

JELET-2021
For Diploma in Pharmacy candidates

1092000689

(Booklet Number)

Duration: 2 Hours

Full Marks: 100

INSTRUCTIONS

1. All questions are of objective type having four answer options for each. Only one option is correct. Correct answer will carry full marks 1. In case of incorrect answer or any combination of more than one answer, $\frac{1}{4}$ mark will be deducted.
2. Questions must be answered on OMR sheet by darkening the appropriate bubble marked A, B, C, or D.
3. Use only **Black/Blue ball point pen** to mark the answer by complete filling up of the respective bubbles.
4. Mark the answers only in the space provided. Do not make any stray mark on the OMR.
5. Write question booklet number and your roll number carefully in the specified locations of the **OMR**. Also fill appropriate bubbles.
6. Write your name (in block letter), name of the examination centre and put your full signature in appropriate boxes in the OMR.
7. The OMR is liable to become invalid if there is any mistake in filling the correct bubbles for question booklet number/roll number or if there is any discrepancy in the name/ signature of the candidate, name of the examination centre. The OMR may also become invalid due to folding or putting stray marks on it or any damage to it. The consequence of such invalidation due to incorrect marking or careless handling by the candidate will be sole responsibility of candidate.
8. Candidates are not allowed to carry any written or printed material, calculator, pen, document, log table, wristwatch, any communication device like mobile phones etc. inside the examination hall. Any candidate found with such items will be **reported against** and his/her candidature will be summarily cancelled.
9. Rough work must be done on the question paper itself. Additional blank pages are given in the question paper for rough work.
10. Hand over the OMR to the invigilator before leaving the Examination Hall.



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SPACE FOR ROUGH WORK

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1. Saponin Glycoside is present in -
(A) Senna (B) Aloe
(C) Shatavari (D) Digitalis
2. Volatile oils are the derivative of -
(A) Isoprene (B) Polylysine
(C) Polypropylene (D) Urotropin
3. Individual member of androecium is called as -
(A) Carpel (B) Stamen
(C) Sepal (D) Petal
4. Oxytocic activity is shown by -
(A) Dioscorea (B) Shatavari
(C) Ergot (D) Digitalis
5. Cholagogue means -
(A) Promote milk secretion (B) Promote bile secretion
(C) Increase sweat secretion (D) Increase gastric secretion
6. Liquorice belongs to family -
(A) Liliaceae (B) Solanaceae
(C) Loganiaceae (D) Leguminosae
7. Ferulic acid when treated with hydrochloric acid gives -
(A) Acetic acid (B) Umbellic acid
(C) Cinnamic acid (D) Vanillic acid
8. Glycosides are condensation products of -
(A) Sugar + aglycone (B) Sugar + Protein
(C) Protein + aglycone (D) Fats + aglycone

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9. 'Holy basil' is the synonym for drug -
(A) *Alpinia officinarum* (B) *Allium sativum*
(C) *Nardostachys jatamansi* (D) *Ocimum sanctum*
10. Keller kiliani test is used for identification of -
(A) Fructose (B) Maltose
(C) Deoxy sugar (D) Glucose
11. Koplik's Spot is related to which disease ?
(A) Pox (B) Measles
(C) Typhoid (D) Rabies
12. German Measles is caused by -
(A) Rubella virus (B) Rubeola virus
(C) *Varicella zoster* (D) Variola virus
13. Chloroquine is deposited in -
(A) Kidney (B) Liver
(C) Retina (D) Teeth
14. Propranolol is given orally in higher dose than that of actual need because propranolol is destroyed by -
(A) Gastric acid (B) First pass metabolism
(C) Normal flora of G.I. lumen (D) Bile acid
15. Penicillin shows antimicrobial activity by -
(A) Inhibiting Cell wall synthesis (B) Inhibiting Protein synthesis
(C) Perforation of cell membrane (D) Alkylation of DNA
16. Digoxin shows cardiotonic activity by inhibiting -
(A) Carbonic anhydrase (B) Cyclooxygenase
(C) Sodium -potassium ATPase (D) Aldehyde dehydrogenase

