INSTRUCTIONS TO CANDIDATES

1. Immediately after the commencement of the Examination, you should check that this Booklet does not have any unprinted or torn or missing pages or items, etc. If any of the above defects is found, get it replaced by a Complete Question Booklet of the available series.

2. Write clearly the Question Booklet Version Code A, B, C, D or E, in the appropriate space provided for the purpose, in the OMR Answer Sheet.

3. Enter the name of the Subject, Reg. No., Question Booklet version code and affix Signature on the OMR sheet. As the answer sheets are designed to suit the Optical Mark Reader (O.M.R.) system, special care should be taken to fill those items accurately.

4. This Question Booklet contains 70 questions carrying equal marks. All questions must be attempted. Each question contains four answers, among them one correct answer should be selected and shade the corresponding option in the OMR sheet.

5. All the answers should be marked only on the OMR sheet provided and only with a black or blue ink ball point pen. If more than one circle is shaded/wrongly shaded/half shaded for a given question no marks will be awarded.

6. Questions are in both English and Kannada. If any confusion arises in the Kannada version, please refer to the English version of the questions.

7. Immediately after the final bell indicating the closure of the examination, stop making any further markings in the OMR Answer Sheet. Be seated till the OMR Answer Sheet is collected. After handing over the OMR Answer Sheet to the Invigilator you may leave the examination hall.
SN – 712

1. ಸಂಖ್ಯೆ ವರ್ಗದಲ್ಲಿ ಪ್ರಶ್ನಾತ್ಮಕ ಪ್ರಶ್ನೆಗಳನ್ನು ಸೂಚಿಸಿಕೊಳ್ಳದೆ, ಇಲ್ಲಿರುವ ಪ್ರಶ್ನೆಗಳು ತಾಧ್ಯತೆ ಮುಂದೂಡಿಯಾಗಿ ಅಂಗೀಕರಿಸುವ ಕ್ರಮವಿಗೆ ತೊಡಗಿಸಿ ಆಸಕ್ತಿಯನ್ನು ಕಡಿಮೆ ಮಾಡಬೇಕು. ಪ್ರಶ್ನೆಗಳು ಮುಖಾಂತ ಕೂಡ ಅವರು ತಾಧ್ಯತೆಯ ಮುಂದೂಡಿಯಾಗಿ ಅಂಗೀಕರಿಸಿದ್ದರೆ ಅವರು ಸೂಕ್ತವಾಗಿಯೇ ಆಯ್ಕೆ ಮಾಡುವಂತೆ ಇರುತ್ತವೆ.

2. ಪ್ರಶ್ನೆಗಳ ಸಲೇಜನ್ನು ತರ್ಲೆ B, C, D ಅಥವಾ E ಕಾಲ್ಪನಿಕ (OMR) ವಿತರಣೆಯಿಂದ ಕೆಲಸ ಮಾಡಬೇಕು.

3. ಪ್ರಶ್ನೆಯಿಂದ ಬೀದಿರುವ (ಸೂಚಿಸಲಾರಂಭಿಸಿದ) ಪ್ರಶ್ನೆಗಳನ್ನು ತಾತ್ಕಾಲಿಕವಾಗಿ ನೋಡಬೇಕು. ಪ್ರಶ್ನೆಗಳನ್ನು ತಯಾರಾದ ಲಿಸ್ಟ್ ಗೆ ಹೂಡಿದಾಗ ಗಮನಿಸಿ ಪ್ರಶ್ನೆಯ ವಿನಿಮಯದ ಫಲಿತಾಂಶಗಳ ಸೂಚನೆಯನ್ನು ಪ್ರಯತ್ನಿಸಿ ಪ್ರಶ್ನೆಗಳನ್ನು ಮೂಡಿಸಬೇಕು.

4. ಪ್ರಶ್ನೆಗಳನ್ನು ಮತ್ತು ಸಲೇಜನ್ನು 70 ವಿತರಣೆಗಳ ಲ್ಯಾಂಡ್ಸ್ ಮಾಡಬೇಕು. ಪ್ರಶ್ನೆಗಳು ಸಲೇಜನ್ನು ಮತ್ತು ಸಲೇಜನ್ನನ್ನು ಎರಡು ಹಾಗೂ ದ್ವೀಪಗಳಿಗೆ ನಡೆಸಬೇಕು. ಅನ್ನು ಸಲೇಜನ್ನನ್ನು ಮತ್ತು ಸಲೇಜನ್ನು ಎರಡು ಹಾಗೂ ದ್ವೀಪಗಳಿಗೆ ನಡೆಸಬೇಕು. ಎರಡು ಹಾಗೂ ದ್ವೀಪಗಳಿಗೆ ನಡೆಸಬೇಕು.

