

**016/2025**

Maximum : 100 marks

Time : 1 hour and 30 minutes

1. Hilum of the kidney lies in its :  
(A) Medial margin (B) Lateral margin  
(C) Superior margin (D) Inferior margin
2. The main branch of left coronary artery is :  
(A) Sinu a trial nodal artery (B) Anterior interventricular artery  
(C) Right marginal artery (D) Artery to AV node
3. Name the safety muscle of tongue :  
(A) Genioglossus (B) Styloglossus  
(C) Palatoglossus (D) Hyoglossus
4. Which endocrine gland secretes the hormone calcitonin?  
(A) Pancreas (B) Pineal gland  
(C) Thyroid (D) Suprarenal gland
5. Largest cell among white blood cell :  
(A) Neutrophil (B) Monocyte  
(C) Basophil (D) Eosinophil
6. The hormone secreted by the cells of corpus luteum :  
(A) Oestrogen (B) LH  
(C) FSH (D) Progesterone
7. Three parts of brain stem are :  
(A) Cerebrum, pons, cerebellum (B) Pons, medulla, cerebellum  
(C) Pons, midbrain, cerebellum (D) Midbrain, pons, medulla
8. Types of anemia characterised by abnormally large cells of erythrocyte series caused by deficiency of vitamin B<sub>12</sub> :  
(A) Iron deficiency anemia (B) Megaloblastic anemia  
(C) Sickle cell anemia (D) Hemophilia

**A**

**3**

**[P.T.O.]**

9. The potential difference between the dispersion medium and the stationary layer of fluid attached to the dispersed particle is :
- (A) Stern potential (B) Zeta potential  
(C) Nernst potential (D) None of the above
10. How many grams of 6% and 10% salicylic acid ointment are to be mixed to make 4 gms of 8% salicylic acid ointment?
- (A) 2 gm of 6% and 2 gm of 10% salicylic acid ointment  
(B) 3 gm of 6% and 1 gm of 10% salicylic acid ointment  
(C) 1 gm of 6% and 3 gm of 10% salicylic acid ointment  
(D) None of the above
11. Which one among the following hard gelatin capsule size has the largest capacity?
- (A) 0 (B) 3  
(C) 1 (D) 2
12. In fluid mechanics, if the Reynolds number exceeds 4000, the flow is considered as :
- (A) Laminar flow (B) Transition flow  
(C) Turbulent flow (D) None of the above
13. The sieve number in which all particles of fine powders must pass through is :
- (A) 22 (B) 44  
(C) 10 (D) 85
14. In size reduction, the mechanism of combined impact and attrition is used in :
- (A) Roller Mill (B) Fluid Energy Mill  
(C) Hammer Mill (D) Pestle and Mortar
15. The time in minutes required to reduce the number of viable microorganisms by 90% through a sterilization process known as :
- (A) Z value (B) D value  
(C) Both (A) and (B) (D) None of the above
16. The pharmacopoeial limit of disintegration time for an effervescent tablet is :
- (A) 15 minutes (B) 30 minutes  
(C) 5 minutes (D) 3 minutes

17. If the blood cells are in contact with hypertonic solution, the cell wall may :
- (A) Shrink (B) Swell  
(C) Will retain its tone (D) None of the above
18. Time dependent dilatants behavior is known as :
- (A) Rheopexy (B) Pseudoplastic flow  
(C) Newtonian flow (D) Plastic flow
19. Mention the drug, which is structurally related to Dopamine has a selective  $\beta_1$  receptor agonistic action, particularly useful in chronic congestive heart failure :
- (A) Fenoldopam (B) Duloxetine  
(C) Dobutamine (D) Dorsolamide
20. Anticholinergic agent used in urinary incontinence, Frequency, urgency and dysuria associated with lower urinary tract infection :
- (A) Flavoxate (B) Drotaverine  
(C) Dicylomine (D) Pirenzipine
21. Name of 5HT<sub>1A</sub> receptor partial agonist having antianxiety effect :
- (A) Buprapion (B) Loxapine  
(C) Dxepine (D) Buspirone
22. Venlafaxine, an antidepressant drug act by :
- (A) Inhibit the uptake of serotonin and Dopamine  
(B) Inhibit the uptake of serotonin and Nor Adrenaline  
(C) Selective inhibitor of 5HT  
(D) Inhibit Mono Amine Oxidase
23. A narcotic analgesic, synthetic analogue of codeine devoid of drug dependence or tolerance :
- (A) Nefopam (B) Remifentanil  
(C) Tramadol (D) Diphenoxylate
24. Danzol is :
- (A) Antigonadotropic agent (B) Antiestrogenic drug  
(C) Anabolic steroid (D) Antiandrogenic compound