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17. Which local anaesthetic is used for gastric irritation ?
(A) Procaine (B) Amethocaine
(C) Oxethazaine (D) Bupivacaine
18. For methanol poisoning specific antidote is -
(A) Fomepizole (B) Desferrioxamine
(C) BAL (D) Sodium nitrite
19. Streptomycin acts well in -
(A) Acidic pH (B) Basic pH
(C) Neutral pH (D) Negative pH
20. Phenobarbitone is a/an -
(A) Acidic Drug (B) Basic Drug
(C) Neutral Drug (D) Amphoteric Drug
21. Gentamycin Sulphate is -
(A) Natural (B) Synthetic
(C) Semi synthetic (D) None of these
22. Steroidal antibiotic is -
(A) Kanamycin (B) Fusidic acid
(C) Gentamycin (D) Polymyxin
23. Selenium sulfide is an -
(A) antimicrobial (B) antiprotozoal
(C) antidandruff (D) anthelmintic
24. Titanium dioxide (TiO_2) is a/an -
(A) antimicrobial (B) sun screening agent
(C) antifungal (D) antiemetic

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25. Which of the followings is a systemic alkalinizer ?
(A) $\text{Mg}(\text{OH})_2$ (B) $\text{Al}(\text{OH})_3$
(C) NaHCO_3 (D) Megaldrate
26. How many numbers of carbon is present in Undecylenic Acid ?
(A) Nineteen (B) Eleven
(C) Ten (D) Sixteen
27. Who is the chairman of Drugs and Technical Advisory Board (DTAB) ?
(A) Drug Controller of India
(B) President of PCI
(C) Director General of Health Services
(D) Director of Central Drug Laboratory, Kolkata
28. The general formula of monosaccharides is -
(A) $\text{C}_n\text{H}_{2n}\text{O}_n$ (B) $\text{C}_{2n}\text{H}_2\text{O}_n$
(C) $\text{C}_n\text{H}_2\text{O}_{2n}$ (D) $\text{C}_n\text{H}_{2n}\text{O}_{2n}$
29. Synovial fluid contains -
(A) Heparin (B) Hyaluronic acid
(C) Chondroitin sulphate (D) Keratin sulphate
30. Which one is Live Vaccine ?
(A) DPT (B) MMR
(C) BCG (D) TT
31. Cellulose Acetate Phthalate (CAP) dissolves at pH -
(A) Above 6 (B) Below 6
(C) 4 (D) 2

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32. Simple Syrup IP contains _____ sucrose.
(A) 66.7 % w/v (B) 85 % w/v
(C) 70 %w/w (D) 66.7 %w/w
33. *Clostridium tetani* produces -
(A) Exotoxin (B) Endotoxin
(C) Pyrogen (D) None of these
34. Composition of Molisch reagent is -
(A) Alpha naphthol + sulphuric acid
(B) Beta naphthol + sulphuric acid
(C) Naphthylamine + sulphuric acid
(D) Phenol + sulphuric acid
35. One nanometer (nm) is equal to -
(A) 10^{-2} cm (B) 10^{-4} cm
(C) 10^{-7} cm (D) 10^{-8} cm
36. Barium meal is used for visualization of -
(A) Gall bladder (B) Intestinal tract
(C) Heart (D) Liver
37. Which is true for "Streptomyces" ?
(A) Gram positive filamentous bacteria
(B) Gram negative filamentous bacteria
(C) Fungus
(D) Acid fast bacteria
38. Which is the example of spirochaete ?
(A) *Chlamydia trachomatis* (B) *Trypanosoma gambiens*
(C) *Treponema pallidum* (D) *Vibrio cholerae*

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39. Which one is Gram positive bacteria ?
(A) *Salmonella typhi* (B) *Vibrio cholerae*
(C) *Pseudomonas aeruginosa* (D) *Staphylococcus aureus*
40. Condy's Lotion is prepared from -
(A) Potassium permanganate (B) Potassium dichromate
(C) Potassium phthalate (D) Potassium bromide
41. Young's formula for child dose calculation is -
(A) $(\text{Age} / (\text{Age} + 12)) \times \text{Adult dose}$
(B) $(\text{Age} / 20) \times \text{Adult dose}$
(C) $(\text{Weight of the child in lbs} / 150) \times \text{Adult dose}$
(D) $(\text{Age in months} / 150) \times \text{Adult dose}$
42. A semi solid preparation containing excess of finely divided solids is a -
(A) Cream (B) Paste
(C) Jellies (D) Liniment
43. Agent added to tooth paste to keep it in moist form is known as -
(A) Humectant (B) Binders
(C) Abrasives (D) Detergents
44. Sorbitan monolaurate is commercially known as -
(A) Tween 20 (B) Span 20
(C) Span 40 (D) Span 60
45. An 'Orphan Drug' is -
(A) A very cheap drug
(B) A drug which has no therapeutic use
(C) A drug needed for treatment or prevention of a rare disease
(D) A drug which acts on Orphanin receptors

