

**D.Pharma 1<sup>st</sup> Year**

**Diploma in Pharmacy**

**1<sup>st</sup> Year**

**Unit Test**

**MCQ**



**Mahatma Gandhi University**

**Daramdin , Sikkim**

**737121**

**[www.mgusikkim.com](http://www.mgusikkim.com)**

**[mgusikkim@gmail.com](mailto:mgusikkim@gmail.com)**

**The top of the first page of your response sheets should look like this:**

**Unit Test MCQ**

**Submitted to**

**Department of Pharmacy**

**Mahatma Gandhi University , Sikkim**



- 1. Name of the Student :**
- 2. Course Name :**
- 3. Enrollment Number :**
- 4. Paper Name :**
- 5. Student Address :**
- 6. Student Mobile No. :**
- 7. Student Email-ID :**

# **Pharmaceuticals**

**1. The word "Pharmaceutics" is derived from the Greek word \_\_\_\_\_ .**

- A) Pharmakon
- B) Pharmacon
- C) Pharmakion
- D) Pharmacia

**Answer:**

**2. Which of the following is NOT a solid dosage form?**

- A) Tablets
- B) Capsules
- C) Powders
- D) Syrups

**Answer:**

**3. Elixirs belong to which category of dosage forms?**

- A) Solid
- B) Semisolid
- C) Liquid
- D) Gaseous

**Answer:**

**4. Which dosage form is designed to release the drug slowly over an extended period?**

- A) Immediate-release tablet
- B) Enteric-coated tablet
- C) Sustained-release tablet
- D) Effervescent tablet

**Answer:**

**5. Gels and pastes are examples of:**

- A) Liquid dosage forms
- B) Semisolid dosage forms
- C) Solid dosage forms
- D) Gaseous dosage forms

**Answer:**

**6. An aerosol is a \_\_\_\_\_ dosage form.**

- A) Liquid
- B) Solid
- C) Semisolid
- D) Gaseous

**Answer:**

**7. Which of the following is a semisolid dosage form for external application?**

- A) Capsule
- B) Tablet
- C) Ointment
- D) Syrup

**Answer:**

**8. The primary purpose of an enteric coating on a tablet is to:**

- A) Improve taste
- B) Protect the drug from stomach acid
- C) Enhance color
- D) Reduce tablet size

**Answer:**

**9. The symbol R in a prescription stands for:**

- A) Signatura
- B) Recipe
- C) Take thou
- D) Both B and C

**Answer:**

**10. The part of the prescription that contains the names and quantities of ingredients is called:**

- A) Superscription
- B) Inscription
- C) Subscription
- D) Signatura

**Answer:**

**11. The part of the prescription that provides directions for the patient is known as:**

- A) Superscription
- B) Inscription
- C) Subscription
- D) Signatura

**Answer:**

**12. Which of the following is an example of a Latin term used in a prescription meaning "before meals"?**

- A) p.c.
- B) b.i.d.
- C) a.c.
- D) h.s.

**Answer:.**

**13. The dose of a drug for a child can be calculated using Young's formula, which is based on:**

- A) Body weight
- B) Body surface area
- C) Age of the child
- D) Height of the child

**Answer:**

**14. Clark's formula for child dose is based on:**

- A) Age
- B) Body weight (in kg)
- C) Body surface area
- D) Height

**Answer:**

**15. "p.r.n." in a prescription means:**

- A) Immediately
- B) When required
- C) Every hour
- D) Before meals

**Answer:**

**16. The abbreviation "q.i.d." stands for:**

- A) Three times a day
- B) Two times a day
- C) Four times a day
- D) Once a day

**Answer:**

**17. Which factor does NOT affect posology?**

- A) Age of the patient
- B) Route of administration
- C) Color of the tablet
- D) Presence of disease

**Answer:**

**18. How many grams of boric acid are required to prepare 500 g of a 5% w/w boric acid ointment?**

- A) 5 g
- B) 10 g
- C) 25 g
- D) 50 g

**Answer:**

**19. A 10% w/v solution means:**

- A) 10 g of solute in 100 mL of solution
- B) 10 g of solute in 100 g of solution
- C) 10 mL of solute in 100 mL of solution
- D) 10 g of solute in 1000 mL of solution

**Answer:**

**20. How much of a 20% solution is needed to prepare 200 mL of a 5% solution?**

- A) 20 mL
- B) 50 mL
- C) 100 mL
- D) 150 mL

**Answer:**

**21. If 2 g of drug is dissolved in 100 mL of water, the percentage strength w/v is:**

- A) 1% w/v
- B) 2% w/v
- C) 4% w/v
- D) 10% w/v

**Answer:**

**22. How many milligrams are there in 0.5 grams?**

- A) 5 mg
- B) 50 mg
- C) 500 mg
- D) 5000 mg

**Answer:**

**23. A ratio strength of 1:2000 means:**

- A) 1 g in 2000 mL
- B) 1 g in 200 mL
- C) 1 g in 20 L
- D) Both A and C (if solution)

**Answer:**

**24. Which type of powder is intended for external use on the skin?**

- A) Dusting powder
- B) Insufflations
- C) Dentifrices
- D) All of the above

**Answer:**

**25. The process of reducing the particle size of a solid substance is called:**

- A) Mixing
- B) Drying
- C) Comminution
- D) Sifting

**Answer:**

**26. A mortar and pestle is used for:**

- A) Filtration
- B) Trituration
- C) Distillation
- D) Evaporation

**Answer:**

**27. Effervescent granules contain:**

- A) Citric acid and tartaric acid with sodium bicarbonate
- B) Only citric acid
- C) Only sodium bicarbonate
- D) Hydrochloric acid

**Answer:**

**28. Which powder is required to be sterile?**

- A) Dusting powder
- B) Oral powder
- C) Surgical dusting powder
- D) Dentifrice powder

**Answer:**

**29. Double cone blender is used for:**

- A) Drying of powders
- B) Mixing of powders
- C) Sizing of powders
- D) Packaging of powders

**Answer:**

**30. A solution that contains sugar as the vehicle is called:**

- A) Elixir
- B) Syrup
- C) Linctus
- D) Spirit

**Answer:**

**31. Simple syrup IP contains approximately \_\_\_\_\_ % w/v of sucrose.**

- A) 47%
- B) 55%
- C) 66.7%
- D) 85%

**Answer:**

**32. Which of the following is a sweet, viscous, and often medicated liquid used for cough?**

- A) Elixir
- B) Linctus
- C) Spirit
- D) Aromatic water

**Answer:**

**33. Elixirs typically contain \_\_\_\_\_ as a solvent.**

- A) Only water
- B) Only alcohol
- C) Water and alcohol
- D) Glycerin only

**Answer:**

**34. Aromatic waters are \_\_\_\_\_ solutions of volatile oils.**

- A) Saturated or nearly saturated
- B) Unsaturated
- C) Supersaturated
- D) Concentrated

