

1. Anhydrous calcium chloride acts as....

- (A) Dehydrating agent
- (B) Drug
- (C) Oxidant
- (D) Mordant

**Answer: (A) Dehydrating agent**

2. Aqua regia is a mixture of....

- (A) HCL and H<sup>2</sup>SO<sup>4</sup>
- (B) HCL and HNO
- (C) HCL and HBR
- (D) HCL and HF

**Answer: (B) HCL and HNO**

3. During dehydration, the substance that is usually lost by the body is

- (A) Sugar
- (B) Sodium Chloride
- (C) Calcium phosphate
- (D) Potassium chloride

**Answer: (B) Sodium Chloride**

4. Styrene is made up of the elements, hydrogen and

- (A) Sulphur
- (B) Carbon
- (C) Oxygen
- (D) Nitrogen

**Answer: (B) Carbon**

5. Sodium bicarbonate is used as....

- (A) An effective antacid
- (B) Inhalants
- (C) Calcium accumulation
- (D) Systemic laxative

**Answer: (A) An effective antacid**

6. A gas used for fumigation is.

- (A) Ethylene
- (B) Nitrogen Oxide
- (C) Sulphur dioxide
- (D) Oxygen

**Answer: (C) Sulphur dioxide**

7. Alum is commonly used as.....

- (A) Anti-infective
- (B) Astringent
- (C) Protective
- (D) All of the mentioned

**Answer: (B) Astringent**

8. Which one of these is a major cation in intracellular fluid?

- (A) Potassium
- (B) Sodium
- (C) Magnesium
- (D) Calcium

**Answer: (A) Potassium**

9. Baking soda is a common name of.....

- (A) Sodium carbonate
- (B) Sodium bicarbonate
- (C) Potassium carbonate
- (D) Sodium citrate

**Answer: (B) Sodium bicarbonate**

10. A molecule that has an equal number of positive and negative charges:

- (A) Isometric
- (B) Isoelectric
- (C) Isobaric
- (D) Isotonic

**Answer: (B) Isoelectric**

11. Saturated fatty acid with four carbon atoms is known as.

- (A) Acetic acid
- (B) Butyric acid
- (C) Valeric acid
- (D) Propionic acid

**Answer: (B) Butyric acid**

12. Citric acid is used in iron limit test.

- (A) To prevent colour due to sulphate
- (B) To prevent colour due to copper
- (C) To prevent colour due to chloride
- (D) To prevent colour due to lead

**Answer: (B) To prevent colour due to copper**

13. The barium meal is.

- (A) Barium chloride
- (B) Barium nitrate
- (C) Barium carbonate
- (D) Barium sulphate

**Answer: (D) Barium sulphate**

14. Hard gelatin capsule contains \_\_\_\_\_ % of moisture

- (A) 13-16%
- (B) 13.5-16%
- (C) 12-16%
- (D) 12-15%

**Answer: (A) 13-16%**

15. Nanocapsules have size less than

(A) 1-20um

(B) 1-50um

(C) 20-50um

(D) 1-30um

**Answer: (A) 1-20um**

16. Official anhydrous water miscible ointment bases i.e emulsifying ointment contains

(A) cationic emulsifier

(B) nonionic emulsifier

(C) anionic emulsifier

(D) none

**Answer: (C) anionic emulsifier**

17. What is bloom strength of hard gelatin shell.

(A) 150 g

(B) 220-280 g

(C) 170 g

(D) 190 g

**Answer: (B) 220-280 g**

18. The largest size of capsule is

(A) 5

(B) 8

(C) 0

(D) 3

**Answer: (D) 0**

19. Obaka automatic capsule filler capable of filling up to \_\_\_\_\_ capsule/hour

- (A) 1000
- (B) 200
- (C) 165000
- (D) 200-1000

**Answer: (C) 165000**

20. Nanocapsules have size less than

- (A) 1-20um
- (B) 1-50um
- (C) 20-50um
- (D) 1-30um

**Answer: (A) 1-20um**

21. the first digit in the propellant number represent

- (A) no, of fluorin atom
- (B) no.of carbon atom
- (C) no, of hydrogen atom
- (D) none

**Answer: (B) no.of carbon atom**

22. The Exveka KEA is

- (A) dedusting & polishing machine of tablet
- (B) dedusting of tablet
- (C) polishing machine of capsule
- (D) dedusting and polishing machine of capsule