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46. Majority of drugs cross biological membranes primarily by -
(A) Passive diffusion (B) Facilitated diffusion
(C) Active transport (D) Pinocytosis
47. Which of the following drugs is most likely to be absorbed from the stomach ?
(A) Morphine sulphate (B) Diclofenac sodium
(C) Hyoscine hydrobromide (D) Quinine dihydrochloride
48. The most commonly occurring conjugation reaction for drugs and their metabolites is -
(A) Glucuronidation (B) Acetylation
(C) Methylation (D) Glutathione conjugation
49. Glomerular filtration of a drug is affected by its -
(A) Lipid solubility (B) Plasma protein binding
(C) Degree of ionization (D) Rate of tubular secretion
50. HLB Scale is designed by -
(A) Bently (B) Lehlinger
(C) Griffin (D) Rutherford
51. Heart receives cholinergic stimulation through _____ nerve.
(A) Vagus (B) Trigeminal
(C) Spinal Accessory (D) Trochlear
52. Method used for extraction of volatile oils is -
(A) Steam distillation (B) Fractional distillation
(C) Molecular distillation (D) Simple distillation
53. At normal pressure, freezing point of blood plasma is -
(A) -0.41°C (B) -0.52°C
(C) -0.05°C (D) -0.5°C

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54. Tablets that are placed under the skin are -
(A) Enteric coated tablets (B) Film coated tablets
(C) Implants (D) Sublingual
55. Which heterocyclic ring is present in Amiloride ?
(A) Pyrimidine ring (B) Pteridine ring
(C) Pyrazine ring (D) Pyridine
56. Which diuretic have steroid nucleus ?
(A) Amiloride (B) Chlorthalidone
(C) Triamterene (D) Spironolactone
57. Diphenhydramine belongs to antihistaminic class of -
(A) Ethylene diamine (B) Amino alkyl ether
(C) Alkyl amine (D) Phenothiazine
58. Pteridine ring is present in -
(A) Amiloride (B) Triamterene
(C) Chlorthalidone (D) Spirolactone
59. Which is the mill used to obtain ointments of the smooth texture of consistency is ?
(A) Ball mill (B) Cutter mill
(C) Edge runner mill (D) Triple roller mill
60. Sigma blade mixers are commonly used in -
(A) Wet granulation (B) Dry granulation
(C) Powder mixing (D) Crude fibre mixing
61. Jentaculum means -
(A) Dinner (B) Breakfast
(C) Lunch (D) Supper

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62. Colligative properties are useful in determining -
(A) Tonicity (B) Solubility
(C) Sterility (D) Stability
63. Which antibiotic is primarily bacteriostatic but becomes bactericidal at higher concentrations ?
(A) Erythromycin (B) Tetracycline
(C) Chloramphenicol (D) Ampicillin
64. Which of the following organism is notorious for developing antimicrobial resistance rapidly ?
(A) *Streptococcus pyogenes* (B) *Meningococcus*
(C) *Treponema pallidum* (D) *Escherichia coli*
65. Which one of these is an indiffusible substances ?
(A) Aspirin (B) Kaolin
(C) KI (D) CaCO_3
66. The penicillin G preparation with the longest duration of action is -
(A) Benzathine penicillin (B) Sodium penicillin
(C) Potassium penicillin (D) Procaine penicillin
67. Among these antineoplastic agents, which one is alkylating agent ?
(A) Vincristine (B) Methotrexate
(C) Mercaptopurine (D) Cyclophosphamide
68. Which of the following drug acts by inhibiting an enzyme in the body ?
(A) Phenobarbitone (B) Allopurinol
(C) Levodopa (D) Metoclopramide
69. Which of the following is a prodrug ?
(A) Hydralazine (B) Clonidine
(C) Captopril (D) Enalapril