**Answer:**

**35. Which of the following is an example of a collodion?**

- A) Flexible collodion
- B) Salicylic acid collodion
- C) Both A and B
- D) None of the above

**Answer:**

**36. Gargles are used for:**

- A) Eye infections
- B) Throat infections
- C) Nasal infections
- D) Ear infections

**Answer:**

**37. Mouthwashes are concentrated solutions used to:**

- A) Clean and deodorize the oral cavity
- B) Treat ear infections
- C) Apply to skin
- D) Inject into muscles

**Answer:**

**38. The process of adding a liquid to a dry powder to form a paste for trituration is called:**

- A) Levigation
- B) Spatulation
- C) Geometrical dilution
- D) Sifting

**Answer:**

**39. A pharmaceutical suspension is a \_\_\_\_\_ dispersion.**

- A) Coarse
- B) Colloidal
- C) Molecular
- D) Gaseous

**Answer:**

**40. The sedimentation volume (F) of an ideal suspension should be:**

- A) 0
- B) 0.5
- C) 1
- D) Greater than 1

**Answer:**

**41. Which of the following is a suspending agent?**

- A) Tragacanth
- B) Sodium lauryl sulfate
- C) Polysorbate 80
- D) Span 80

**Answer:**

**42. An emulsion is a mixture of:**

- A) Two immiscible liquids
- B) Solid and liquid
- C) Gas and liquid
- D) Solid and solid

**Answer:**

**43. In an oil-in-water (o/w) emulsion, the continuous phase is:**

- A) Oil
- B) Water
- C) Both oil and water
- D) Air

**Answer:**

**44. Which of the following is an example of a natural emulsifying agent?**

- A) Acacia
- B) Span 60
- C) Tween 80
- D) Sodium lauryl sulfate

**Answer:**

**45. The HLB value of an emulsifying agent for an o/w emulsion is generally:**

- A) 1-3
- B) 4-6
- C) 8-18
- D) 20-25

**Answer:**

**46. Creaming in an emulsion is:**

- A) Irreversible separation of phases
- B) Reversible upward or downward movement of dispersed phase
- C) Breaking of emulsion
- D) Change in color

**Answer:**

**47. The dye test for emulsion uses \_\_\_\_\_ to identify o/w emulsion.**

- A) Oil-soluble dye
- B) Water-soluble dye
- C) Both A and B
- D) None of the above

**Answer:**

**48. Which phenomenon is called the "cracking" of an emulsion?**

- A) Creaming
- B) Flocculation
- C) Coalescence
- D) Sedimentation

**Answer:**

**49. Ointments are semisolid preparations intended for application to:**

- A) Skin or mucous membranes
- B) Eyes only
- C) Ears only
- D) Teeth only

**Answer:**

**50. The base that is washable and water-removable is:**

- A) Oleaginous base
- B) Absorption base
- C) Water-soluble base
- D) Emulsion base

**Answer:**

**51. Which of the following is an oleaginous base?**

- A) White petrolatum
- B) PEG 400
- C) Carbopol gel
- D) Pluronic gel

**Answer:**

**52. The process of incorporating a solid into an ointment base by reducing particle size is called:**

- A) Fusion
- B) Trituration
- C) Levigation
- D) Elutriation

**Answer:**

**53. Pastes contain a higher proportion of \_\_\_\_\_ compared to ointments.**

- A) Water
- B) Alcohol
- C) Powdered solids
- D) Oil

**Answer:**

**54. Jellies are semisolid systems that contain:**

- A) High amount of water
- B) High amount of oil
- C) Only alcohol
- D) Gaseous propellants

**Answer:**

**55. Carbopol is a commonly used \_\_\_\_\_ in gel formulations.**

- A) Gelling agent
- B) Emulsifying agent
- C) Sweetening agent
- D) Preservative

**Answer:**

**56. The drug release from an ointment base is fastest from:**

- A) Oleaginous base
- B) Absorption base
- C) Water-soluble base
- D) Emulsion base (w/o)

**Answer:**

**57. Suppositories are solid dosage forms intended for insertion into:**

- A) Rectum
- B) Vagina
- C) Urethra
- D) All of the above

**Answer:**

**58. Which base is most commonly used for suppositories?**

- A) PEG (Polyethylene glycol)
- B) Cocoa butter (Theobroma oil)
- C) Glycerogelatin
- D) Lanolin

**Answer:**

**59. The melting point of cocoa butter is approximately:**

- A) 25-30°C
- B) 30-35°C
- C) 40-45°C
- D) 50-55°C

**Answer:**

**60. Polymorphism in cocoa butter refers to its ability to exist in:**

- A) Different chemical forms
- B) Different crystalline forms
- C) Different colors
- D) Different tastes

**Answer:**

**61. Suppositories for vaginal use are also known as:**

- A) Bougies
- B) Pessaries
- C) Urethral suppositories
- D) Balloons

**Answer:**

**62. The displacement value of a drug in suppository base is used to:**

- A) Calculate the amount of base replaced by the drug
- B) Measure the hardness
- C) Determine the melting point
- D) Check disintegration

**Answer:**

**63. Glycerogelatin suppositories are generally used as:**

- A) Laxatives
- B) Anesthetics
- C) Antipyretics
- D) Antibiotics

**Answer:**

**64. An injection that is administered into the muscle is called:**

- A) Intravenous
- B) Intramuscular
- C) Subcutaneous
- D) Intradermal

**Answer:**

**65. Water for Injection (WFI) is sterilized by:**

- A) Dry heat
- B) Filtration
- C) Autoclaving (moist heat)
- D) Radiation

**Answer:**

**66. The pH of ophthalmic preparations should ideally be:**

- A) 1-2
- B) 3-4
- C) 7.4 (similar to tear fluid)
- D) 10-11

**Answer:**

**67. Which of the following is a preservative used in multi-dose eye drops?**

- A) Benzalkonium chloride
- B) Sodium chloride
- C) Dextrose
- D) Starch

**Answer:**

**68. The isotonicity of an injection is adjusted to match:**

- A) Distilled water
- B) 0.9% w/v sodium chloride solution
- C) 5% dextrose solution
- D) 10% alcohol

**Answer:**

**69. A pyrogen is a:**

- A) Protein
- B) Vitamin
- C) Fever-producing substance (endotoxin)
- D) Sweetener

**Answer:**

**70. Which test is used to detect pyrogens in injections?**

- A) Disintegration test
- B) LAL test (Limulus Amebocyte Lysate)
- C) Hardness test
- D) Dissolution test

**Answer:**

**71. Large volume parenterals (LVPs) have a volume of:**

- A) Less than 1 mL
- B) 1-5 mL
- C) 10-20 mL
- D) More than 100 mL

**Answer:**

**72. Ophthalmic ointments must be:**

- A) Sterile
- B) Isotonic
- C) Free from foreign particles
- D) All of the above

