi (D) Ali Musliyar
89. Who made primary education compulsory in Travancore ?
- (A) Colonel Manro (B) Swathi Tirunal  
(C) Rani Guri Parvathi Bai (D) Rani Lakshmi Bai
90. "*Vivekodayam*" a Magazine was published by :
- (A) Sahodaran Ayyappan (B) Ayyankali  
(C) Kumaranasan (D) Swami Vivekananda
91. Who bagged King Faisal International Prize 2015 ?
- (A) Dr. Zakir A. Naik (B) Omar Mwannes Yaghi  
(C) Dr. Prafulla Kar (D) Prof. Jeffrey Ivan Gordon
92. What does the term A.A.Y. denote, which is the short form of a social scheme launched by the Government of India ?
- (A) Antodaya Awas Yojana (B) Asian Awas Yojana  
(C) Antodaya Anna Yojana (D) Area Antodaya Yojana
93. National Youth Day was observed across India on 12<sup>th</sup> January 2015. The day was observed to commemorate the birth anniversary of which famous Indian Philosopher ?
- (A) Rabindranath Tagore (B) Swami Vivekananda  
(C) Dayananda Saraswathi (D) Sarvepalli Radhakrishnan
94. Who won the Men's Singles Title of the Swiss Open of Badminton on March 2015 ?
- (A) Sun Yu (B) Lu Kai  
(C) Kidambi Srikanth (D) Victor Alexson
95. What was the theme of the World Consumers Rights Day which was observed on 15<sup>th</sup> March 2015 ?
- (A) Helping consumers choose healthy diets  
(B) Consumer justice  
(C) Every consumer has rights to healthy diet  
(D) Our money, our rights

96. Which Educational Institution topped the world reputation ranking 2015 that was released by Times Higher Education ?  
(A) Harward University (B) Oxford University  
(C) Stanford University (D) Massachusetts Institute of Technology
97. Which State Government launched Bhagyashree Scheme for Girl Child on 2015 ?  
(A) Uttar Pradesh (B) Maharashtra (C) Sikkim (D) Tripura
98. Which Indian ecologist won the Tyler Prize for Environment Achievement 2015 ?  
(A) Madhav Gadgil (B) Salim Ali  
(C) Sukathakumari (D) Kasturirangan
99. Who bagged the best actress award of the National Film Awards announced on 2015 ?  
(A) Priyanka Chopra (B) Kareena Kapoor  
(C) Maduri Dixit (D) Kangana Ranaut
100. Which Party of Israel won the Israeli elections 2015 ?  
(A) Likud Party (B) Joint Arab List Party  
(C) Zionist Union Party (D) Yesh Atid Party

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