

026/2024

Maximum : 100 marks

Time : 1 hour and 30 minutes

1. The total amount of water present in body cavities in a 70 kg adult male is ————— L.
(A) 1 L (B) 14 L
(C) 42 L (D) 60 L
2. Among the following, choose the FALSE statement about G protein :
(A) Can act as a receptor
(B) Can activate second messengers
(C) Dissociates reversibly into two on activation
(D) GTP binds to alpha subunit
3. Which is TRUE about gastrin?
(A) Stimulates growth of gastric mucosa
(B) Secretion is blocked by atropine
(C) Acid in stomach increases gastrin secretion
(D) Inhibits insulin & glucagon secretion
4. Amount of oxygen carried by one gram of heamoglobin when fully saturated is :
(A) 3.46 ml (B) 2.35 ml
(C) 1.34 ml (D) 0.96 ml
5. Among the following which is not an action of GH?
(A) ↑ Gluconeogenesis (B) ↑ Glycolysis
(C) ↑ Lipolysis (D) ↑ Glycogenolysis
6. First heart sound is heard at :
(A) At the beginning of IVC phase (B) At the end of IVC phase
(C) At the beginning of IVR phase (D) At the end of IVR phase
7. Which among the following is not a Peptide hormone?
(A) Insulin (B) Calcitonin
(C) Oestrogen (D) Growth Hormone

A

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[P.T.O.]

8. False statement about sertoli cells is :
- (A) Seen in the walls of seminiferous tubules
 - (B) Secretes inhibin which inhibits FSH
 - (C) Secretes androgen binding proteins
 - (D) Secretes androgens for spermatogenesis
9. Examples of accelerants used in topically applied drugs include :
- (A) DMF
 - (B) DMA
 - (C) DMSO
 - (D) All of the above
10. For a satisfactory plain tablet the minimum hardness should be :
- (A) 5 Kg
 - (B) 2 Kg
 - (C) 4 Kg
 - (D) None of the above
11. The invitro dissolution testing of tablet is to :
- (A) Correlate with invivo bioavailability
 - (B) Relates drug solubility and permeability
 - (C) To predict IVIVC correlation
 - (D) All of the above
12. Promulgens are composed of :
- (A) Mixture of fatty acid and their ethoxylates
 - (B) Lactic acid with fatty acids
 - (C) Non ionic emulsifiers
 - (D) (A) and (C)
13. Phase inversion temperature is also called as :
- (A) Transition temperature
 - (B) Coalescence temperature
 - (C) HLB temperature
 - (D) None of the above
14. Weathering of glass containers can be avoided by which of the following?
- (A) Sulphur treatment
 - (B) Dealkalizing process
 - (C) (A) and (B)
 - (D) None of the above
15. LAL test is how many times more sensitive than rabbit pyrogen test :
- (A) 2-3 times
 - (B) 5-10 times
 - (C) 15-30 times
 - (D) None of the above

16. Sunscreen products include which of the following :
- (A) Titanium Dioxide (B) Avobenzone
(C) Zinc Oxide (D) All of the above
17. Equipment used for mixing sticky solids :
- (A) Double cone mixer (B) Planetary mixer
(C) Ribbon blender (D) V cone blender
18. In fluids at critical velocity the flow changes from Viscous to :
- (A) Turbulent (B) Pseudoplastic
(C) Laminar (D) Dilatant
19. Retrovirus mediated gene transfer is
- (A) In vivo method (B) Ex vivo method
(C) Both (A) and (B) (D) None of the above
20. Type I-hypersensitivity reactions are mediated predominantly by :
- (A) Ig M antibodies (B) Ig G antibodies
(C) Ig E antibodies (D) T lymphocytes
21. Therapeutic index is :
- (A) Maximum non toxic dose/Maximum effective dose
(B) Maximum toxic dose/Minimum effective dose
(C) Maximum effective/Minimum non toxic dose
(D) Maximum effective dose/Maximum non toxic dose
22. Myocardial contractility mainly depends on :
- (A) Intracellular Calcium (B) Extracellular Calcium
(C) Both (A) and (B) (D) Independent of Calcium
23. Terbutaline is a :
- (A) $\alpha 2$ selective adrenergic agonist
(B) $\beta 2$ selective adrenergic agonist
(C) $\alpha 1$ selective adrenergic agonist
(D) $\beta 1$ selective adrenergic agonist