**Answer:**

**73. A pharmaceutical aerosol uses a \_\_\_\_\_ to expel the product.**

- A) Pump
- B) Propellant
- C) Gravity
- D) Capillary action

**Answer:**

**74. Which of the following is a commonly used propellant in aerosols?**

- A) Carbon dioxide
- B) Nitrogen
- C) Hydrofluoroalkanes (HFAs)
- D) All of the above

**Answer:**

**75. The container of an aerosol is filled with:**

- A) Only product concentrate
- B) Only propellant
- C) Product concentrate and propellant
- D) Only solvent

**Answer:**

**76. The valve that delivers the aerosol product in a controlled manner is called:**

- A) Dip tube
- B) Actuator
- C) Metering valve
- D) Gasket

**Answer:**

**77. Aerosols are used for:**

- A) Local application to skin
- B) Inhalation therapy
- C) Space disinfection
- D) All of the above

**Answer:**

**78. GMP stands for:**

- A) Good Manufacturing Practices
- B) General Manufacturing Process
- C) Good Medical Practices
- D) General Medical Protocol

**Answer:**

**79. Which of the following is a primary packaging material?**

- A) Corrugated box
- B) Glass bottle in direct contact with drug
- C) Shrink wrap
- D) Pallet

**Answer:**

**80. The purpose of quality control (QC) is to:**

- A) Increase production speed
- B) Ensure product meets specifications
- C) Reduce cost
- D) Increase profit

**Answer:**

**81. Which type of glass is most chemically resistant for parenteral products?**

- A) Type I (Borosilicate glass)
- B) Type II (Treated soda-lime glass)
- C) Type III (Soda-lime glass)
- D) Type IV (General purpose glass)

**Answer:**

**82. Blister packaging is commonly used for:**

- A) Liquids
- B) Tablets and capsules
- C) Ointments
- D) Powders

**Answer:**

**83. The symbol of a cup with a line through it on a pharmaceutical label indicates:**

- A) Store in a cool place
- B) Do not use if seal is broken
- C) Prescription only medicine
- D) Do not throw in trash (recycle)

**Answer:**

**83. The symbol of a cup with a line through it indicates:**

- A) Batch number
- B) Use by date
- C) Single dose/Do not reuse
- D) Store upright

**Answer:**

**84. Dental products include:**

- A) Toothpowders
- B) Toothpastes
- C) Mouthwashes
- D) All of the above

**Answer:**

**85. A common abrasive used in dentifrices is:**

- A) Calcium carbonate
- B) Parabens
- C) Glycerin
- D) Sodium lauryl sulfate

**Answer:**

**86. Surgical dressings are used for:**

- A) Covering wounds
- B) Absorbing exudates
- C) Protecting from infection
- D) All of the above

**Answer:**

**87. An example of an absorbent surgical dressing is:**

- A) Cotton wool
- B) Gauze
- C) Bandages
- D) All of the above

**Answer:**

**88. When two drugs react chemically to form a toxic product, it is called:**

- A) Physical incompatibility
- B) Chemical incompatibility
- C) Therapeutic incompatibility
- D) Biological incompatibility

**Answer:**

**89. The combination of soluble barbiturates with acidic solutions leads to precipitation. This is an example of:**

- A) Physical incompatibility
- B) Therapeutic incompatibility
- C) Chemical incompatibility
- D) No incompatibility

**Answer:**

**90. Prescribing a sedative with a stimulant is an example of:**

- A) Physical incompatibility
- B) Chemical incompatibility
- C) Therapeutic incompatibility
- D) Pharmaceutical incompatibility

**Answer:**

**91. A transdermal patch delivers the drug:**

- A) Through the skin into the bloodstream
- B) Directly into the stomach
- C) Into the lungs
- D) Into the eye

**Answer:**

**92. Liposomes are vesicular drug delivery systems composed of:**

- A) Phospholipid bilayers
- B) Silicone polymers
- C) Starch
- D) Gelatin

**Answer:**

**93. The term "nanoparticle" refers to particles with size in the range of:**

- A) 1-100 nm
- B) 100-500  $\mu\text{m}$
- C) 0.5-1 mm
- D) 1-5 mm

**Answer:**

**94. Targeted drug delivery aims to:**

- A) Increase side effects
- B) Deliver drug specifically to the site of action
- C) Decrease drug absorption
- D) Increase dosing frequency

**Answer:**

**95. The disintegration test for uncoated tablets (IP) requires that tablets disintegrate within:**

- A) 5 minutes
- B) 15 minutes
- C) 30 minutes
- D) 60 minutes

**Answer:**

**96. The hardness of a tablet is measured using a:**

- A) Monsanto hardness tester
- B) Disintegration apparatus
- C) Dissolution apparatus
- D) Friabilator

**Answer:**

**97. Friability of tablets is tested using:**

- A) Monsanto tester
- B) Roche friabilator
- C) Dissolution bath
- D) UV spectrophotometer

**Answer:**

**98. The dissolution test measures:**

- A) How fast the tablet breaks down
- B) How much drug is released into solution over time
- C) The hardness of the tablet
- D) The weight variation

**Answer:**

**99. Weight variation test for tablets is done to ensure:**

- A) Uniformity of drug content
- B) Uniformity of weight
- C) Uniformity of color
- D) Uniformity of size

**Answer:**

**100. For capsules, the content uniformity test is performed when the drug content is less than \_\_\_\_\_ mg or less than \_\_\_\_\_ % of label claim.**

- A) 10 mg, 50%
- B) 50 mg, 80%
- C) 100 mg, 90%
- D) 2 mg, 2%

**Answer:**

# **Pharmaceutical Chemistry**

**1. Pharmaceutical chemistry is the science that deals with the:**

- A) Study of drugs only
- B) Design, synthesis, and analysis of drugs
- C) Marketing of drugs
- D) Packaging of drugs

**Answer:**

**2. The branch of chemistry that deals with drugs obtained from natural sources is called:**

- A) Synthetic chemistry
- B) Phytochemistry
- C) Biochemistry
- D) Toxicology

**Answer:**

**3. The pH of a neutral solution at 25°C is:**

- A) 0
- B) 7
- C) 14
- D) 10

**Answer:**

**4. Which of the following is a strong acid?**

- A) Acetic acid
- B) Carbonic acid
- C) Hydrochloric acid
- D) Boric acid

**Answer:**

**5. A buffer solution resists change in:**

- A) Temperature
- B) Pressure
- C) pH
- D) Volume

**Answer:**

**6. Hydrochloric acid is used in pharmaceutical preparations as:**

- A) Acidifying agent
- B) Antacid
- C) Laxative
- D) Antiseptic

**Answer:**

**7. Which of the following is used as an antacid?**

- A) Sodium chloride
- B) Magnesium hydroxide
- C) Potassium chloride
- D) Calcium sulfate

**Answer:**

**8. Aluminium hydroxide gel is used as:**

- A) Antacid
- B) Cathartic
- C) Expectorant
- D) Antiseptic

**Answer: A**

**9. The chemical name of baking soda is:**

- A) Sodium carbonate
- B) Sodium bicarbonate
- C) Sodium chloride
- D) Sodium hydroxide

