

1. Which of the following avoids first pass effect of the drug
 - a. Oral ingestion
 - b. Rectal suppository
 - c. **Intravenous injection**
 - d. None of the other options
2. In which of the following phases of clinical trial of Drug ethical clearance is not required?
 - a. Phase 1
 - b. Phase 2
 - c. Phase 3
 - d. **Phase 4**
3. K_m value indicates:
 - a. Impurity of enzyme
 - b. Physiological role
 - c. Purity of enzyme
 - d. **Affinity**
4. Which of the following shows high first pass metabolism?
 - a. **Propranolol**
 - b. Phenobarbitone
 - c. Phenylbutazone
 - d. Phenytoin
5. Pharmacovigilance is used for
 - a. **To monitor drug toxicity**
 - b. To monitor unauthorized drug manufacture
 - c. Monitoring of students
 - d. Check costs
6. What quantities of 95% v/v and 45% v/v alcohols are to be mixed to make 800mL of 65% v/v alcohol?
 - a. 480 mL of 95% and 320 mL of 45% alcohol
 - b. **320 mL of 95% and 480 mL of 45% alcohol**
 - c. 440 mL of 95% and 360 mL of 45% alcohol
 - d. 360 mL of 95% and 440 mL of 45% alcohol
7. The role of borax in cold cream is:
 - a. Anti-microbial agent
 - b. To provide fine particles to polish skin
 - c. **In-situ emulsifier**
 - d. Antioxidant
8. Purity of water can be assessed by determining one of its following properties instrumentally:
 - a. pH
 - b. Refractivity
 - c. Viscosity
 - d. **Conductivity**
9. Which one of the following is commonly used bulking agent in the formulation of freeze dried low dose drug products?
 - a. Sodium chloride
 - b. **Mannitol**
 - c. Starch
 - d. HPMC
10. Which filler can NOT be used for the preparation of tablets for amine containing basic drugs to avoid discoloration of the tablets?
 - a. Dicalcium phosphate
 - b. Microcrystalline cellulose
 - c. Starch
 - d. **Lactos**
11. Stevens Johnson syndrome is the most common adverse effect associated with one of the following category of drugs:
 - a. **Sulphonamide**
 - b. Macrolides
 - c. Penicilins
 - d. Tetracyclines
12. In Gas-Liquid Chromatography, some of the samples need to be derivatized in order to increase their
 - a. **Volatility**
 - b. Solubility
 - c. Thermal conductivity
 - d. Polarizability
13. Artemisinin contains the following group in its structure:
 - a. **An endoperoxide**
 - b. An exoperoxide
 - c. An epoxide
 - d. An acid hydrazide
14. Streptomycin can NOT be given orally for treatment of tuberculosis because:
 - a. It gets degraded in the GIT
 - b. It cause severe diarrhea
 - c. It causes metallic taste in the mouth
 - d. **It is not absorbed from the GIT**
15. Which one of the following is NOT an ex-officio member of Pharmacy Council of India?
 - a. The Director General of Health Services
 - b. The Director of Central Drugs Laboratory
 - c. The Drugs Controller General of India
 - d. **The Director of Pharmacopoeia Laboratory**
16. Eugenol is present in:
 - a. Fennel
 - b. **Tulsi**
 - c. Cardamom
 - d. Coriander
17. Ginkgo biloba is used for its:
 - a. Expectorant activity
 - b. PAF antagonistic activity
 - c. Lipid lowering activity
 - d. **Antidepressant activity**
18. Quassia wood is adulterated with:
 - a. Brucea antidysentrica
 - b. Cinnamomum zeylanicum