25. Which one inhibit Leukotriene synthesis?  
(A) Montelukast (B) Sodium chromoglycate  
(C) Zileuton (D) Ketotifen
26. Mention one inhalational steroid used in Asthma :  
(A) Deflezacort (B) Budesonide  
(C) Methyl Prednisolone (D) Betamethasone
27. Cilastatin is :  
(A) Reversible inhibitor of Dehydropeptidase  
(B) Irreversible inhibitor of Dehydropeptidase  
(C) Reversible inhibitor of Betalactamase  
(D) Irreversible inhibitor of Betalactamase
28. A Fibrinolytic with fibrin non specific direct plasminogen activator activity :  
(A) Streptokinase (B) Alteplace  
(C) Thromboplastin (D) Urokinase
29. Rifampicin act by :  
(A) Inhibiting RNA dependent DNA polymerase  
(B) Stimulating RNA dependent DNA polymerase  
(C) Inhibiting DNA dependent RNA polymerase  
(D) Stimulating DNA dependent RNA polymerase
30. Pyrimidine antimetabolite having anti fungal action :  
(A) Griseofulvin (B) Flucytosine  
(C) Mionozole (D) Capsosungin
31. Atazanavir is :  
(A) Non Nucleoside Reverse Transcriptase Inhibitor  
(B) Nucleoside Reverse Transcriptase Inhibitor  
(C) Retroviral protease inhibitor  
(D) Integrase inhibitor
32. Which drug is used for the casual prophylaxis of all species of Malaria?  
(A) Chloroquine (B) Mefloquine  
(C) Proguanil (D) Primaquine

33. Name one luminal amoebicide which directly kills trophozoites :
- (A) Diloxanide furoate (B) Satranidazole  
(C) Emetine (D) Metronidazole
34. Topotecan is a :
- (A) Dihydrofolate reductase inhibitor (B) Topoisomerase I inhibitor  
(C) Topoisomerase II inhibitor (D) Neuraminidase inhibitor
35. Name the enzyme act as a catalyst for the conversion of Glucose-1 phosphate to Uridine diphosphate glucose (UDPG) in Glucogenesis?
- (A) Uridine diphosphate glucose pyrophosphorylase  
(B) Glucosyltransferase  
(C) Hexokinase  
(D) Glucokinase
36. Orotic acid is formed in :
- (A) Urea cycle (B)  $\beta$ -oxidation  
(C) Pyrimidine Biosynthesis (D) HMP Shunt
37. Example for glycogen storage disease :
- (A) MC Ardle's disease (B) Albinism  
(C) Xanthomatosis (D) Wilson's disease
38. Name the detector which is used in Gas chromatography :
- (A) Katharometer (B) Diode array detector  
(C) Single wave length detector (D) Refractive index detector
39. Absorption of light in the visible and ultraviolet regions of the spectrum is due to the presence of :
- (A) Oscillator (B) Integrator  
(C) Recorder (D) Chromophore
40. Taut-Suspension galvanometer unit is used in which type of instrumental method of analysis :
- (A) Nephlo-turbidimetry (B) IR Spectrophotometry  
(C) Flame photometer (D) Fluorimetry
41. The basic ring present in Glimepride :
- (A) Furan (B) Pyrrolidine  
(C) Pyridine (D) Pyrrole

42. Cephalexin comes under which generation of cephalosporins :
- (A) Fourth generation (B) Second generation  
(C) First generation (D) Third generation
43. Dimenhydrinate is an example for :
- (A) Antihistaminics (B) Anticonvulsants  
(C) Sedative and Hypnotics (D) Cholinesterase reactivators
44. Name the narcotic drug with low abuse potential :
- (A) Morphine sulphate (B) Codeine  
(C) Diphenoxylate hydrochloride (D) Fentanyl citrate
45. "Desired income from drugs/cost of prescription drugs  $\times$  100 = percent above cost to be charged for prescription": Name the above charging policy adopted in pricing of drugs in a hospital :
- (A) Break-even point pricing (B) Cost-plus rate system  
(C) Part inclusive rate system (D) Per diem drug charge system
46. National programme for the control of blindness was introduced in which year?
- (A) 1976 (B) 1971  
(C) 1963 (D) 1989
47. Which national programme was introduced to achieve 100% vaccination coverage nation wide?
- (A) Swachh Bharat (B) Poshan Abhiyan  
(C) Mother's Absolute Affection (MAA) (D) Indradhanush
48. The average duration of the time between the placing of an order and the receipt of the item is known as :
- (A) Reorder level (B) Buffer stock  
(C) Lead time (D) Zero level
49. Dipstick test is used to detect :
- (A) Malaria (B) Pneumonia  
(C) Nipah (D) Cancer
50. Abbreviate ICH :
- (A) Indian Council for Harmonisation  
(B) International Council for Harmonisation  
(C) International Council for Homeopathy  
(D) Indian Council for Human Rights