**Answer:**

**10. Sodium bicarbonate is used in effervescent preparations because it releases:**

- A) Oxygen
- B) Hydrogen
- C) Carbon dioxide
- D) Nitrogen

**Answer:**

**11. Which of the following is a systemic antacid?**

- A) Magnesium trisilicate
- B) Aluminium hydroxide
- C) Sodium bicarbonate
- D) Calcium carbonate

**Answer:**

**12. Oral rehydration salts (ORS) contain:**

- A) Sodium chloride, potassium chloride, glucose, sodium bicarbonate
- B) Only sodium chloride
- C) Only glucose
- D) Only potassium chloride

**Answer:**

**13. The antidote for acid poisoning is:**

- A) Magnesium hydroxide
- B) Sodium bicarbonate (dilute)
- C) Hydrochloric acid
- D) Boric acid

**Answer:**

**14. Compound sodium lactate injection is used to treat:**

- A) Acidosis
- B) Alkalosis
- C) Dehydration
- D) Fever

**Answer:**

**15. Which of the following is a saline laxative?**

- A) Liquid paraffin
- B) Magnesium sulfate (Epsom salt)
- C) Bisacodyl
- D) Senna

**Answer:**

**16. Kaolin is used as:**

- A) Antacid
- B) Adsorbent (in diarrhea)
- C) Laxative
- D) Antiseptic

**Answer:**

**17. Activated charcoal is used in poisoning because it:**

- A) Absorbs toxins
- B) Induces vomiting
- C) Neutralizes acid
- D) Stimulates heart

**Answer:**

**18. Bismuth subcarbonate is used as:**

- A) Antacid
- B) Astringent and antidiarrheal
- C) Laxative
- D) Antiseptic

**Answer:**

**19. Which of the following is a bulk-forming laxative?**

- A) Isabgol (Psyllium)
- B) Magnesium citrate
- C) Phenolphthalein
- D) Glycerin

**Answer:**

**20. Liquid paraffin is a:**

- A) Stimulant laxative
- B) Emollient laxative
- C) Saline laxative
- D) Bulk laxative

**Answer:**

**21. Zinc oxide is used as:**

- A) Astringent and mild antiseptic
- B) Laxative
- C) Antacid
- D) Antidote

**Answer:**

**22. Calamine is chemically:**

- A) Zinc carbonate
- B) Zinc oxide with ferric oxide
- C) Ferric oxide
- D) Titanium dioxide

**Answer:**

**23. Which of the following is used as an antiseptic and disinfectant?**

- A) Boric acid
- B) Hydrogen peroxide
- C) Iodine
- D) All of the above

**Answer:**

**24. Hydrogen peroxide is commonly used as a:**

- A) Antacid
- B) Disinfectant and antiseptic
- C) Laxative
- D) Antihypertensive

**Answer:**

**25. The concentration of hydrogen peroxide used as an antiseptic is:**

- A) 1% w/v
- B) 3% w/v
- C) 10% w/v
- D) 30% w/v

**Answer:**

**26. Potassium permanganate is used as:**

- A) Oxidizing agent and antiseptic
- B) Reducing agent
- C) Antacid
- D) Laxative

**Answer:**

**27. Iodine is soluble in water with the help of:**

- A) Alcohol
- B) Potassium iodide
- C) Glycerin
- D) Chloroform

**Answer:**

**28. Povidone-iodine is a complex of iodine with:**

- A) Polyvinylpyrrolidone
- B) Polyethylene glycol
- C) Polysorbate
- D) Polyvinyl alcohol

**Answer:**

**29. Chlorinated lime (bleaching powder) is used as:**

- A) Antacid
- B) Disinfectant
- C) Laxative
- D) Antidote

**Answer:**

**30. Which of the following is used as an abrasive in toothpastes?**

- A) Sodium lauryl sulfate
- B) Calcium carbonate
- C) Glycerin
- D) Saccharin

**Answer:**

**31. The fluoride compound used in dentifrices to prevent dental caries is:**

- A) Sodium fluoride
- B) Stannous fluoride
- C) Sodium monofluorophosphate
- D) All of the above

**Answer:**

**32. Mouthwashes often contain \_\_\_\_\_ as an antiseptic.**

- A) Phenol
- B) Chlorhexidine gluconate
- C) Ethanol
- D) All of the above

**Answer:**

**33. Which of the following is a hematinic agent?**

- A) Ferrous sulfate
- B) Calcium gluconate
- C) Magnesium sulfate
- D) Sodium chloride

**Answer:**

**34. Iron is absorbed better in the presence of:**

- A) Vitamin C (ascorbic acid)
- B) Calcium
- C) Magnesium
- D) Zinc

**Answer:**

**35. Ferrous sulfate is used to treat:**

- A) Hypertension
- B) Anemia
- C) Diabetes
- D) Asthma

**Answer:**

**36. The antidote for iron poisoning is:**

- A) Deferoxamine
- B) Activated charcoal
- C) Sodium bicarbonate
- D) Calcium gluconate

**Answer:**

**37. Calcium gluconate is used as:**

- A) Antacid
- B) Calcium supplement
- C) Laxative
- D) Antiseptic

**Answer:**

**38. Potassium chloride injection is used to treat:**

- A) Hyperkalemia
- B) Hypokalemia
- C) Hyponatremia
- D) Hybernatriemia

**Answer:**

**39. Normal saline is a \_\_\_\_\_ % w/v solution of sodium chloride.**

- A) 0.45%
- B) 0.9%
- C) 3%
- D) 5%

**Answer:**

**40. A radiopharmaceutical used for thyroid imaging is:**

- A) Sodium iodide I-131
- B) Technetium-99m
- C) Cobalt-60
- D) Iodine-125

**Answer:**

**41. The most commonly used isotope in diagnostic nuclear medicine is:**

- A) Iodine-131
- B) Technetium-99m
- C) Cobalt-60
- D) Carbon-14

**Answer:**

**42. The functional group present in alcohols is:**

- A)  $-\text{COOH}$
- B)  $-\text{OH}$
- C)  $-\text{CHO}$
- D)  $-\text{NH}_2$

**Answer:**

**43. The general formula for an aldehyde is:**

- A)  $\text{R}-\text{OH}$
- B)  $\text{R}-\text{CHO}$
- C)  $\text{R}-\text{CO}-\text{R}'$
- D)  $\text{R}-\text{COOH}$

**Answer:**

**44. A ketone has the functional group:**

- A)  $-\text{OH}$
- B)  $-\text{CHO}$
- C)  $-\text{CO}-$  (carbonyl between two carbons)
- D)  $-\text{COOH}$