**Answer: (D) dedusting and polishing machine of capsule**

23. \_\_\_\_\_ element is regularly given to modify the solubility of gelatin capsule

- (A) additive
- (B) formaline
- (C) water
- (D) formaline and water

**Answer: (B) formaline**

24. Isoelectric point of type A gelatin is \_\_\_\_\_

- (A) 4.8-5
- (B) 5-5.8
- (C) 7-9
- (D) 4-6

**Answer: (A) 4.8-5**

25. Relative humidity of softgel is

- (A) 0.35
- (B) 0.2
- (C) 0.15
- (D) 20-25%

**Answer: (A) 0.35**

26. Tag open cap apparatus for evaluation of

- (A) flame projection
- (B) identification of propellant
- (C) flash point
- (D) aerosole value discharge rate

**Answer: (C) flash point**

27. \_\_\_\_\_ is the bactericidal recommended for ophthalmic used

- (A) parabens
- (B) phenyl mercuric citrate
- (C) chlorocresol
- (D) benzalconium chloride

**Answer: (D) benzalconium chloride**

28. The output of a typical rotary machine ranges from --to—suppositories an hour

- (A) 3500-6000
- (B) 6000-6500
- (C) 3000-6000
- (D) 6500-7500

**Answer: (A) 3500-6000**

29. The displacement factor of boric acid is \_\_\_\_ to the cocoa butter

- (A) 0.81
- (B) 0.61
- (C) 0.83
- (D) 0.67

**Answer: (D) 0.67**

30. Which of the following is NOT a part of the female reproductive system?

- (A) Ovaries
- (B) Uterus
- (C) Fallopian tubes
- (D) Epididymis

**Answer: (D) Epididymis**

31. The part of the brain responsible for higher cognitive functions, such as thinking and memory, is the:

- (A) Cerebrum
- (B) Cerebellum
- (C) Medulla oblongata
- (D) Hypothalamus

**Answer: (A) Cerebrum**

32. Which of the following is the main function of the lymphatic system?

- (A) Defense against pathogens
- (B) Production of hormones
- (C) Regulation of body temperature
- (D) Digestion of food

**Answer: (A) Defense against pathogens**

33. The hormone responsible for the development and maintenance of male secondary sexual characteristics is:

- (A) Testosterone
- (B) Estrogen
- (C) Progesterone
- (D) Follicle-stimulating hormone (FSH)

**Answer: (A) Testosterone**

34. Which of the following is NOT a part of the digestive system?

- (A) Esophagus
- (B) Gallbladder
- (C) Kidneys
- (D) Stomach

**Answer: (C) Kidneys**

35. The process by which food is moved through the digestive system by muscle contractions is called:

- (A) Peristalsis
- (B) Osmosis
- (C) Diffusion
- (D) Active transport

**Answer: (A) Peristalsis**



36. Which of the following is NOT a function of the endocrine system?

- (A) Regulation of growth and development
- (B) Production of hormones
- (C) Transmission of nerve impulses
- (D) Regulation of metabolism

**Answer: (C) Transmission of nerve impulses**

37.  $\alpha$ -Amino acid on heating form

- (A)  $\gamma$ -lactam
- (B) diketopiperazine
- (C)  $\delta$ -lactam
- (D) Syndrome

**Answer: (B) diketopiperazine**

38. Syndromes is a product of amino acid. These are

- (A) cyclic diamide, formed on heating the amino acid
- (B) formed by dehydration of N-nitroso derivative of N-aryl amino acid
- (C)  $\alpha$ -acidamidoketone, formed by heating amino acid with acetic anhydride in pyridine solution
- (D) the product of amino acid with ninhydrin

**Answer: (B) formed by dehydration of N-nitroso derivative of N-aryl amino acid**

39. Ninhydrin is

- (A) Indane – 1, 2, 4 trione
- (B) Indane – 1, 3, 4 – trione
- (C) Indole – 1, 2, 3 – trione
- (D) Indane 1, 2, 3 trione

**Answer: (D) Indane 1, 2, 3 trione**

40. Chemically Sanger's reagent is

- (A) 1-fluoro 2, 6- dinitro benzene
- (B) 1-fluoro 2, 4 – dinitro benzene
- (C) 2-fluoro 1, 4- dinitro benzene
- (D) 1-fluoro 3, 5- dinitro benzene