51. Which is associated with Siddha system of medicine?  
 (A) Veeram (B) Prakopa  
 (C) Repertories (D) Yellow bile
52. Spirulina contain :  
 (A) Sapogenin (B) Withaferin  
 (C) Gentianine (D) Phycocyanin
53. Which of the following is obtained from Red algae?  
 (A) Fimbrolide (B) Zonerol  
 (C) Bromophakellin (D) Eledoisin
54. Glandular trichomes are present in :  
 (A) Nux vomica (B) Male fern  
 (C) Vasaka (D) Datura
55. Which one of the following is used in irritable bowel syndrome?  
 (A) Reserveratrol (B) Boswellic acid  
 (C) Wogonin (D) Shilajit
56. Which oil was used as the emollient in first cold cream?  
 (A) Almond oil (B) Glycerine  
 (C) Olive oil (D) Jojoba extract
57. Cotton fibres are separated from seeds by :  
 (A) Ginning (B) Peeling  
 (C) Plucking (D) Retting
58. The water insoluble part of Tragacanth :  
 (A) Tragacanthin (B) Amylopectin  
 (C) Amylose (D) Bassorin
59. Which of the following contains constituents used as insecticides?  
 (A) Veratrum (B) Colchicum  
 (C) Castor oil (D) Jute
60. Which of the following is not a plant growth regulator?  
 (A) Gibberellins (B) Absciscic acid  
 (C) Ethylene (D) Acetylene

61. Gelatin is lacking the amino acid :
- (A) Methionine (B) Tryptophan  
(C) Valine (D) Leucine
62. Example of ingestant allergen :
- (A) Penicillin (B) Wheat  
(C) Liver extract (D) Asparagus
63. Badouins test is for :
- (A) Olive oil (B) Castor oil  
(C) Sesame oil (D) Arachis oil
64. Which is the gelling agent used in tissue culture media?
- (A) Tragacanth (B) Agar Agar  
(C) Gum acacia (D) Dextran
65. Which of the following statements are true about  $SN_2$  reaction?
- (i) Absence of rearrangement  
(ii) Favored by aprotic solvents  
(iii) Stereo selective and stereo specific  
(iv) Undergo phase transfer catalysis
- (A) (i) and (iv) only (B) (i), (ii) and (iv) only  
(C) (ii) and (iv) only (D) All
66. Weak acid or base have different colors in ionized and unionized forms :  
The fact is explained in
- (A) Gay Lussac's theory (B) Colloidal theory  
(C) Ostwald's theory (D) Quinoid theory
67. Which statements are true about no bond resonance?
- (i) It is a stabilizing effect  
(ii) It involves only pi electrons  
(iii) It involves the interaction of sigma and pi orbital  
(iv) It gives more stability than resonance
- (A) Only (i) and (ii) (B) Only (iv)  
(C) Only (i) and (iii) (D) All



68. Which of the following elements form inert complex?  
(A) Nickel (B) Chromium  
(C) Zinc (D) Copper
69. What is soap clay?  
(A)  $\text{Al}_2\text{O}_3 \cdot 4\text{SiO}_2 \cdot \text{H}_2\text{O}$  (B)  $3\text{MgO} \cdot 4\text{SiO}_2 \cdot \text{H}_2\text{O}$   
(C)  $\text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2 \cdot 2\text{H}_2\text{O}$  (D)  $2\text{MgO} \cdot 3\text{SiO}_2 \cdot x\text{H}_2\text{O}$
70. In Reformatsky reaction which metal is used as the catalyst?  
(A) Magnesium (B) Nickel  
(C) Cadmium (D) Zinc
71. Benzoic acid is deactivated by which of the following group?  
(A)  $-\text{NO}_2$  (B)  $\text{OH}$   
(C)  $-\text{Cl}$  (D)  $-\text{SO}_3\text{R}$
72. Which of the following statement is wrong about Thiophene?  
(A) Catalytic hydrogenation yields tetra hydrothiophene  
(B) Undergoes electrophilic substitution reactions at 2<sup>nd</sup> position  
(C) Can be prepared from open chain compound by ring closure  
(D) Thiophene is considered as aromatic compound
73. A preferable method of separation of enantiomers :  
(A) Salt formation (B) Mechanical separation  
(C) Fractional distillation (D) Fractional crystallization
74. Which of the following is a triphenyl methane derivative?  
(A) Methyl orange (B) Cresol red  
(C) Malachite green (D) Xylenol orange
75. Adulteration of ghee can be analysed by :  
(A) Saponification value (B) Acid value  
(C) Iodine value (D) Reichert Meissl value
76. The product of Claisen condensation :  
(A) Phenolic aldehyde (B)  $\beta$  hydroxy aldehyde  
(C)  $\beta$  keto ester (D)  $\alpha\beta$  unsaturated acid