**Answer:**

**45. The simplest aromatic hydrocarbon is:**

- A) Methane
- B) Ethane
- C) Benzene
- D) Toluene

**Answer:**

**46. Which of the following is a heterocyclic compound?**

- A) Benzene
- B) Pyridine
- C) Toluene
- D) Naphthalene

**Answer:**

**47. The IUPAC name of  $\text{CH}_3\text{COOH}$  is:**

- A) Methanoic acid
- B) Ethanoic acid
- C) Propanoic acid
- D) Butanoic acid

**Answer:**

**48. Esterification is a reaction between a carboxylic acid and:**

- A) Alcohol
- B) Aldehyde
- C) Ketone
- D) Amine

**Answer:**

**49. Saponification is the hydrolysis of an ester in the presence of:**

- A) Acid
- B) Base
- C) Water only
- D) Alcohol

**Answer:**

**50. The process of converting vegetable oil into vanaspati ghee is called:**

- A) Saponification
- B) Hydrogenation
- C) Esterification
- D) Fermentation

**Answer:**

**51. Paracetamol belongs to which class of drugs?**

- A) Antipyretic and analgesic
- B) Antibiotic
- C) Antihistamine
- D) Antidepressant

**Answer:**

**52. Aspirin is chemically known as:**

- A) Acetylsalicylic acid
- B) Salicylic acid
- C) Methyl salicylate
- D) Paracetamol

**Answer:**

**53. Ibuprofen is a:**

- A) Antipyretic
- B) Analgesic
- C) Anti-inflammatory
- D) All of the above

**Answer:**

**54. The antibiotic that contains a beta-lactam ring is:**

- A) Tetracycline
- B) Penicillin
- C) Erythromycin
- D) Chloramphenicol

**Answer:**

**55. Penicillin is obtained from:**

- A) Bacteria
- B) Fungus (Penicillium)
- C) Plant
- D) Synthetic source

**Answer:**

**56. Cephalosporins are related to penicillins in structure and are also:**

- A) Beta-lactam antibiotics
- B) Macrolides
- C) Aminoglycosides
- D) Tetracyclines

**Answer:**

**57. Chloramphenicol is associated with which serious side effect?**

- A) Nephrotoxicity
- B) Ototoxicity
- C) Bone marrow depression
- D) Hepatotoxicity

**Answer:**

**58. Tetracyclines should not be given to children below 8 years because they cause:**

- A) Tooth discoloration
- B) Liver damage
- C) Kidney damage
- D) Deafness

**Answer:**

**59. The antimalarial drug chloroquine is a derivative of:**

- A) Quinoline
- B) Pyrimidine
- C) Imidazole
- D) Thiazole

**Answer:**

**60. Quinine is obtained from:**

- A) Cinchona bark
- B) Artemisia plant
- C) Neem tree
- D) Tulsi plant

**Answer:**

**61. Metformin is used to treat:**

- A) Hypertension
- B) Diabetes mellitus (Type 2)
- C) Asthma
- D) Cancer

**Answer:**

**62. Glibenclamide is an:**

- A) Insulin sensitizer
- B) Sulfonylurea oral hypoglycemic
- C) Biguanide
- D) Thiazolidinedione

**Answer:**

**63. Atorvastatin is a:**

- A) Antihypertensive
- B) Antidiabetic
- C) Lipid-lowering agent (statin)
- D) Antihistamine

**Answer:**

**64. Amlodipine is a:**

- A) Beta-blocker
- B) Calcium channel blocker
- C) ACE inhibitor
- D) Diuretic

**Answer:**

**65. Losartan is an:**

- A) ACE inhibitor
- B) Angiotensin receptor blocker (ARB)
- C) Beta-blocker
- D) Alpha-blocker

**Answer:**

**66. Ranitidine is a:**

- A) Antacid
- B) H2 receptor antagonist (anti-ulcer)
- C) Proton pump inhibitor
- D) Antiemetic

**Answer:**

**67. Omeprazole is a:**

- A) H2 blocker
- B) Proton pump inhibitor
- C) Antacid
- D) Antispasmodic

**Answer:**

**68. Promethazine is an:**

- A) Antihistamine
- B) Antidepressant
- C) Antipsychotic
- D) Anticonvulsant

**Answer:**

**69. Cetirizine is a:**

- A) First-generation antihistamine
- B) Second-generation antihistamine (non-sedating)
- C) Decongestant
- D) Corticosteroid

**Answer:**

**70. Diazepam belongs to the class of:**

- A) Barbiturates
- B) Benzodiazepines
- C) Phenothiazines
- D) Tricyclic antidepressants

**Answer:**

**71. Phenytoin is used as:**

- A) Antiepileptic
- B) Antidepressant
- C) Antipsychotic
- D) Anxiolytic

**Answer:**

**72. Warfarin is an:**

- A) Anticoagulant
- B) Antiplatelet agent
- C) Thrombolytic
- D) Hemostatic

**Answer:**

**73. Heparin is administered by which route?**

- A) Oral
- B) Subcutaneous or intravenous
- C) Topical
- D) Inhalation

**Answer:**

**74. Furosemide is a:**

- A) Thiazide diuretic
- B) Loop diuretic
- C) Potassium-sparing diuretic
- D) Osmotic diuretic

**Answer:**

**75. Spironolactone is a:**

- A) Loop diuretic
- B) Thiazide diuretic
- C) Potassium-sparing diuretic
- D) Carbonic anhydrase inhibitor

**Answer:**

**76. The chemical name of a drug is based on:**

- A) Brand name
- B) IUPAC rules
- C) Generic name
- D) Common name

**Answer:**

**77. Which name is given by the manufacturer?**

- A) Chemical name
- B) Generic name (non-proprietary)
- C) Brand name (proprietary)
- D) Official name

**Answer:**

**78. The official name of a drug in India is published in:**

- A) Indian Pharmacopoeia
- B) British Pharmacopoeia
- C) United States Pharmacopoeia
- D) Merck Index

**Answer:**

**79. The suffix “-olol” in drug names indicates:**

- A) Antihistamines
- B) Beta-blockers
- C) Antidepressants
- D) Antibiotics

**Answer:**

**80. The suffix “-pril” is typical of:**

- A) ACE inhibitors
- B) ARBs
- C) Calcium channel blockers
- D) Statins

**Answer:**

**81. The shelf life of a drug is the time period during which it remains:**

- A) Potent and safe
- B) Colored
- C) Soluble
- D) Liquid

**Answer:**

**82. Drugs that decompose in the presence of moisture should be stored:**

- A) In a cool place
- B) In a dry place
- C) In a refrigerator
- D) In a light-resistant container

**Answer:**

**83. Light-sensitive drugs should be stored in:**

- A) Clear glass bottles
- B) Amber-colored bottles
- C) Plastic bottles
- D) Metal containers