- c. **Cassia angustifolia**
d. Cephaleis ipecaeanaha
19. The given antibiotic is an example of ansamycins
a. Roxythromycin
b. Adriamycin
c. Aureomycin
d. **Rifamycin**
20. The amount of barbalo present in Aloe Vera is
a. < 1%
b. **3.5 – 4%**
c. 1- 1.5%
d. 2-2.5%
21. In the Drugs and Cosmetics Act and Rules, the Schedule relating to GMP is:
a. **Schedule M**
b. Schedule C
c. Schedule Y
d. Schedule H
22. The healing agent used in hand creams is:
a. **Soft paraffin**
b. Urea
c. Bees wax
d. Stearyl alcohol
23. Bloom strength is used to check the quality of:
a. Lactose
b. Ampoules
c. Hardness of tablets
d. **Gelatin**
24. Which one of the following is a flocculating agent for a negatively charged drug?
a. **Aluminium Chloride**
b. Bentonite
c. Tragacanth
d. Sodium Biphosphate
25. Thioglycolic acid- like compounds have applications in following type of cosmetic formulations:
a. **Depilatory preparations**
b. Epilatory preparations
c. Vanishing creams
d. Skin tan preparations
26. Guggul lipids are obtained from
a. **Commiphora molmol**
b. Commiphora wightii
c. Boswellia serrata
d. Commiphora abyssinica
27. Nicotinic action of acetylcholine is blocked by the drug:
a. Atropine
b. Carvedilol
c. Neostigmine
d. **d-Tubocurarine**
28. Selective serotonin reuptake inhibitor is:
a. Imipramine
b. Iproniazide
c. **Fluoxetine**
d. Naphazoline
29. Triterpenoids are active constituents of:
a. Jaborandi
b. Rhubarb
c. Stramonium
d. **Brahmi**
30. Coulter counter is used in determination of:
I. Particle surface area
II. Particle size
III. Particle volume
a. Only I
b. Only II
c. Only III
d. **I, II, and III**
31. Drugs in suspensions and semi-solid formulations always degrade by:
a. First order kinetics
b. Second order kinetics
c. **Zero order kinetics**
d. Non-linear kinetics
32. In nail polish, following polymer is used as a film-former:
a. **Nitrocellulose**
b. Polylactic acid
c. Hydroxypropyl methylcellulose
d. Cellulose acetate phthalate
33. Improvement of memory in Alzheimer's disease is brought about by drugs which increase transmission in:
a. **Cholinergic receptors**
b. Dopaminergic receptors
c. GABA receptors
d. Adrenergic receptors
34. Which one of the followings is a plasminogen activator?
a. Tranexamic acid
b. **Streptokinase**
c. Aminocaproic acid
d. None of the other options
35. Which one of the following drugs does NOT act through G-Protein coupled receptors?
a. Epinephrine
b. **Insulin**
c. Dopamine
d. TSH
36. Which one of the following dugs is NOT a typical anti-psychotic agent?

- a. Chlorpromazine
b. Haloperidol
c. **Risperidone**
d. Flupentixil
37. Identify the drugs which is NOT used in the treatment of malaria caused by Plasmodium falciparum:
a. **Artemisinin**
b. Primaquine
c. Quinine
d. Mefloquine
38. The chemical behaviour of morphine alkaloid is:
a. Acidic
b. **Basic**
c. Neutral
d. Amphoteric
39. Synthesis of UREA takes place exclusively in:
a. Kidney
b. **Liver**
c. Urinary Bladder
d. Pancreas
40. A metabolite of SPIRONOLACTONE is:
a. Aldosterone
b. **Canrenone**
c. Corticosterone
d. Pregnenolone
41. The starting material for the synthesis of ALPRAZOLAM is:
a. 3-amino-5-bromoacetaphenone
b. **2-amino-5-chlorobenzophenone**
c. 2-amino-5-bromoacetaphenone
d. 3-amino-5-chlorobenzophenone
42. A widely accepted detector electrode for pH measurement is:
a. Platinum wire
b. **Glass electrode**
c. Ag-AgCl electrode
d. Lanthanum fluoride
43. A new drug delivery system which is composed of phospholipids that spontaneously form a multilamellar concentric bilayer vesicles with layers of aqueous media separating the lipid layers is:
a. Prodrugs
b. **Liposomes**
c. Osmotic pumps
d. Nanoparticles
44. The analyte is used in the form of a solution in flame photometry because it should undergo:
a. Evaporation
b. Condensation
c. **Nebulisation**
d. Precipitation
45. Isoniazid is a primary antitubercular agent that:
a. **Requires pyridoxine supplementation**
b. Causes ocular complication that are reversible if the drug is discontinued
c. Is ototoxic and nephrotoxic
d. Should never be used due to hepatotoxic potential
46. The mechanism of action of Paclitaxel is:
a. Bind to DNA through intercalation between specific bases and block the synthesis of new RNA or DNA cause DNA
b. **Mitotic spindle poison through the enhancement of tubulin polymerization**
c. competitive partial agonist or inhibitor of estrogen and binds to estrogen receptors
d. S-Phase specific antimetabolite that is converted by deoxykinase to the 5'-mononucleotide