77. The import and sale of Ethchlorvynol is regulated by:  
 (A) Sch Y (B) Sch X  
 (C) Sch U (D) Sch V
78. Pack size of paediatric oral drops is:  
 (A) 3 ml (B) 5 ml  
 (C) 7 ml (D) 9 ml
79. The quantity of any single drug imported for personal use must not exceed \_\_\_\_\_ average doses :  
 (A) 50 (B) 100  
 (C) 150 (D) 200
80. Opium poppy can be cultivated only on behalf of the central government in notified areas in the states of :  
 (A) Madhya Pradesh (B) Uttar Pradesh  
 (C) Rajasthan (D) All of the above
81. Inclusion of indigenous system of medicine was recommended by :  
 (A) Mudaliar committee (B) Bhatia committee  
 (C) Hathi committee (D) Bhore committee
82. Which is not a permitted color?  
 (A) Tartrazine (B) Rhodamine  
 (C) Resorcin brown (D) Indigo carmine
83. Alcoholic dutiable goods can be kept in a warehouse for a maximum period of :  
 (A) 3 yrs (B) 5 yrs  
 (C) 7 yrs (D) 10 yrs
84. Which is nonpatentable?  
 (A) A new drug to treat cancer  
 (B) A new method for water purification  
 (C) A new method of agriculture or horticulture  
 (D) All of the above
85. Schedule T-A :  
 (A) List of machinery, equipment and manufacturing premises for manufacture of various categories of Ayurveda and Siddha system of medicine  
 (B) Good manufacturing practices for Ayurveda, Siddha and Unani medicines  
 (C) Form of records of utilisation of raw material by Ayurveda, Siddha and Unani manufacturing units  
 (D) None of the above

86. The Pharmacy Bill 2023 amends :
- (A) The Pharmacy Act 1948
  - (B) Drugs and Cosmetics Act 1940
  - (C) Medicinal and Toilet Preparation Act 1955
  - (D) None of the above
87. Value of percentage margin for calculating ceiling price of scheduled formulations :
- (A) 4
  - (B) 8
  - (C) 12
  - (D) 16
88. The central information commission consists of :
- (i) The Chief Information Commissioner
  - (ii) Leader of Opposition in the Lok Sabha
  - (iii) A cabinet minister to be nominated by the Chief Minister
  - (iv) A Union cabinet minister to be nominated by the Prime Minister
- (A) (ii), (iii), (iv)
  - (B) (i), (ii), (iii)
  - (C) (i), (ii), (iv)
  - (D) (i), (iii), (iv)
89. In regard to particle size, the Wurster process is applicable to :
- (A) Macro Encapsulation
  - (B) Micro Encapsulation
  - (C) Both (A) and (B)
  - (D) None of the above
90. Soft drug approach for ocular drug delivery involves :
- (A) Site specific action
  - (B) Undergoes singular metabolic deactivation
  - (C) Both (A) and (B)
  - (D) None of the above
91. Sonophoresis include :
- (A) Ultra sound based drug delivery
  - (B) Short duration High voltage pulses based drug delivery
  - (C) Applied electric potential based drug delivery
  - (D) All of the above
92. Thermodynamically stable solubilized systems are known as :
- (A) Clear emulsions
  - (B) Micro emulsions
  - (C) Micellar micro emulsions
  - (D) All of the above

93. Loo-Riegelman method is useful for which of the following?  
(A) One compartment model (B) Multi compartment model  
(C) Mammillary model (D) All of the above
94. Iodophore contain which of the following?  
(A) Non ionic surfactant (B) Anionic surfactant  
(C) Povidone (D) All of the above
95. As per WHO guidelines identification of critical elements of a process which are available at Senders Unit and not in Receiving Unit is known as:  
(A) Gap analysis (B) Design space  
(C) In process control (D) Finished product
96. Examples of cross tabulation include which of the following?  
(A) Two way tables (B) Three way tables  
(C) Manifold tables (D) All of the above
97. Wilcoxon signed rank test is better than which of the following?  
(A) One sample test (B) Paired t-test  
(C) Both (A) and (B) (D) None of the above
98. Indicator commonly used for Gaspak jar is :  
(A) Methylene blue (B) Indole red  
(C) Safranin (D) Both (B) and (C)
99. An example of conductometric biosensor is :  
(A) Calorimetric biosensor (B) Urea biosensor  
(C) Piezoelectric biosensor (D) Thermometric biosensor
100. In the DNA diagnostic test for tuberculosis the Enzyme used is :  
(A) Luciferase (B) Urease  
(C) Ligase (D) Both (A) and (B)

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