**Answer: (A) 1-fluoro 2, 6- dinitro benzene**

41. The 1-dimethyl amino naphthalene- 5- sulphonyl chloride is known as

- (A) Dansyl chloride
- (B) Edman reagent
- (C) Schack reagent
- (D) None

**Answer (A) Dansyl chloride**

42. The protein on reaction with alkaline copper sulfate solution develops reddish violet coloration. It is an indication of

- (A) presence of -NH-CO-NH-group
- (B) presence of-CONH-CH-CO-NH-group – R
- (C) -CONH-CO-NH-group
- (D) —NH—CH CONH

**Answer: (B) presence of-CONH-CH-CO-NH-group – R**

43. Type of polycythemia that Caused by excessive proliferation of bone marrow stem cells

- (A) Relative polycythemia
- (B) Primary polycythemia
- (C) Secondary polycythemia
- (D) Tertiary polycythemia

**Answer: (B) Primary polycythemia**

44. Increasing fluid volume is a rationale treatment for

- (A) Relative polycythemia
- (B) Primary polycythemia
- (C) Secondary polycythemia
- (D) Tertiary polycythemia

**Answer: (A) Relative polycythemia**

45. In atherosclerosis, the most affected artery is

- (A) Pulmonary artery
- (B) Coronary artery
- (C) Hepatic artery
- (D) Renal artery

**Answer: (B) Coronary artery**

46. Risk factors for development of atherosclerosis is

- (A) increase serum level of LDL
- (B) decrease serum level of LDL
- (C) increase serum level of HDL
- (D) None

**Answer: (A) increase serum level of LDL**

47. Symptoms of Plague

- (A) The eyelashes produce abrasion of the cornea
- (B) This results in corneal ulcer
- (C) Ultimately it leads to blindness
- (D) inflammation of lymphatic glands

**Answer: (D) inflammation of lymphatic glands**

48. Advocacy in health policy involves:

- (A) Passive observation of policy changes
- (B) Actively supporting and promoting policies
- (C) Criticizing policies without offering solutions
- (D) Ignoring policy implications

**Answer: (B) Actively supporting and promoting policies**

49. Example of schedule G drug is

- (A) Tetracycline
- (B) PAS
- (C) Ibuprofen
- (D) Glibenclamide

**Answer: (D) Glibenclamide**

50. Licence for the whole sale of schedule C and C1 drugs is given in form no:

- (A) 20
- (B) 20-A
- (C) 21-B
- (D) 21-BB

**Answer: (C) 21-B**

51. The price fixed by the Government for a new drug is

- (A) Ceiling price
- (B) Local tax
- (C) Whole sale price
- (D) Retail price

**Answer: (D) Retail price**

52. How are drugs excreted from the body in drug metabolism?

- (A) Through urine
- (B) Through sweat
- (C) Through breath
- (D) Through tears

**Answer: (A) Through urine**

53. How do drugs undergo phase II metabolism?

- (A) Oxidation reactions
- (B) Reduction reactions
- (C) Conjugation reactions
- (D) Hydrolysis reactions

**Answer: (C) Conjugation reactions**

54. How does drug metabolism in the liver affect drug half-life?

- (A) Increases half-life
- (B) Decreases half-life
- (C) Has no impact on half-life
- (D) Stabilizes half-life

**Answer: (B) Decreases half-life**

55. How do enzymes influence reaction rates?

- (A) By increasing activation energy
- (B) By lowering activation energy
- (C) By changing the equilibrium constant
- (D) By stabilizing reactants

**Answer: (B) By lowering activation energy**

56. How is a Western Blot different from a Southern Blot?

- (A) Detection of specific proteins
- (B) Detection of specific DNA sequences
- (C) Quantification of nucleic acids
- (D) Separation of proteins based on size

**Answer: (A) Detection of specific proteins**

57. How is drug metabolism primarily carried out in the body?

- (A) Liver enzymes
- (B) Kidney filtration
- (C) Lung absorption
- (D) Stomach secretion

**Answer: (A) Liver enzymes**

58. How does hemoglobin's structure contribute to its oxygen-binding capacity?

- (A) Hemoglobin structure has no impact on oxygen binding
- (B) Hemoglobin undergoes conformational changes upon oxygen binding
- (C) Hemoglobin inhibits oxygen binding
- (D) Hemoglobin enhances carbon dioxide binding

**Answer: (B) Hemoglobin undergoes conformational changes upon oxygen binding**

59. How does NMR spectroscopy contribute to structural biology?

- (A) Visualization of protein structures
- (B) Determination of molecular weights
- (C) Monitoring enzyme kinetics
- (D) Analysis of nucleic acid structures