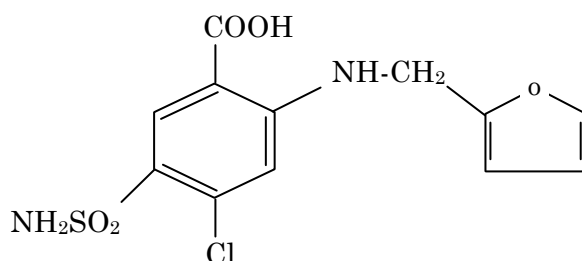
24. An example for ultra short acting barbiturates :
- (A) Secobarbitone (B) Phenobarbitone
(C) Pentobarbitone (D) Thiopentone
25. Abrupt onset of unpaired consciousness associated with staring and cessation of ongoing activities typically lasting 30 seconds :
- (A) Myoclonic seizure (B) Tonic clonic seizure
(C) Absence seizure (D) Simple partial seizure
26. Reye 's syndrome in children seen with administration of :
- (A) Paracetamol (B) Aspirin
(C) Ibuprofen (D) Indomethacin
27. All are carbonic anhydrase inhibitors except :
- (A) Acetazolamide (B) Methazolamide
(C) Dichlorphenamide (D) Furosemide
28. A vitamin that work in reducing bad cholesterol :
- (A) Vitamin B6 (B) Vitamin B3
(C) Vitamin B12 (D) Vitamin B2
29. A mitotic spindle poison is :
- (A) Paclitaxel (B) Flurouracil
(C) Mitomycin (D) Methotrexate
30. A 3rd generation Cephalosporin used as antimicrobial agent is :
- (A) Ceforamide (B) Cefotaxime
(C) Cephalothin (D) Cefoxitin
31. The species source for long acting insulins :
- (A) Humans (B) Monkeys
(C) Rats (D) All of the above
32. An example for anti retroviral agent :
- (A) Acyclovir (B) Zidovudine
(C) Ribavirin (D) Trifluridine
33. Ototoxicity is caused due to :
- (A) Phenytoin (B) Doxorubicin
(C) Chloroquine (D) Rifamicin

34. The orphan drug used for orphan disease paracetamol overdose toxicity :
- (A) Erythropoietin (B) Fomepizole
(C) Atovaquone (D) Acetyl cysteine

35. The amino acid that does not undergoes transamination :
- (A) Alanine (B) Leucine
(C) Lysine (D) Methionine

36. Which of the following is a Selective β_1 blocker?
- (A) Nadolol (B) Pindolol
(C) Metoprolol (D) Timolol

37. The following is the structure of :



- (A) Mefenamic acid (B) Meclofenamic acid
(C) Tolfenamic acid (D) Furosemide
38. All of the following are substrates for gluconeogenesis except :
- (A) Palmitic acid (B) Lactic acid
(C) Aspartic acid (D) Glutamic acid
39. Globar used as a radiation source in IR spectroscopy is composed of :
- (A) Polystyrene (B) Polysiloxane
(C) Silicon carbide (D) Silicon dioxide
40. The most widely used HPLC detector suitable for gradient elution is :
- (A) Refractive index detector (B) Ultraviolet detectors
(C) Electrochemical detectors (D) Fluorescence detectors
41. Mc Ardle's syndrome is due to deficiency of :
- (A) Glucose-6-phosphatase (B) Branching enzyme
(C) Debranching enzyme (D) Muscle glycogen phosphorylase

42. The heterocyclic ring present in the structure of Fentanyl is :
- (A) Piperidine (B) Imidazole
(C) Indole (D) Pyrrole
43. An unsuitable carrier gas in gas chromatography is :
- (A) Helium (B) Oxygen
(C) Hydrogen (D) Nitrogen
44. The component of electron transport chain that possess isoprenoid units :
- (A) Cytochrome oxidase (B) Coenzyme Q
(C) Cytochrome b (D) Iron sulphur protein
45. The National Malaria Control Programme (NMCP) became a part of National vector Borne disease control programme in :
- (A) 1953 (B) 1958
(C) 2002 (D) 2005
46. The number of pharmacists required for a 100-bed hospital :
- (A) 2 (B) 3
(C) 5 (D) 8
47. The Secretary of Pharmacy and therapeutics Committee is the :
- (A) Physician (B) Chief Pharmacist
(C) Nursing Head (D) Hospital Administrator
48. The ISO 9000 standards were first published in :
- (A) 1975 (B) 1978
(C) 1985 (D) 1987
49. The 'Father of Quality circles' who introduced the seven tools of quality control :
- (A) Kaoru Ishikawa (B) Genichi Taguchi
(C) Frederick W Taylor (D) Armand V Feigenbaum
50. The rVSV-ZEBOV vaccine is approved to prevent :
- (A) SARS (B) Ebola
(C) Influenza (D) Covid-19