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70. Which macrophage cell is present in skin ?
(A) Kupffer Cell (B) Osteoclast
(C) Osteocyte (D) Dendritic cell
71. Which of the followings does not change with the change of temperature ?
(A) Molarity (B) Normality
(C) Molality (D) Formality
72. With iron compound, tannins give the colour -
(A) Pale yellow (B) Blue black
(C) Light pink (D) Orange
73. Among the following cations, which cation is most abundant in extracellular fluid ?
(A) Na^+ (B) K^+
(C) Ca^{2+} (D) Mg^{2+}
74. "Inotropic effect" means -
(A) Change of rate of contraction (B) Change of force of contraction
(C) Regulation of conduction velocity (D) All of these
75. 20 gm NaOH dissolved in 500 ml of water. What is the normality of solution ?
(A) 1.5(N) (B) 1(N)
(C) 2(N) (D) 150(N)
76. Soap type surfactants are incompatible with _____ type surface active agents.
(A) Cationic (B) Anionic
(C) Non -ionic (D) None of these
77. Active form of Levodopa is -
(A) Carbidopa (B) Dopamine
(C) Epinephrine (D) Nor -adrenaline

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78. The purpose of Phase -I and Phase -II metabolism of drug to make the metabolite -
(A) More polar (B) Less polar
(C) More hydrophobic (D) Less hydrophilic
79. Which of the followings is a non -steroidal estrogen ?
(A) Ethinylestradiol (B) Mestranol
(C) Tibolone (D) Stilbestrol
80. Specific Benzodiazepine antagonist is -
(A) Flumazenil (B) Fludrocortisone
(C) 5 -Fluorouracil (D) Flutamide
81. Which sulfonamide is used topically for burn case ?
(A) Sulfacetamide (B) Sulfamethoxazole
(C) Sulfasalazine (D) Silver sulfadiazine
82. In iodometric titration which indicator is used ?
(A) Bromothymol blue (B) Soluble starch
(C) Phenol red (D) Ferroin indicator
83. In Limit Test for iron, citric acid is mixed because it -
(A) maintain pH
(B) prevent precipitation of iron with ammonia
(C) acts as oxidant
(D) reduces surface tension
84. Regulations and standards for ophthalmic ointments and solutions is specified in -
(A) Schedule -M (B) Schedule -FF
(C) Schedule -O (D) Schedule -P

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85. The amino acid having no chiral carbon is -
(A) Glycine (B) Phenyl Alanine
(C) Methionine (D) Cystine
86. Caffeine is -
(A) 3,7 -Dimethyl xanthine (B) 1,3 -Dimethyl xanthine
(C) 1,3,7 - Trimethyl xanthine (D) 1,7 - Dimethyl xanthine
87. In limit test of arsenic, which instrument is used to detect the impurities in pharmaceuticals ?
(A) Gutzeit apparatus (B) Nessler cylinder
(C) Kipp's apparatus (D) Deionizer
88. Tetracycline group of drugs is contra-indicated with milk and milk products due to -
(A) Conjugation (B) Hydroxylation
(C) Chelation (D) Oxidation
89. Which one is the mood elevator ?
(A) Acyclovir (B) Amantadine
(C) Azadirachtin (D) Zidovudine
90. Which one is the addicting antitussive ?
(A) Glycyrrhizin (B) Vasicine
(C) Tolu balsam (D) Codeine
91. Which one is penicillanase enzyme inhibitor ?
(A) Clavulanic acid (B) Hexadecanoic acid
(C) Ethacrynic acid (D) Pantothenic acid
92. The popular intrauterine contraceptive device is -
(A) Cream (B) Foam tablet
(C) Copper T (D) Condom

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93. Which one of these antihistaminic is used as appetite stimulant ?
(A) Promethazine Hydrochloride (B) Cyproheptadine
(C) Fexofenadine (D) Pheniramine maleate
94. The ratio of sulphamethoxazole and trimethoprim in cotrimoxazole is -
(A) 2:5 (B) 3:5
(C) 1:5 (D) 5:1
95. Pore size of bacteria proof filter is -
(A) 0.5 μm (B) 1 μm
(C) 0.2 μm (D) 0.75 μm
96. Which one is the prokinetics ?
(A) Levosulbutamol (B) Levocetirizine
(C) Levodopa (D) Levosulpiride
97. Rochelle Salt is -
(A) Potassium sodium tartarate (B) Antimony potassium tartarate
(C) Antimony sodium tartarate (D) Potassium permanganate
98. Brine is a concentrated solution of -
(A) Sodium hydroxide (B) Sodium chloride
(C) Potassium chloride (D) Potassium carbonate
99. Amber coloured ampoules are used for -
(A) Hygroscopic substances (B) Light sensitive substances
(C) Oxygen sensitive substances (D) All of these
100. Handerson Hasselbatch equation is related to -
(A) Buffer solution (B) Dissolution rate
(C) Osmotic pressure (D) Absorption

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