PAPER CODE : 6004

M.Sc. Semester – 3 (New Course)

JULY-SEP-2021

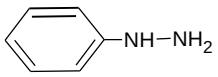
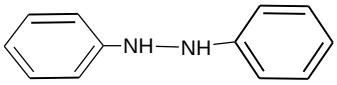
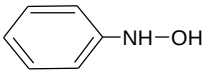
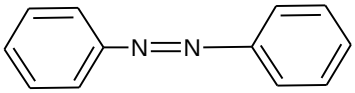
CHNN-602-(O) : Industrial Chemistry

[Organic Chemistry]

કુલ સમય :– ૬૦ મીનીટ કુલ પ્રશ્નો : ૪૯ વિદ્યાર્થીએ ટીક કરવાના પ્રશ્નો : ૩૫

નોંધ : વિદ્યાર્થીએ માત્ર ૩૫ પ્રશ્નો જ ટીક કરવાના રહેશે. જો વધારે ટીક કરેલ હશે તો પ્રથમ ૩૫ પ્રશ્નો જ ગણતરીમાં લેવામાં આવશે.

1. Which of following product is obtain when Anthraquinone react with 36% oleum in presence of mercury catalyst at 125^0c temperature?
   (A)Anthraquinone-1- sulfonic acid (B)Anthraquinone-2- sulfonic acid
   (C) Anthraquinone-1,5 di sulfonic acid (D)Anthraquinone-2,6 di sulfonic acid
2. What is the full name of trade name "G Acid" ?
   (A) 2-Naphthol -1- Sulfonic acid
   (B) 2-Naphthol - 6- Sulfonic acid
   (C) 2-Naphthol -3,6 disulfonic acid
   (D) 2-Naphthol -6,8 disulfonic acid Which is structural formula of Hydrazobenzen?

   (a) 
   (b) 
   (c) 
   (d) 
3. Which of the following process is not the part of unit operation?
   (A) Condensation (B) Crystallisation (C) Distillation (D)Filtration
4. Which product obtain when toluene is heated with fuming HNO_3 and fuming H_2SO_4 at 111^0c temperature?
   (A) 2-Nitro toluene (B)4-Nitro toluene (C)2,4-dinitro toluene (D) 2,4,6-trinitro toluene
5. Give the name of explosive contains molecular formula $C_3H_6O_6N_6$.
   (A) Tetryl (B) Pentryl (C) Cyclonite (D) Nitrocellulose
6. Give the structural formula of main product in the following ammonolysis reaction.
   $H_2N\text{-}CH_2\text{-}CH_2\text{-}OSO_3H \rightarrow$ Product
   (A) $CH_3\text{-}CH_2\text{-}NH_2$(B) $H_2N\text{-}CH_2\text{-}CH_2\text{-}NH_2$ (C) $H_2N\text{-}CH_2\text{-}CH_2\text{-}OH$ (D) None of these
7. Which product obtained when 2- Naphthol is heated with97% H_2SO_4 at low temperature?
   (A) 2-Naphthol -1 sulfonic acid (B)2-Naphthol – 6- sulfonic acid
   (C) 2-Naphthol -3- sulfonic acid (D)2-Naphthol – 7- sulfonic acid
8. Which of following reagent used for halogenations reaction?
   (A) Zn dust +NaOH (B) Fuming H_2SO_4 (C) conc. HNO_3 + conc.H_2SO_4 (D) I_2+HNO_3
9. Which act establishes responsibility and right for employers and employees?
   (A) CERCLA (B) RCRA (C) OSHA (D) SARA
10. How long is a patent valid in India?
    (A) 30 years (B) 20 years (C) 40 years (D) 60 years
11. Major activities involves in research and development information system are ----------
    (A) Design and engineering (B) Process control (5) Quality control (D) All of above
12. Drying oils contain Xfatty acid while non drying oils contain Yfatty acid .
    (A) X= Lauric acid Y= Oleic acid (B) X= Oleic acid Y= Lauric acid
    (C) X= Stearic acid Y= Lenoleinic acid (D) X= Stearic acid Y= Oleic acid