5. ಪ್ರಶ್ನೆಗಳನ್ನು ಸಲೇಜನ್ನು ನುಡಿಸಿ ನಂತರ ಪ್ರಶ್ನೆಗಳನ್ನು ಸಲೇಜನ್ನು ನುಡಿಸಬೇಕು. ಸಲೇಜನ್ನು ನುಡಿಸಿದರೆ ಪ್ರಶ್ನೆಗಳನ್ನು ನಂತರ ಸಹ ಹಾಗೂ ನಂತರ ಸಹ ಆಯ್ಕೆ ಮಾಡಬೇಕು. ಸ್ಲೀಡಿಂಗ್ ಅಥವಾ ಪ್ರಶ್ನೆಗಳು ನುಡಿಸಿದರೆ ಪ್ರಶ್ನೆಗಳನ್ನು ನಂತರ ಸಹ ಹಾಗೂ ನಂತರ ಸಹ ಆಯ್ಕೆ ಮಾಡಬೇಕು.

6. ಪ್ರಶ್ನೆಗಳನ್ನು ಪಡೆದುಕೊಳ್ಳಲು ಎಂದರೆ ನುಡಿಸಬೇಕು. ಪ್ರಶ್ನೆಗಳನ್ನು ಪಡೆದುಕೊಳ್ಳಲು ಎಂದರೆ ನುಡಿಸಬೇಕು. ಪ್ರಶ್ನೆಗಳನ್ನು ಪಡೆದುಕೊಳ್ಳಲು ಎಂದರೆ ನುಡಿಸಬೇಕು.

7. ಪ್ರಶ್ನೆಗಳ ಸಲೇಜನ್ನು ಪಡೆದಾಗದೇ ಪ್ರಶ್ನೆಗಳು ಪಡೆದಾಗದೇ ಸಲೇಜನ್ನು ಪಡೆದಾಗದೇ. ಪ್ರಶ್ನೆಗಳಿಗೆ ಪಡೆದಾಗದೇ ಸಲೇಜನ್ನು ಪಡೆದಾಗದೇ ಸಲೇಜನ್ನು ಪಡೆದಾಗದೇ. ಪ್ರಶ್ನೆಗಳನ್ನು ಪಡೆದಾಗದೇ ಸಲೇಜನ್ನು ಪಡೆದಾಗದೇ ಸಲೇಜನ್ನು ಪಡೆದಾಗದೇ.

Note: English version of the instructions is printed on the front page of this booklet.
1. Fresh sewage is in nature
   a) Alkaline
   b) Neutral
   c) Acidic
   d) None of the above

2. The biological decomposition of organic wastes under controlled conditions is known as
   a) Composting
   b) Sanitary landfills
   c) Incineration
   d) None of the above

3. Chernobyl nuclear disaster occurred in the year
   a) 1985
   b) 1987
   c) 1986
   d) 1988
4. Enrichment of nutrients in a water body leads to
   a) Eutrophication
   b) Biotransformation
   c) Biomagnification
   d) None of the above

5. The maximum permissible limit of nitrates in drinking water is
   a) 45 mg/l
   b) 79 mg/l
   c) 100 mg/l
   d) 250 mg/l

6. Environment Protection Act was enacted in the year
   a) 1974
   b) 1998
   c) 1986
   d) 1982
7. pH value of potable water is
   a) 3 and 5  b) 10.5 and 12.6
   c) 6.5 and 8.8  d) 1.5 and 2.0

8. The chemical name for alum is
   a) Aluminium chloride  b) Alum
   b) Silver nitrate  c) Aluminium sulphate
   d) Copper sulphate

9. Consumptive, productive, social aesthetic and option values refer to
   a) Tropic structure
   b) Ecosystem stability
   c) Biodiversity
   d) Dynamic equilibrium
10. Due to incomplete combustion of fuels from petrol engines, the gas liberated is
   a) Carbon dioxide
   b) Carbon monoxide
   c) Nitrogen dioxide
   d) Sulphur dioxide

11. Some toxic compounds are ingested and retained in the tissues. These pollutants pose special risks to humans and other organisms high on the food chain because of which process?
   a) Synergism
   b) Compound contamination
   c) Biomagnification
   d) Carcinogenesis
12. The disease caused by drinking contamination
   a) Scurvy
   b) Typhoid
   c) Malaria
   d) Anemia

13. Sewage sickness is a form of
   a) Water pollution
   b) Air pollution
   c) Land pollution
   d) Light pollution

14. Sodium is usually estimated by which of the following analytical technique?
   a) Flame Photometry
   b) Coulometry
   c) High pressure liquid
   d) Chromatography
15. Poorly nourished lakes are known as
   a) Oligotrophic
   b) Eutrophic
   c) Mesotrophic
   d) Xerographic