51. Coconut oil has a very low iodine value and a high saponification value. This is due to the presence of the :
- (A) Triglyceride of mainly lauric acid
 - (B) Triglyceride of mainly myristic acid
 - (C) Triglycerides of smaller quantities of caproic, caprylic, oleic, palmitic and stearic acids
 - (D) All of the above
52. Agar is used :
- (A) In the preparation of culture media
 - (B) As an emulsifying agent
 - (C) In the treatment of chronic constipation
 - (D) All of the above
53. Fenugreek contains the alkaloid, trigonelline, which is a :
- (A) Pyridine type
 - (B) Isoquinoline type
 - (C) Indole type
 - (D) None of the above
54. Starch granules undergo gelatinization when treated with :
- (A) caustic potash
 - (B) concentrated solutions of calcium or zinc chlorides
 - (C) concentrated solution of chloral hydrate
 - (D) all of the above
55. "Like are cured by likes" is the basic principle involved in :
- (A) Ayurveda
 - (B) Siddha
 - (C) Homeopathy
 - (D) Unani
56. Which of the following is the application of plant tissue culture?
- (A) Biochemical conversions
 - (B) Clonal propagation
 - (C) Production of useful phytoconstituents
 - (D) All of the above
57. All are optically active alkaloids except :
- (A) Coniine
 - (B) Papaverine
 - (C) Quinine
 - (D) Ephedrine

58. Leaf constants are determined by using :
- (A) Stomatal index (B) Vein-islet number
(C) Palisade ratio (D) All of the above
59. Shikimic acid pathway is employed by :
- (A) Microorganisms only (B) Plants only
(C) Both microorganisms and plants (D) Animals
60. Ginseng contains :
- (A) Cardiac glycosides (B) Saponin glycosides
(C) Anthraquinone glycosides (D) None of the above
61. Both the corm and the seeds of colchicum are used for treating :
- (A) Arthritis (B) Rheumatism
(C) Gout (D) All of the above
62. Urokinase is non antigenic because it is :
- (A) Obtained from plants (B) An endogenous enzyme
(C) Obtained from microorganisms (D) None of the above
63. A marine anticancer agent :
- (A) Manoalide (B) Anthopleurin - A
(C) Bryostatin - 1 (D) α - Conotoxin
64. Turmeric contains :
- (A) Turmerone (B) α , β - Atlantone
(C) Zingiberene (D) All of the above
65. Chlorinated lime is regarded as consisting of :
- (A) Calcium chloride (B) Calcium hypochlorite
(C) Calcium chloro-hypochlorite (D) Calcium chlorate
66. The reaction by which Indole is converted into 3-dimethylamino-methylindole (Gramine) by :
- (A) Reissert synthesis (B) Mannich reaction
(C) Reimer-Tiemann reaction (D) Friedlander's synthesis

67. DDT is chemically :
- (A) Dichloro Diphenyl Trichlorohexane (B) Dichloro Dimethyl Trichloroethane
(C) Dichloro Diethyl Trichloropropane (D) Dichloro Diphenyl Trichloroethane
68. In which heterocyclic ring, the numbering of ring atoms does not start on the hetero atom :
- (A) Indole (B) Acridine
(C) Quinoline (D) Thiophene
69. Naphthalene undergoes electrophilic substitution reactions primarily at :
- (A) C-1 (B) C-5
(C) C-4 (D) C-3
70. Dying oils undergo, which among the following reaction to form a thin water proof film :
- (A) Halogenation (B) Hydrolysis-Oxidation
(C) Oxidation-Polymerization (D) Hydrogenation
71. Meso compounds are achiral due to the presence of :
- (A) Plane of symmetry (B) Centre of symmetry
(C) Alternative axis of symmetry (D) None of the above
72. Which of the following reaction employs amalgamated zinc and concentrated hydrochloric acid as the reducing agent?
- (A) Wolff-Kishner reduction (B) Clemmensen reduction
(C) Birch reduction (D) Dakin reaction
73. Imidazole is isomeric with :
- (A) Oxazole (B) Thiazole
(C) Pyrazole (D) Pyrrole
74. Phenolphthalein is colourless in :
- (A) Acid solution only (B) Neutral solution only
(C) Both acid and neutral solutions (D) Slightly alkaline solution
75. Role of concentrated sulphuric acid in the nitration of benzene :
- (A) To increase the acidity of con. nitric acid
(B) To avoid the formation of di and trinitrobenzene
(C) To generate the electrophile-nitronium ion
(D) None of the above

