**Paper Code – 6016**

# M.Sc. Semester-III (New Course)

## Chemistry

## July-Septermber-2021

## CHN-604(D) Environmental Chemistry

**કુલ સમય :– : ૩૦ મીનીટ** **કુલ પ્રશ્નો : ૩૫** **વિદ્યાર્થીએ ટીક કરવાના પ્રશ્નો : ૧૮**

**નોંધ : વિદ્યાર્થીએ માત્ર ૧૮ પ્રશ્નો જ ટીક કરવાના રહેશે. જો વધારે ટીક કરેલ હશે તો પ્રથમ ૧૮ પ્રશ્નો જ ગણતરીમાં લેવામાં આવશે.**

1. Find the incorrect statement
   A. BOD value of clean water is less than 5 ppm
   B. Drinking water pH should be between 5.5-9.5
   C. carbon, sulphur and nitrogen oxides are the most widespread air pollutants
   D. dissolved oxygen concentration below 5 ppm is ideal for the growth of fish
2. In the air, $N_2$ and $O_2$ occur naturally but they do not react to form oxides of nitrogen because
   A. oxides of nitrogen are unstable B. catalyst is required for the reaction
   C. catalyst is required for the reaction D. $N_2$ and $O_2$ do not react with each other
3. Most effective pesticides is
   A. Carbonates B. organophosphate C. Both A and B D. None of these
4. The organic material of the solid waste will decompose
   A. By the flow of water B. By the soil particles
   C. By the action of microorganisms D. By oxidation
5. increase in the concentration of pollutants in higher trophic levels is known as
   A. Biomagnifications B. biodegradation C. Recycling D. All of these
6. Which of the following is the consequence pollution
   A. Increase water level in seas B. Releases of the hazardous radiations
   C. Increase in the animals in forests D. Global warming
7. How do industrial pollution results in water pollution
   A. Dumping of various waste product from industries
   B. Taking water bodies places to built industries
   C. Industries which uses all the water bodies and cause scarcity of water
   D. Building of purification unit in the industries
8. Which one of the following industries produced sulfur dioxide and flu ash as pollutants
   A. Textile industries B. cottage industries C. Thermal industries D. Coal industries
9. Main processes of heating the ocean water i.e
   A. By convection of heat from the interior of earth B. By absorption of radiation from sun
   C. Both A and B D. None of these
10. Atmospheric humidity is measured by
    A. Psychrometer B. Lysimeter C. Anemometer D. Hydrometer
11. BOD may not be good index for water bodies receiving effluents from
    A. Sugar industries B. Domestic industries C. Dairy industries D. Petroleum industries
12. Benzene a _____ substance is an important industrial solvent used in the production of pharmaceuticals plastics and dyes
    A. Odorless B. None flammable C. Biodegradable D. Carcinogenic
13. Why recycled paper banned for use in food containers
    A. Because it creates a lot of space B. Because it creates contamination
    C. Because paper can be used only one time D. Because paper is very thick and cant over the food containers
14. Which agency deals with the health effects that may occur from environmental exposure to toxic chemicals
    A. The Environmental Protection Agency B. The Centers for Disease Control and Prevention
    C. The Agency for Toxic Substances and Disease Registry D. The Nuclear Regulatory Commission
15. If two organophosphate insecticides are absorbed into an organism, the result will be
    A. additive effect B. synergestic effect C. Potentiation D. substraction effect
16. Cement factory labourers are prone to
    A. Leukemia B. Bone marrow disease C. Asbestosis D. Cytocilicosis
17. A river with high BOD value is
    A. Highly polluted B. Highly clean C. Highly productive D. None of these
18. Bioherbicides have been recommended
    A. To prevent eco-degradation B. Because of their ready availability

C. Because of their cheap Rates D. Because of their abundance

19. Main function of biofertilizer is
    A. To increase chemical process B. To increase physiological process
    C. To increase biological Process D. To increase photosynthesis process
20. Why is plastic dangerous for marine life
    A. They mistake it for food and cannot digest it
    B. They can get tangled in it which hinders their ability to swim
    C. Both A and B
    D. It's not dangerous because they use plastic waste for habitats
21. When temporary hard water is boiled, one of the substances formed is
    A. calcium bicarbonate B. calcium sulfate C. hydrogen chloride D. carbon dioxide
22. Sedimentation is a physical process used in wastewater treatment to
    A. remove particles that are less dense than water
    B. remove particles that are more dense than water
    C. remove the pertinacious material from the water
    D. none of the above
23. Ozone layer is found in
    A. Thermosphere B. Stratosphere C. Mesosphere D. Lithosphere
24. Which is not a green house gas?
    A. CFC B. CH4 C. CO D. H2

25 The common methods used for disinfection in waste water treatment plants are
    A. chlorination B. UV light C. Both A and B D. Phenolic solvent

26. The water cycle refers to the transfer of water from
    A. one state to another B. one reservoir to another
    C. Both A and B D. none of the other
27. How much percent $CO_2$ in atmosphere
    A. 0.03% B. 0.08% C. 0.05% D. 0.09%
28. The atmosphere pressure decreses with
    A. Length B. width C. Height D. All of these
29. The chemical oxygen demand (COD)measures the
    A. . amount of oxygen required for growth of microorganisms in water
    B. amount of oxygen that would be removed from the water in order to oxidize pollution
    C. amount of oxygen required to oxidize the calcium present in waste water
    D. none of the above
30. Which of the following comes mainly due to the combustion of fuel used in motor vehicles
    A. Chlorofluorocarbons B. carbon monoxide C. lead compounds D. None of these
31. Which titrant used in DO analysis
    A. $Na_2S_2O_3$ B. both C. $K_2Cr_2O_7$ D. None of these
32. Chlorine demand is measured by
    A. Horrock's apparatus B. Chlorimeter C. Double pot D. Berkfeld filter
33. Which is correct for lindane
    A. Control of cotton insects B. Both A and C C. It's a herbicides D. None of these
34. The following is indirect method of Solar energy utilization
    A. Wind energy B. Biomass energy C. Wave energy D. All of the above
35. Ozone is formed by_____
    A. Photochemical reaction B. Kolbe reaction C. Addition reaction D. None of these