16. Highest level of biotic interaction is
   a) Mutualism
   b) Predation
   c) Parasitism
   d) Amensalism

17. Group of individuals of the same species that share common attributes is called
   a) Community
   b) Population
   c) Ecotype
   d) Society
18. Acid rain is caused by
   a) CO and CO$_2$
   b) SO$_2$ and O$_2$
   c) SO$_2$ and NO$_2$
   d) NO$_2$ and O$_2$

19. Marine pollution of the ocean is due to
   a) Oil spills
   b) Washing of cargo ships
   c) Disposal of hazardous waste
   d) All the above

20. The chemical that is used to ripen mangoes is
    a) Calcium sulphide
    b) Calcium carbide
    c) Calcium carbonate
    d) Calcium chloride

Which one of the following is not an example of marine pollution?

   a) Oil spills
   b) Washing of cargo ships
   c) Disposal of hazardous waste
   d) All the above
21. Biotic environment includes
   a) Producers  b) Consumers
c) Decomposers  d) All the above

22. Chicken gunya is transmitted by
   a) Culex  b) Aedes
c) Anopheles  d) Housefly

23. In our country, Vana Mahotsav Day is observed on
   a) Second of October  b) First of December
c) Tenth of August  d) First of July

24. Which one of the following is not a primary contributor to the green house effect?
   a) Carbon dioxide  b) Carbon monoxide
c) Chlorofluorocarbons  d) Nitrous oxide
25. Medicine of quinine is provided by
   a) Eucalyptus plant  b) Aconite plant  c) Cinchona plant  d) Money plant

26. 71% of earth surface is covered with
   a) Land  b) Air  c) Water  d) Coal

27. Which combination of the following elements constitutes a major portion of earth crust?
   a) Oxygen and Silicon  b) Oxygen and Iron  c) Silicon and Iron  d) Aluminium and Iron

28. The least preferred technique in the disposal of municipal solid waste is
   a) Incineration  b) Composting  c) Landfilling  d) Bricketting
29. Minamata episode was caused by which heavy metal?
   a) Calcium    b) Mercury    c) Lead    d) Arsenic

30. The First Environmental Law in India was enacted in
   a) 1947    b) 1950    c) 1972    d) 1982

31. A device fitted to the exhaust system petrol driven motor vehicle to reduce emissions of pollutants is called as
   a) Conversion System    b) Conversion Kit    c) Catalytic Converter    d) Catalytic Box

32. The maximum permissible level of BOD (mg/l) in waste water that is let into river is
   a) 20    b) 30    c) 40    d) 10
33. Which one of the following sequence represents increasing order of toxicity of metals?
   a) Ca, Zn, Cd, Mn  
   b) Ca, Mn, Zn, Cd  
   c) Zn, Mn, Cd, Ca  
   d) Mn, Cd, Zn, Ca

34. The term environment refers to
   a) Total set of circumstances  
   b) Hydrosphere  
   c) Atmosphere  
   d) Biosphere

35. Climate change issue is due to increase of ________ gas in the atmosphere.
   a) Oxygen  
   b) Ozone  
   c) CO   
   d) CO₂

36. Biomass energy refers to
   a) Renewable  
   b) Non renewable  
   c) Renewable and alternative  
   d) Renewable, alternative and ecofriendly
37. Sacred grooves are of
   a) Agricultural importance
   b) Religious importance
   c) Economic importance
   d) Industrial importance

38. Fluoride is harmful at concentration exceeding ________ mg/l in water.
   a) 0.9    b) 1.5    c) 0.5    d) 0.4

39. Algal blooms appear in water due to
   a) High pesticides
   b) Nutrient enrichment
   c) More silt
   d) Industrial effluent

A
40. GMOs are
   a) Genetically Modified Organisms
   b) Genetically Mediated Organisms
   c) Genetic Model Organisms
   d) Genetically Model Organisms

41. __________ is not responsible for ozone depletion.
   a) Chlorofluorocarbons
   b) Lead
   c) Fluorine
   d) Chlorine

42. __________ zone, is the deep water zone containing only heterotrophs.
   a) Profoundal
   b) Littoral
   c) Sub littoral zone
   d) None of the above
43. The space between the soil particles and soil organisms is called
   a) Pore space
   b) Pore size
   c) Particles
   d) None of the above

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   a) ₆₇₈₉₀
   b) ₆₇₈₉₀
   c) ₆₇₈₉₀
   d) ₆₇₈₉₀

44. The instrument used to measure relative humidity is
   a) Hygrometer
   b) Hydrometer
   c) Barometer
   d) Thermometer