**Answer: (A) Visualization of protein structures**

60. How does renal impairment affect drug elimination in clinical pharmacokinetics?

- (A) Accelerates drug excretion
- (B) Slows down drug excretion
- (C) Has no impact on drug elimination
- (D) Increases drug absorption

**Answer: (B) Slows down drug excretion**

61. A chemical that is toxic to the brain but which is detoxified in the liver would be expected to be ---

- (A) more toxic orally than intramuscularly
- (B) more toxic rectally than intravenously
- (C) more toxic via inhalation than orally
- (D) more toxic on the skin than intravenously

**Answer: (C) more toxic via inhalation than orally**

62. All of the following are reasons for selective toxicity except-----

- (A) transport differences between cell
- (B) biochemical differences between cell
- (C) cytology of male neurons versus female neurons
- (D) cytology of plant cells versus animal cells

**Answer: (C) cytology of male neurons versus female neurons**

63. Carcinogenicity is a specialized toxicity related to the development of?

- (A) Cancer
- (B) Cardiovascular diseases
- (C) Neurological disorders
- (D) Respiratory diseases

**Answer: (A) Cancer**

64. Dose-response assessment aims to establish the relationship between?

- (A) Exposure and dose
- (B) Toxicity and exposure
- (C) Toxicity and dose
- (D) Exposure and risk

**Answer: (C) Toxicity and dose**

65. Environmental monitoring involves the continuous measurement of:

- (A) Toxicant levels
- (B) Biotic indices
- (C) Human activities
- (D) Soil composition

**Answer: (A) Toxicant levels**

66. Exposure assessment in risk assessment involves the estimation of?

- (A) The amount of toxicant in the environment
- (B) The number of exposed individuals
- (C) The toxicity of chemicals
- (D) The duration of exposure

**Answer: (A) The amount of toxicant in the environment**

67. In the context of regulatory toxicology, what does "EPA" stand for?

- (A) Environmental Protection Authority
- (B) Environmental Policy Agency
- (C) Environmental Protection Agency
- (D) Ethical Practices Association

**Answer: (C) Environmental Protection Agency**

68. In the context of toxicological emergencies, what does the acronym "MSDS" stand for?

- (A) Medical Safety Data Sheet
- (B) Material Safety Data Sheet
- (C) Managing Safety During Spills
- (D) Mastering Safety Directives

**Answer: (B) Material Safety Data Sheet**

69. In the United States, which agency is responsible for overseeing workplace safety and health regulations?

- (A) OSHA
- (B) CDC
- (C) EPA
- (D) FDA

**Answer: (A) OSHA**

70. Chemicals known to produce dispositional tolerances are ----

- (A) benzene and xylene
- (B) trichloroethylene and methylene chloride
- (C) paraquat and diaquat
- (D) carbon tetrachloride and cadmium

**Answer: (D) carbon tetrachloride and cadmium**



71. Hazard identification in risk assessment involves the identification of?

- (A) Risk factors
- (B) Potential dangers
- (C) Chemicals
- (D) Safe practices

**Answer: (B) Potential dangers**

72. How does environmental toxicology assess the impact of toxicants on ecosystems?

- (A) By studying individual species
- (B) By analyzing air quality
- (C) By monitoring biodiversity
- (D) By measuring water temperature

**Answer: (C) By monitoring biodiversity**

73. In the context of toxicology, what is the term for the amount of a substance that enters the bloodstream?

- (A) Absorption
- (B) Distribution
- (C) Metabolism
- (D) Bioavailability

**Answer: (A) Absorption**

74. In toxicology, electrophoresis is used to separate?

- (A) Gases
- (B) Particles
- (C) Molecules
- (D) Organisms

**Answer: (C) Molecules**

75. Site selection of a drug store is a:

- (A) Important decision
- (B) Insignificant decision
- (C) Irrelevant decision
- (D) None

**Answer: (A) Important decision**

76. The layout of a drug store depends upon:

- (A) pharmacist /proprietor
- (B) Rule specified in schedule in schedule "N"
- (C) Availability of space
- (D) All

**Answer: (B) Rule specified in schedule in schedule "N"**

77. Coding of items helps in:

- (A) Handing of store items
- (B) Standardisation of drugs
- (C) Reduction of item
- (D) All

**Answer: (A) Handing of store items**

78. Alpha numerical codification is suitable for a:

- (A) Large scale organisation
- (B) Small scale organisation
- (C) Medium scale organisation
- (D) All