47. What is the reagent used for diazotization?
a. **NaNO₃ + dilute HCl**
b. KNO₃ + dilute H₂SO₄
c. Zn + dilute H₂SO₄
d. Tin + H₂SO₄
48. The mechanism of antiparasitic action of Mebendazole and thiabendazole involves:
a. **Stimulation of acetylcholine receptors at neuromuscular junctions**
b. Inhibition of dihydropolate reductase
c. Interference with microtubule synthesis and assembly
d. Block thiamine transport
49. A 5HT_{1B/1D} receptor agonist useful in migraine is:
a. **Sumatriptan**
b. Ketanserin
c. Ergotamine
d. Methysergide
50. A retardant material that forms a hydrophilic matrix in the formulation of matrix tablets is:
a. **H.P.M.C**
b. C.A.P
c. Polyethylene
d. Carnauba wax
51. The schedule in Drugs and Cosmetics Act that deals with the requirements and guidelines for clinical trials, import and manufacture of new drugs is:
a. Schedule O
b. Schedule M
c. Schedule F
d. **Schedule Y**
52. The correct non-ionic surfactant used as a penetration enhancer in the preparation of mucoadhesives is:
a. Oleic acid

- b. **Tween-80**
c. Glycerol
d. Propylene glycol
53. An agent used in Prinzmetal angina has spasmolytic action which increases coronary blood supply is:
a. **Nitroglycerine**
b. Nifedipine
c. Timolol
d. Isosorbide mononitrate
54. Unless otherwise stated in the individual monograph of the pharmacopoeia, in the disintegration test for enteric coated tablets, first the dissolution is carried out in:
a. 0.1M HCl
b. Phosphate buffer
c. **Water**
d. 0.1M H₂SO₄
55. Lycopodium spore method can be used to find out percentage purity of crude drugs which contain:
a. Multi-layered tissues or cells
b. **Well defined particles which can be counted**
c. Oil globules
d. Characteristic particles of irregular thickness, the length of which can be measured