₆₃₄₅₆₇₈九十 ₃₄₅₆₇₈₉₀ ₃₄₅₆₇₈₉₀ ₃₄₅₆₇₈₉₀
   a) ₆₇₈₉₀
   b) ₆₇₈₉₀
   c) ₆₇₈₉₀
   d) ₆₇₈₉₀

45. Black soils are black in color owing to a high content of
   a) Humus
   b) Sodium
   c) Potassium
   d) Copper

₆₃₄₅₆₇₈九十 ₃₄₅₆₇₈₉₀ ₃₄₅₆₇₈₉₀ ₃₄₅₆₇₈₉₀
   a) ₆₇₈₉₀
   b) ₆₇₈₉₀
   c) ₆₇₈₉₀
   d) ₆₇₈₉₀

SPACE FOR ROUGH WORK
46. Which one of the following does not produce $\text{SO}_2$ in indoor environment?
   a) Fossil wood
   b) Fire proofing using asbestos
   c) Cooking, smoking, vacuuming
   d) Kerosene space heaters

47. The Stockholm Conference of United Nations was held in the year
   a) 1968
   b) 1969
   c) 1971
   d) 1972

48. Which gas is mainly responsible for the Green House effect?
   a) Ozone
   b) Oxygen
   c) $\text{CO}_2$
   d) CO
49. Symbiosis is expressed by
   a) Soil
   c) Lichens
   b) Fungi
   d) Virus

50. Largest ecosystems of the world are
   a) Grassland
   c) Forests
   b) Great lakes
   d) Oceans

51. Acid rains is any rain with pH
   a) Below 5.6
   c) Below 8.0
   b) Above 5.6 and below 6.9
   d) Below 7.0

52. The author of Silent Spring
   a) Jeffrey Archer
   c) E. P. Odum
   b) Rachel Carson
   d) Sydney Sheldon

"""సిలెంట్ స్ప్రింగ్""ల రచయిత
   a) జఫర్ ఎచికర
   c) ఏ.ప్. ఒడం
   b) రాష్ట్రాన్ కార్సన్
   d) సిడ్నీ శెలడన్

SPACE FOR ROUGH WORK
53. The thickness of the ozone layer is measured using unit of
a) Newton  b) Joule  c) Dobson  d) Decibel

54. Which one of the following is a non persistent pesticide?
   a) Chlordane  b) Dieldrin  c) Malathion  d) Aldrin

55. Chipko Movement was held in
   a) Uttar Pradesh  b) Assam  c) Karnataka  d) Kerala

56. London Smog occurred in the year
   a) 1952  b) 1986  c) 1962  d) 1972
57. Chlorine added to water acts as a
   a) Disinfectant
   b) Absorbent
   c) Coagulant
   d) None of the above

58. The United Nations Conference on human environment was organized at
   a) Rio de Janeiro
   b) Paris
   c) Stockholm
   d) New Delhi

59. ___________ gives an empirical value to water quality and is a parameter for the
    organic matter present in water.
   a) BOD
   b) COD
   c) DO
   d) Hardness
60. Ozone is a
   a) Primary pollutant
   b) Secondary pollutant
   c) Hydrocarbon
   d) PAN

61. High volume air sampler is used to monitor
   a) CO
   b) CO₂
   c) SPM
   d) Hydrocarbon

62. Which of the following is an endemic species found in Western Ghats?
   a) Marsh Mongoose
   b) Indian Rhinoceros
   c) Brown Palmcivet
   d) Flying Squirrel

63. The mean temperature of the earth is approximately
   a) 10°C
   b) 15°C
   c) 20°C
   d) 29°C
64. Which of the following is a green house gas?
   a) Nitrogen  
   b) Methane  
   c) Oxygen  
   d) Sulphur dioxide

65. Which of the following is not a fossil fuel?
   a) Coal  
   b) Wood  
   c) Petrol  
   d) LPG

66. The coldest region of the atmosphere is
   a) Troposphere  
   b) Stratosphere  
   c) Mesosphere  
   d) Thermosphere

67. Environmental planning organization is
   a) ICAR  
   b) NEERI  
   c) NCO  
   d) NPO
68. The Silent Valley is a
   a) Place in Himachal Pradesh
   b) Densely forested valley in Palghat district of North Kerala
   c) Valley in Garhwal Himalayan region
   d) Valley in Shivalik range

69. Richter scale is used to measure
   a) Velocity of light
   b) Intensity of sound
   c) Amplitude of seismic waves
   d) Wind velocity

70. A common disinfectant used in village wells is
   a) Ozone gas
   b) Potassium permanganate
   c) Iodine and bromine
   d) Free chlorine

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SPACE FOR ROUGH WORK