13. Which of the following is not vegetable oil?
(A) Peanut oil (B) Olive Oil (C) Blubber Oil (D) Linseed Oil
14. Which function group present in Eucalyptus oil of winter green?
(A) Alcoholic group (B) Aldehyde group (C) Phenolic group (D) Ester group
15. By which process vegetable ghee is prepared from oil ?
(A) Hydrogenation (B) Oxidation (C) Nitration (D) Sulphonation
16. Which of following oil is used as plasticizer for lacquers and polymer?
(A) Plam oil (B) Corn oil (C) Linseed Oil (D) Tallow oil
17. Which of following raw materials are present in soft soap?
(A) Sodium salt of fatty acid,Tallow and Animal fats
(B) Potassium salt of fatty acidLinseed Oil and castor oil
(C) Sodium salt of fatty acid Animal fats and castor oil
(D) All of above
18. Which fatty acid contain 16 carbon skeleton
(A) Glutamic acid (B)Lauric acid (C) Myristic acid (D) Palmitic Acid
19. Which of the chemical is used to dissolve the soap to make transparent soap?
(A) Ethanoic acid (B) Ethanol (C) Benzene (D) Propylene
20. Compound which is added to soap to impart antiseptic Properties is--------
(A) Bithionol (B) rosin (C) Sodium lauryl sulphate (D)Sodium dodecyl benzene sulphonate
21. Polyethylene Glycols are used in preparation of which type of detergents?
(A) Cationic detergent (B) Anionic detergent (C) Non- ionic detergent (D) All of above
22. Which is organochlorineinsecticides?
(A) Malathion (B) DDT (C) Parathion (D) Dithion
23. Carbamates used as fungicides are ---------
(A) Dithiocarbonate (B) Thiocarbonate (C)Carbofuran (D) Carbofuran and alidicarb
24. Most effective pesticides are ---------
(A) Carbomates (B) Organochlorines (C) Organophosphates (D) All of above
25. Which of the following system is affected by D.D.T.pesticide?
(A) Circulatory system (B) Nervous system (C) Heart (D) Digestive system
26. Which of the following is stomach or internal insecticide?
(A) Malathion (B) Parathion (C) Chlordane (D) Methoxy chlor
27. Which of the following is additional step in manufacture of paper from bagasseas compare to that from bamboo
(A) Depithing (B) Digestion (C) Bleaching (D) None of these
28. The ideal pulp for the manufacture of paper should have high ----------content.
(A) Lignin (B) Cellulose (C) Both (A) & (B) (D) None of these
29. Which of the following is not a food additives?
(A) Citric acid (B) Invertage (C)Benzoyl peroxide (D)Ammonium chloride
30. Which of the following process is used for receiving smooth and fine glaze paper from rough and irregular paper?
(A) Sulphate (B)Sulphite (C)Calendering (D) All of above
31. Comparing sulphate process with sulphite process we find that -------in the later.
(A) Both temperature and pressure in former is less than that
(B)Both temperature and pressure in former is more than that
(C) Pressure is more than former where as temperature is more
(D)Pressure is more than former where as temperature is less

32. Which of following is unsaturated fatty acid?
(A) Lauric acid (B) Palmitic acid (C) Stearic acid (D)Oleic acid

33. The major constituent of black liquor generated during paper manufacture is sodium
(A) Sulphate (B) Carbonate (C) Hydoxide (D) Bicabonate

34. What is the full form of 2,4- D used as plant tranquillisers?
(A) 2,4dichlorophenoxy acetic acid (B) 2,4dimethaylphenoxy acetic acid
(C)2,4dimethoxyphenoxy acetic acid (D) None of these

35. After the formation is over ethanol is recovered by
(A)Centrifugation (B) Distillation (C)Filtration (D) Cell disintegration

36. What is different substrate used for ethanol production?
(A) Starch contain substrate (B) Juice from sugar cane or molasses or sugar beet
(C) Waste product from wood or processed wood (D) All of the above

37. Ethanol is product by ----------
(A)Continuous formation (B) batch formation (C) Both (A) & (B) (D) None of these

38. Viscose rayon is ----------
(A) Cellulose nitrate (B) Regenerate cellulose nitrate(C) Regenerate cellulose acetate (D) None of these

39. Nylon 66 is manufactured using ----------
(A) caprolactum (B) adipic acid(C) ethylene glycol (D) adipic acid and hexa methylene diamine

40. Which of the following mineral is required by plants in large quantities?
(A) Chlorine (B) Phosphorus (C) Manganese (D) Molybdenum

41. Plants absorb nutrients through their ----------
(A)Roots (B) Stem (C) Leaves (D) Flowers

42. Name the plant hormone which is responsible for the ripening of fruits?
(A) Auxin (B) Cytokinins (C) Ethylene (D) None of these

43. Which plants hormone are responsible for the crop from falling?
(A) Cytokinins (B) Ethylene (C) Gibberellins (D) Auxin

44. Which process is used for classification of the juice or conversion of raw sugar into white sugar in India?
(A) Nitration (B) Halogenations (C) Sulphitation (D) None of these

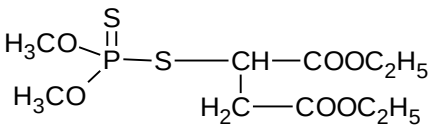
45. What is other name of artificial silk?
(A) Nylon (B) Rayon (C) Acrylic (D) Polyester

46. A substance intentionally added that preserves flavor and improve taste is called
(A) Food additive (B) Food adulterant (C) Food contaminant (C) Food material

47. Which of the following are type of surfactant?
(A) Anionic surfactants (B) Cationic surfactants (C) None ionic surfactants (D) All of above

48. Which of the following is an example of non ionic detergent?
(A) Sodium salt of alkyl sulphate (B) Sodium salt of alkyl benzene sulphonic acid
(C) Akyl trimethyl ammonium chloride (D) Polyethers

49. Give the name of insecticide having structure formula



(A) Parathion (B) Malathion (C) TEPP (D) Aldrin