56. Spinal cord in infants extends upto the level of:
a. Lower border of L1 vertebrae
b. Lower border of L5
c. Upper border of S1
d. **Lower border of L3**
57. Lower border of scapula is at the level of:
a. T4
b. T3
c. T9
d. **T7**
58. The length of Adult Trachea is:
a. 6 to 8 cm
b. **10 to 11 cm**
c. 14 to 15 cm
d. 16 to 20 cm
59. Coronary sinus opens into:
a. Inferior vena cava
b. **Right atrium**
c. Left atrium
d. Great cardiac veins
60. The longest vein in human body is:
a. IVC
b. Cephalic
c. Basilic
d. **Long saphenous**
61. Colour vision is by:
a. Rods
b. **Cones**
c. Occipital cortex
d. Bipolar cells
62. The receptors of pain is:
a. Ruffini organs
b. Meckel's bodies
c. Golgi bodies
d. **Free nerve endings**
63. BMR is dependent upon:
a. Body weight
b. **Surface area**
c. Amount of adipose tissue
d. Amount of lean body mass
64. Site of ADH action is:
a. Proximal tubules
b. Loop of Henle
c. Vasa recta
d. **Collecting tubules**
65. Parietal cell secretes:
a. Mucus
b. Pepsinogen
c. Gastrin
d. **Intrinsic factor**
66. Which one of the following drugs specifically inhibits calcineurin in the activated T lymphocytes?
a. Daclizumab
b. Prednisone
c. Sirolimus
d. **Tacrolimus**
67. Which of the following drugs act by inducing Lipocortins?
a. **Glucocorticoids**
b. Insulin
c. Vasopressin
d. None
68. V1 receptors are associated with:
a. Absorption of water by collecting ducts
b. **Vasoconstriction**
c. Insulin release
d. No specific role in body
69. Which of the drugs should be used cautiously in patient with Sulpha drug allergy?
a. Insulin
b. Rifampicin
c. Zidovudine
d. **Furesimide**
70. Amantadine is used in clinical settings as:
a. Anti-parkinson drug
b. Anti-influenza drug

- c. **Both anti-parkinson drug and anti-influenza drug**
d. None of the other options
71. Drug of choice for malaria in Pregnancy:
a. **Chloroquine**
b. Halofantrine
c. Artemisinin
d. Mefloquine
72. Tocolytics are drugs which are used for:
a. Uterine stimulants
b. Bronchodilation
c. **Uterine relaxants**
d. Bronchoconstrictor
73. Sulfa drugs are associated with:
I. Steven Johnson syndrome
II. Erythema nodosum
III. Haemolytic anaemia
a. Only I
b. Only II
c. Only III
d. **I, II and III**
74. Chloroquine can be used in all Except:
a. DLE
b. **IBS**
c. RA
d. Malaria
75. Sitagliptin is:
a. Renin Inhibitor
b. **DPP-4 Inhibitor**
c. Vasopressin Inhibitor
d. Form of ART
76. Gatifloxacin has been withdrawn from market because:
a. Causes renal failure
b. Causes peripheral vascular disease
c. Causes erectile dysfunction
d. **Hyperglycemia in elderly**
77. Hyperkalemia is associated with all except:
a. ACE inhibitors
b. Cyclosporine
c. Addison disease
d. **Diuretics**
78. Earfarin is absolutely contraindicated in:
a. **First trimester of pregnancy**
b. Third trimester of pregnancy
c. During breast feeding
d. None of the other options
79. Which of the following is NRTI?
a. Saquinavir
b. **Abacavir**
c. Indinavir
d. Ritonavir
80. MESNA is used along with cyclophosphamide as to:
a. Synergistic action
b. Required for activation of cyclophosphamide
c. **Prevent haemorrhagic cystitis**
d. None of the other options
81. Pentoxifylline is used is:
I. PVD
II. Vascular dementia
III. Alcoholic liver disease
a. Only I
b. Only II
c. Only III
d. **I, II and III**
82. Sildenafil acts by inhibiting:
a. PDE-1
b. **PDE-5**
c. PDE-2
d. PDE-9
83. Redman syndrome is associated with which of the following drug?
a. **Vancomycin**
b. Linezolid
c. Azithromycin
d. Rifamycin
84. Sodium Valproate is used in:
a. Mood disorders
b. Epilepsy
c. **Both mood disorders and epilepsy**
d. None of the other options
85. Ganciclovir is used for:
a. **CMV retinitis**
b. Anti-influenzal drug
c. Anti-helminth drug
d. Anti-leprotic drug
86. Volume of distribution is highest with:
a. Zidovudine
b. **Chloroquine**
c. Abacavir
d. Leptins
87. Drugs associated with pseudomembranous colitis:
a. Amoxicillin
b. **Vancomycin**
c. Amoxicillin and vancomycin
d. None of the other options
88. Pralidoxime is useful in:
a. **Organophosphate poisoning**
b. Carbamate poisoning
c. Theophylline poisoning

- d. TCA poisoning
89. False statement regarding First order kinetics of drugs:
- Rate of elimination \propto Drug concentration
 - CL- constant
 - Constant amount eliminated in unit time**
 - Constant fraction eliminated in unit time
90. Loading dose of a drug is governed by:
- Volume of distribution (V)
 - Half life ($t_{1/2}$)
 - Clearance rate (CL)
- Only I**
 - Only II
 - Only III
 - I, II, III
91. Which of the following is an electrolyte?
- Folic acid
 - Intravenous emulsion
 - Potassium chloride**
 - Vitamin C
92. Chemotherapy agents are also known as:
- Antineoplastics**
 - Ophthalmics
 - Total parenteral nutrition solutions
 - Large volumes of IV solution
93. Codeine differs structure from Morphine by:
- N-Methyl Group
 - Cl Group
 - OC₂H₂ Group
 - OCH₃ Group**
94. Chloroquin is an antimalarial drug which belongs to the class of:
- 4 amino quinoline**
 - 3 amino quinoline
 - 2 amino quinoline
 - acidine
95. Penicilline on hydrolysis with alkali gives:
- Penicilloic acid**
 - Penaldic acid
 - Penicillic acid
 - Penicillamine
96. In which type titration pure metals are used as standards?
- Precipitation titration
 - Acid base titration
 - Oxidation reduction titration
 - Complex formation titration**
97. Sulpha drugs are titrated by which type of titration:
- Diazotization titration**
 - Redox titration
 - Non-aqueous titration
- d. Acid base titration
98. Oxidation of Galactose with Conc. HNO₃ yields:
- Mucic acid**
 - Glucuronic acid
 - Saccharic acid
 - Gluconic acid
99. Synthesis of urea takes place in:
- Liver**
 - Kidney
 - Urinary Bladder
 - Gall Bladder
100. Starting material for Amitriptyline is:
- Phthalic anhydride**
 - Phthalamic acid
 - Terephthalic acid
 - Phthalimide