76. Assay of calcium gluconate is done by :
- (A) Gravimetry (B) Alkalimetry
(C) Fajans method (D) Complexometry
77. Coca derivatives means any mixture of coca containing more than the following amount of cocaine?
- (A) 0.2% (B) 0.5%
(C) 0.02% (D) 0.10%
78. The import of drugs for personal use contains average dose in mg up to?
- (A) 10 (B) 100
(C) 50 (D) 500
79. All finished alcoholic preparations in a bonded laboratory should be stored in jars or bottles, each containing not less than?
- (A) 1 Litre (B) 1.5 Litre
(C) 2.25 Litre (D) 5 Litre
80. Manufacturer of cosmetics to conform to the latest Bureau of Indian Standards requirements is specified in :
- (A) Schedule-A (B) Schedule-S
(C) Schedule-F (D) Schedule-T
81. The application to import drugs as part of bonafide laggage is made to the licensing authority in :
- (A) Form 12A (B) Form 12
(C) Form 12B (D) Form 26
82. The following points should be considered by a pharmacist while dealing with his profession except?
- (A) Professional vigilance
(B) Limitation of professional activity
(C) Relationship with professional organisation
(D) Law abiding citizens
83. Narcotic drugs and psychotropic substances act was enacted in the year :
- (A) 1895 (B) 1857
(C) 1985 (D) 1980

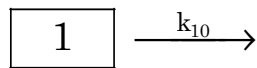
84. The number of registered pharmacists nominated by respective state government in a state council is :
- (A) 6 (B) 5
(C) 7 (D) 8
85. Whoever contravenes any of the provisions of the Drugs and Magic Remedies (objectionable advertisements) Act, 1954 is punishable up to the maximum imprisonment of :
- (A) One year (B) Two years
(C) Five years (D) Three years
86. Good manufacturing practices for ayurvedic, siddha and unani medicines is specified in :
- (A) Schedule-S (B) Schedule-T
(C) Schedule-B (D) Schedule-U
87. As per the Drugs and Magic Remedies act-1954, which of the disease, disorder or condition cannot be claimed to be cured?
- (A) Goitre (B) Gangrene
(C) Glaucoma (D) All the above
88. Good laboratory practices and requirements of premises and equipments is specified in :
- (A) Schedule M (B) Schedule N
(C) Schedule L-1 (D) Schedule M-1
89. The principle fungus for commercial citric acid production by fermentation is :
- (A) *Aspergillus aculeatus* (B) *Aspergillus foetidus*
(C) *Aspergillus niger* (D) *Aspergillus wentii*
90. The certificate of pharmaceutical product is issued in the format recommended by :
- (A) USFDA (B) WHO
(C) CDSCO (D) MHRA
91. The rule for permission to import new drug under schedule Y is :
- (A) Rule 122A (B) Rule 122B
(C) Rule 122DA (D) Rule 122E
92. Which among the following is a non-erodible ophthalmic insert?
- (A) Lacrisert (B) Ocusert
(C) Soluble Ocular Drug Insert (D) Minidisc

93. The headquarters of Small Industrial Development Bank of India (SIDBI) is located at :
- (A) New Delhi (B) Indore
(C) Mumbai (D) Lucknow

94. The parameters for quality Risk management is mentioned in :
- (A) ICH guideline Q7 (B) ICH guideline Q8
(C) ICH guideline Q9 (D) ICH guideline Q10

95. Dose-dependant kinetics is observed in :
- (A) Zero order kinetics (B) First order kinetics
(C) Second order kinetics (D) Mixed order kinetics

96. The type of drug administration shown by the following compartment model?



- (A) Oral administration
(B) Intrathecal administration
(C) Intravenous administration
(D) Sublingual administration
97. The most frequently occurring value in a data set is called the :
- (A) Mean (B) Mode
(C) Median (D) Average
98. Coefficient of variation was developed by :
- (A) Karl Pearson (B) Fanas Gattton
(C) Horace Secrists (D) Charles Edward
99. Fractional sterilization is also known as :
- (A) Pasteurization (B) Tyndallization
(C) Lyophilization (D) Ionization
100. The biological indicator for radiation sterilization are the spores of :
- (A) Bacillus stearothermophilus (B) Bacillus subtilis
(C) Bacillus nigrificans (D) Bacillus pumilis

SPACE FOR ROUGH WORK

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