**Answer: (A) Large scale organisation**

79. Purchase indent is an:

- (A) Internal document
- (B) Legal document
- (C) External document
- (D) Any of the mentioned

**Answer: (A) Internal document**

80. Indian Contract act was passed in:

- (A) 1992
- (B) 1872
- (C) 1972
- (D) 1892

**Answer: (B) 1872**

81. In which city is the headquarters of the International Monetary Fund (IMF) located?

- (A) Paris
- (B) Geneva
- (C) Washington, D.C.
- (D) London

**Answer: (C) Washington, D.C.**

82. In which year did the Berlin Wall fall?

- (A) 1989
- (B) 1991
- (C) 1985
- (D) 1995

**Answer: (A) 1989**

83. In which year did the Great Depression begin?

- (A) 1931
- (B) 1932
- (C) 1941
- (D) 1929

**Answer: (D) 1929**

84. In which year was the Kyoto Protocol adopted, aimed at reducing greenhouse gas emissions?

- (A) 1998
- (B) 1997
- (C) 2005
- (D) 2010

**Answer: (B) 1997**

85.

How many Fundamental Duties are enshrined in the Indian Constitution?

- (A) 10
- (B) 12
- (C) 11
- (D) 8

**Answer: (C) 11**

86. In which country is the ancient city of Petra located?

- (A) Jordan
- (B) Egypt
- (C) Iraq
- (D) Turkey

**Answer: (A) Jordan**

87. In which year did the Spanish Civil War end?

- (A) 1942
- (B) 1945
- (C) 1939
- (D) 1951

**Answer: (C) 1939**

88. How many times India has won the Hockey world cup?

- (A) 0
- (B) 1
- (C) 2
- (D) 5

**Answer: (B) 1**

89. In which year did the Chernobyl nuclear disaster occur?

- (A) 1986
- (B) 1979
- (C) 1991
- (D) 2000

**Answer: (A) 1986**

90. What is the capital city of Australia?

- (A) Brisbane
- (B) Sydney
- (C) Melbourne
- (D) Canberra

**Answer: (D) Canberra**

91. A living microbe with reduced virulence that is used for vaccination is considered:

- (A) A toxoid
- (B) Dormant
- (C) Virulent
- (D) Attenuated

**Answer: (D) Attenuated**

92. Allelopathy refers to

- (A) Inhibition of growth of one species by another by the production of toxins
- (B) Inhibition of sporulation of pathogen by the host
- (C) Altering the reproductive cycle of one organism by another
- (D) Inhibition of growth of one species by another by preventing reproduction

**Answer: (A) Inhibition of growth of one species by another by the production of toxins**

93. Before giving blood transfusion a nurse must note the date, time of collection and must be aware that Packed RBCs can be stored upto:

- (A) 25days
- (B) 55days
- (C) 45days
- (D) 35 -42days

**Answer: (D) 35 -42days**

94. A blood transfusion should be completed within 4 hours to:

- (A) Prevent bacterial growth
- (B) Prevent fluid overload
- (C) Prevent haemolytic transfusion reaction.
- (D) Prevent hypothermia

**Answer: (A) Prevent bacterial growth**

95. An air bubble in water will act like a

- (A) convex lens
- (B) convex mirror
- (C) concave lens
- (D) concave mirror

**Answer: (C) concave lens**

96. An epitope is
- (A) a B-cell.
  - (B) a hapten.
  - (C) an antibody.
  - (D) the antigen determinant site.

**Answer: (D) the antigen determinant site.**

97. An immunoglobulin is a
- (A) carbohydrate.
  - (B) fatty acid.
  - (C) glycoprotein.
  - (D) protein.

**Answer: (C) glycoprotein.**

98. 18G intra venous cannula is used for
- (A) Medication
  - (B) Newborn baby
  - (C) Subcutaneous injection
  - (D) Blood transfusion

**Answer: (D) Blood transfusion**

99. Absence of which clotting factor leads to Hemophilia-A?
- (A) Factor VII
  - (B) Factor VIII
  - (C) Factor IX
  - (D) Factor X

**Answer: (B) Factor VIII**

100. Accidental deaths occur near lime kilns due to..... poisoning
- (A) CO
  - (B) barbiturate
  - (C) CO<sub>2</sub>
  - (D) Cyanide

**Answer: (C) CO<sub>2</sub>**