**Answer:**

**84. The temperature for a “cool place” in pharmacopoeia is:**

- A) 0-5°C
- B) 8-15°C
- C) 15-25°C
- D) 30-40°C

**Answer:**

**85. A “refrigerator” temperature range is:**

- A) 0-4°C
- B) 2-8°C
- C) 10-15°C
- D) 15-20°C

**Answer:**

**86. The limit test for chloride is based on the reaction with:**

- A) Silver nitrate
- B) Barium chloride
- C) Ferric chloride
- D) Lead acetate

**Answer:**

**87. The limit test for sulfate uses:**

- A) Silver nitrate
- B) Barium chloride
- C) Ferric chloride
- D) Lead acetate

**Answer:**

**88. The limit test for iron is based on the reaction with:**

- A) Potassium ferrocyanide
- B) Thioglycollic acid
- C) Both A and B
- D) None of the above

**Answer:**

**89. The limit test for arsenic is carried out using:**

- A) Gutzeit apparatus
- B) Nessler cylinder
- C) UV spectrophotometer
- D) Flame photometer

**Answer:**

**90. In the limit test for heavy metals, hydrogen sulfide gas is used to produce:**

- A) Colored precipitate
- B) Colored solution
- C) Effervescence
- D) Odor

**Answer:**

**91. The pH of a solution is measured using a:**

- A) Thermometer
- B) pH meter
- C) Balance
- D) Spectrophotometer

**Answer:**

**92. A UV spectrophotometer is used to measure:**

- A) Weight
- B) Absorbance of light at specific wavelengths
- C) Volume
- D) Temperature

**Answer:**

**93. Thin Layer Chromatography (TLC) is used for:**

- A) Identification and purity testing
- B) Weight measurement
- C) pH measurement
- D) Temperature control

**Answer:**

**94. In TLC, the stationary phase is usually:**

- A) Silica gel
- B) Water
- C) Alcohol
- D) Air

**Answer:**

**95. The R<sub>f</sub> value in chromatography is:**

- A) Retention factor (distance traveled by solute/distance by solvent)
- B) Retention time
- C) Flow rate
- D) Partition coefficient

**Answer:**

**96. Which of the following is an expectorant?**

- A) Potassium iodide
- B) Codeine
- C) Dextromethorphan
- D) Chlorpheniramine

**Answer:**

**97. The antidote for morphine poisoning is:**

- A) Naloxone
- B) Atropine
- C) Activated charcoal
- D) Vitamin K

**Answer:**

**98. Atropine is an:**

- A) Anticholinergic
- B) Cholinergic
- C) Adrenergic
- D) Antihistamine

**Answer:**

**99. Salbutamol is used as:**

- A) Antihypertensive
- B) Bronchodilator
- C) Antibiotic
- D) Antifungal

**Answer:**

**100. Corticosteroids like hydrocortisone are used as:**

- A) Anti-inflammatory
- B) Antiviral
- C) Antifungal
- D) Antimalarial

**Answer:**

# Pharmacognosy

**01. The term “Pharmacognosy” was first coined by**

- A) Galen
- B) C.A. Seydler
- C) Dioscorides
- D) Linnaeus

Answer:

**02. Pharmacognosy mainly deals with**

- A) Drug synthesis
- B) Study of crude drugs from natural sources
- C) Drug marketing
- D) Hospital management

Answer:

**03. Crude drug is**

- A) Chemically pure isolated compound
- B) Any synthetic drug
- C) Drug obtained from natural sources, not fully processed
- D) Only antibiotics

Answer:

**04. The father of Pharmacognosy is generally considered to be**

- A) Shennong
- B) Dioscorides
- C) Galen
- D) C.A. Seydler

Answer:

05. Pharmacognosy is a combination of two Greek words meaning

- A) Drug and recognition
- B) Plant and extraction
- C) Herb and chemistry
- D) Medicine and action

Answer:

06. Scope of Pharmacognosy includes

- A) Herbal drug industry
- B) Ayurvedic formulations
- C) Standardization & evaluation of crude drugs
- D) All of the above

Answer:

07. In D.Pharm ER-2020, Pharmacognosy is taught in

- A) Only 2nd year
- B) 1st year as core subject
- C) Only as elective
- D) Not included

Answer:

**08. Which of the following is NOT an objective of Pharmacognosy?**

- A) Identification of drugs
- B) Cultivation of medicinal plants
- C) Design of synthetic polymers
- D) Evaluation of crude drugs

Answer:

09. The study of historical uses of plants in medicine is called

- A) Ethnopharmacology
- B) Pharmacology
- C) Microbiology
- D) Toxicology

Answer:

**10. A pharmacopoeia is**

- A) A textbook of pharmacology
- B) An official book of drug standards
- C) A book of prescriptions
- D) A trade catalogue

Answer:

11. Crude drugs are classified based on

- A) Alphabetical order
- B) Morphological characters
- C) Chemical nature of constituents
- D) All of the above

Answer:

12. When crude drugs are arranged according to their active chemical constituents, it is called

- A) Morphological classification
- B) Taxonomical classification
- C) Chemical classification
- D) Pharmacological classification

Answer:

13. Clove is classified chemically as

- A) Alkaloidal drug
- B) Volatile oil containing drug
- C) Glycosidal drug
- D) Tannin containing drug

Answer:

14. Foxglove (*Digitalis*) is a

- A) Alkaloidal drug
- B) Cardiac glycoside containing drug
- C) Fixed oil drug
- D) Resinous drug

Answer:

**15. Senna is classified morphologically as**

- A) Leaf drug
- B) Root drug
- C) Bark drug
- D) Flower drug

Answer:

16. Cinchona is obtained from

- A) Leaf
- B) Root
- C) Bark
- D) Flower

Answer:

**17. Isabgol is obtained from**

- A) Stem
- B) Fruit and seeds
- C) Root
- D) Bark

Answer:

**18. Plant source of crude drugs belongs to kingdom**

- A) Animalia
- B) Plantae
- C) Monera
- D) Fungi only

Answer:

19. Which of the following is NOT a source of crude drug?

- A) Plant
- B) Animal
- C) Mineral
- D) Laboratory synthetic compound

Answer:

**20. Taxonomical classification is based on**

- A) Organ used
- B) Therapeutic use
- C) Botanical relationship
- D) Alphabetical order

Answer:

**21. The practice of growing and raising medicinal plants is called**

- A) Domestication
- B) Cultivation
- C) Adulteration
- D) Fermentation

Answer:

22. A plant grown in its natural habitat is called

- A) Cultivated
- B) Wild
- C) Adulterated
- D) Standardized

Answer:

23. The main objective of cultivation of medicinal plants is

- A) To increase cost
- B) To ensure uniform quality and yield
- C) To reduce potency
- D) To increase adulteration

Answer:

24. Factor affecting cultivation but NOT directly affecting chemical constituents is

- A) Climate
- B) Soil
- C) Time of collection
- D) Label colour

Answer:

**25. Good agricultural and collection practices (GACP) help in**

- A) Adulterating drugs
- B) Ensuring quality and safety of herbal materials
- C) Increasing synthetic drugs
- D) Making formulations only

Answer:

26. The process of storing crude drugs under suitable conditions is called

- A) Preservation
- B) Collection
- C) Adulteration
- D) Distillation

Answer:

27. Drying of crude drugs is necessary to

- A) Increase moisture
- B) Prevent microbial growth and enzymatic degradation
- C) Decrease stability
- D) Increase weight

Answer:

**28. Shading (shade drying) is preferred for drugs containing**

- A) Starch only
- B) Heat labile constituents like volatile oils
- C) Heavy metals
- D) Mineral drugs

Answer:

29. The time of collection for maximum active constituent is called

- A) Harvesting time
- B) Germination time
- C) Preservation time
- D) Packaging time

Answer:

30. In cultivation, crop rotation is used to

- A) Increase disease
- B) Maintain soil fertility
- C) Decrease yield
- D) Increase weeds

Answer:

**31. Adulteration is**

- A) Intentional or unintentional substitution or addition of inferior material
- B) Standardization
- C) Drying process
- D) Sterilization

Answer:

32. Mixing exhausted clove with genuine clove is an example of

- A) Sophistication
- B) Substitution
- C) Adulteration
- D) Standardization

Answer:

**33. Quality control of crude drugs includes**

- A) Organoleptic evaluation
- B) Microscopic evaluation
- C) Chemical and physical evaluation
- D) All of the above

Answer:

34. Organoleptic evaluation involves

- A) Taste, odour, colour, appearance
- B) Melting point
- C) TLC only
- D) pH only

Answer:

35. Microscopic evaluation is useful to detect

- A) Adulterants
- B) Powdered drugs' characteristic features
- C) Foreign matter
- D) All of the above

Answer:

36. Ash value helps to determine

- A) Volatile oil content
- B) Presence of inorganic matter and impurities
- C) Sugar content
- D) Alkaloid content

Answer:

37. Acid insoluble ash indicates

- A) Presence of siliceous matter like sand
- B) Moisture content
- C) Volatile oil
- D) Tannins

Answer:

**38. Extractive values are used to**

- A) Measure optical rotation
- B) Estimate approximate amount of active constituents soluble in particular solvent
- C) Measure viscosity
- D) Measure density

Answer:

39. Foreign organic matter test detects

- A) Heavy metals
- B) Insects, moulds, other plant parts, etc.
- C) Volatile oils
- D) Alkaloids

Answer:

**40. TLC in Pharmacognosy is primarily used for**

- A) Drying
- B) Fingerprinting and identification of constituents
- C) Sterilization
- D) Taste evaluation

Answer:

41. Secondary metabolites are

- A) Essential for basic growth and metabolism
- B) Not essential for life but important pharmacologically
- C) Always toxic
- D) Always proteins

Answer:

**42. Alkaloids are**

- A) Nitrogen-containing basic organic compounds of plant origin
- B) Carbohydrates
- C) Lipids
- D) Proteins

Answer:

43. Example of an alkaloidal drug is

- A) Senna
- B) Cinchona
- C) Isabgol
- D) Castor oil

Answer:

44. Glycosides are composed of

- A) Sugar + aglycone
- B) Only sugar
- C) Only aglycone
- D) Only protein

Answer:

45. Digitalis contains

- A) Anthraquinone glycosides
- B) Cardiac glycosides
- C) Saponins
- D) Tannins

Answer:

46. Saponins are known for

- A) Bitter taste and haemolytic property
- B) Sweet taste
- C) Sedative action
- D) Colouring action

Answer:

**47. Tannins are**

- A) Sweet substances
- B) Astringent polyphenolic compounds
- C) Sugars
- D) Proteins

Answer:

48. Volatile oils are also called

- A) Fixed oils
- B) Essential oils
- C) Mineral oils
- D) Resin oils

Answer:

**49. Resins are**

- A) Volatile liquids
- B) Solid or semi-solid amorphous products, usually insoluble in water
- C) Sugars
- D) Proteins

Answer:

**50. The solvent used for extraction of volatile oils in Clevenger apparatus is mostly**

- A) Alcohol
- B) Water (steam)
- C) Chloroform
- D) Ether

Answer:

51. Senna leaves contain mainly

- A) Anthraquinone glycosides
- B) Alkaloids
- C) Fixed oils
- D) Tannins only

Answer:

52. Castor oil is obtained from

- A) Leaf
- B) Seed
- C) Root
- D) Bark

Answer:

**53. Aloe is obtained from**

- A) Dried latex of leaves
- B) Seeds
- C) Bark
- D) Wood

Answer:

54. Liquorice (Glycyrrhiza) is a

- A) Root and stolon drug
- B) Leaf drug
- C) Bark drug
- D) Flower drug

Answer:

**55. Clove is the**

- A) Dried flower buds
- B) Dried bark
- C) Dried leaf
- D) Dried fruit

Answer:

56. Cinnamon is obtained from

- A) Root
- B) Leaf
- C) Bark
- D) Fruit

Answer:

57. Isabgol acts as

- A) Stimulant laxative
- B) Bulk forming laxative
- C) Purgative by irritation
- D) Anti-emetic

Answer:

**58. Clove oil contains mainly**

- A) Menthol
- B) Eugenol
- C) Thymol
- D) Citral

Answer:

59. Opium is obtained from

- A) Papaver somniferum unripe capsules
- B) Seeds
- C) Roots
- D) Leaves

Answer:

60. Rauwolfia serpentina contains

- A) Reserpine alkaloids
- B) Anthraquinone glycosides
- C) Cardiac glycosides
- D) Volatile oils

Answer:

61. Extraction in Pharmacognosy is

- A) Distillation of water
- B) Separation of medicinally active portions of crude drugs using suitable solvents
- C) Only filtration
- D) Only drying

Answer:

62. Menstruum is

- A) Insoluble residue
- B) Solvent used for extraction
- C) Concentrated extract
- D) Powdered drug

Answer:

**63. Marc refers to**

- A) Solvent
- B) Filter paper
- C) Insoluble plant residue left after extraction
- D) Volatile oil

Answer:

64. Maceration is

- A) Passing solvent continuously through drug
- B) Soaking drug in solvent for a period with occasional shaking
- C) Distillation
- D) Sublimation

Answer:

65. Percolation is

- A) Simple soaking
- B) Continuous flow of solvent through packed drug material in a column
- C) Drying
- D) Steam distillation only

Answer:

**66. Soxhlet extraction is an example of**

- A) Continuous hot extraction
- B) Maceration
- C) Percolation
- D) Mechanical expression

Answer:

67. The process of concentrating the extract under reduced pressure is

- A) Filtration
- B) Vacuum evaporation
- C) Sublimation
- D) Sedimentation

Answer:

68. A tincture is

- A) Aqueous extract
- B) Hydroalcoholic solution of crude drug
- C) Fixed oil
- D) Resin

Answer:

**69. An infusion is prepared by**

- A) Boiling for long time
- B) Pouring hot or cold water on crude drug and steeping
- C) Autoclaving
- D) Dry heat

Answer:

70. A decoction is obtained by

- A) Boiling crude drug in water for a specified time
- B) Dissolving in alcohol
- C) Maceration in oil
- D) Steam distillation

Answer:

**71. Powder microscopy is useful for**

- A) Tablets only
- B) Identifying powdered crude drugs and detecting adulterants
- C) Measuring viscosity
- D) Measuring density

Answer:

72. Stomata, trichomes, vessels, and starch grains are studied in

- A) Organoleptic evaluation
- B) Microscopic evaluation
- C) Chemical tests only
- D) TLC only

Answer:

73. Lignified tissues in microscopy give colour with

- A) Iodine solution
- B) Phloroglucinol + HCl
- C) Ferric chloride
- D) Molisch reagent

Answer:

74. Starch grains give blue colour with

- A) Iodine
- B) Picric acid
- C) Ferric chloride
- D) Ninhydrin

Answer:

75. Calcium oxalate crystals can be identified microscopically by

- A) Their birefringence and shape
- B) Odour
- C) Taste
- D) Solubility in oil

Answer:

76. Standardization of herbal drugs means

- A) Only botanical identification
- B) Establishing consistent quality and purity by various parameters
- C) Only packaging
- D) Only marketing

Answer:

77. WHO guidelines emphasize

- A) Quality, safety and efficacy of herbal medicines
- B) Only colour and taste
- C) Only low cost
- D) Only synthetic drugs

Answer:

**78. Stability testing of herbal formulations is important to determine**

- A) Taste only
- B) Shelf life and storage conditions
- C) Only weight
- D) Only pH

Answer:

79. Marker compounds in herbal standardization are

- A) Inert fillers
- B) Chemical constituents used as reference for quality control
- C) Packaging materials
- D) Only preservatives

Answer:

**80. Pharmacopoeial standards for crude drugs include**

- A) Ash values
- B) Extractive values
- C) Foreign matter limits
- D) All of the above

Answer:

81. The Indian Herbal Pharmacopoeia is

- A) Official book of synthetic drugs
- B) Standards for selected medicinal plants used in India
- C) Book of homeopathic medicines only
- D) Only cosmetics

Answer:

82. Ayurveda is an example of

- A) Allopathic system
- B) Traditional Indian system using many crude drugs
- C) Veterinary only
- D) Homeopathy

Answer:

83. Homeopathy mainly uses

- A) Highly diluted preparations from plant/animal/mineral sources
- B) Only antibiotics
- C) Only vitamins
- D) Only hormones

Answer:

**84. Crude drugs of marine origin are obtained from**

- A) Trees
- B) Sea organisms like algae, sponges
- C) Birds
- D) Reptiles only

Answer:

85. A “galenical” preparation is

- A) Synthetic chemical only
- B) Preparation obtained from plants using suitable menstrua
- C) Only tablet
- D) Only injection

Answer:

86. The active principle of Belladonna is

- A) Atropine
- B) Reserpine
- C) Digoxin
- D) Quinine

Answer:

87. The main use of Isabgol is

- A) Antipyretic
- B) Hypnotic
- C) Laxative
- D) Analgesic

Answer:

**88. Clove is used mainly as**

- A) Sedative
- B) Local analgesic and carminative
- C) Antidiabetic
- D) Hypnotic

Answer:

89. Turmeric contains

- A) Curcumin
- B) Atropine
- C) Reserpine
- D) Digoxin

Answer:

90. The main active constituent of ginger is

- A) Eugenol
- B) Gingerols
- C) Menthol
- D) Thymol

Answer:

91. Adulteration by substitution with different species is called

- A) Inorganic adulteration
- B) Substitution adulteration
- C) Organoleptic adulteration
- D) Sophistication

Answer:

92. An example of animal source crude drug is

- A) Honey
- B) Senna
- C) Clove
- D) Cinnamon

Answer:

93. Bentonite and kaolin are examples of

- A) Plant drugs
- B) Animal drugs
- C) Mineral drugs
- D) Marine drugs

Answer:

94. "Crude fibre" test is related to

- A) Protein content
- B) Cellulose and lignin content
- C) Mineral content
- D) Alkaloid content

Answer:

95. "Moisture content" in crude drug is determined to prevent

- A) Loss of colour only
- B) Microbial growth and deterioration
- C) Taste change only
- D) Odour only

Answer:

96. WHO stands for

- A) World Herb Organization
- B) World Health Organization
- C) World Hospital Organization
- D) World Hygiene Office

Answer:

97. The process of adding defined amount of marker/standard to adjust potency is

- A) Adulteration
- B) Standardization/adjustment
- C) Contamination
- D) Degradation

Answer:

98. In Pharmacognosy, "purity" of crude drug refers to

- A) Only absence of microbes
- B) Freedom from foreign matter, adulterants and excessive contaminants
- C) Only good colour
- D) Only good taste

Answer:

99. A fixed oil differs from volatile oil in that fixed oils

- A) Are non-greasy
- B) Do not evaporate on warming and leave permanent stain
- C) Are very volatile
- D) Have strong odour only

Answer:

100. The ultimate aim of studying Pharmacognosy in D.Pharm is to

- A) Manufacture synthetic drugs
- B) Enable identification, evaluation, and proper use of natural drugs
- C) Learn surgery
- D) Learn only microbiology

Answer:

# **Human Anatomy & Physiology**

**1. The study of the structure of the body and its parts is called:**

- A) Physiology
- B) Anatomy
- C) Histology
- D) Pathology

**Answer:**

**2. The study of the function of the body and its parts is called:**

- A) Anatomy
- B) Physiology
- C) Cytology
- D) Embryology

**Answer:**

**3. The basic structural and functional unit of the human body is:**

- A) Tissue
- B) Organ
- C) Cell
- D) System

**Answer:**

**4. The term "homeostasis" refers to:**

- A) Disease state
- B) Maintenance of a stable internal environment
- C) Body temperature only
- D) Blood pressure only

**Answer:**

**5. Which cavity contains the brain?**

- A) Thoracic cavity
- B) Abdominal cavity
- C) Cranial cavity
- D) Pelvic cavity

**Answer:**

**6. The control center of the cell is the:**

- A) Mitochondria
- B) Nucleus
- C) Ribosome
- D) Cytoplasm

**Answer:**

**7. The powerhouses of the cell that produce ATP are:**

- A) Ribosomes
- B) Lysosomes
- C) Mitochondria
- D) Golgi apparatus

**Answer:**

**8. Which organelle is responsible for protein synthesis?**

- A) Smooth ER
- B) Ribosomes
- C) Lysosomes
- D) Nucleolus

**Answer:**

**9. The cell membrane is primarily composed of:**

- A) Proteins only
- B) Lipids only
- C) Phospholipid bilayer and proteins
- D) Carbohydrates only

**Answer:**

**10. The process by which cells engulf large particles is called:**

- A) Pinocytosis
- B) Phagocytosis
- C) Exocytosis
- D) Diffusion

**Answer:**

**11. Which organelle contains digestive enzymes to break down waste?**

- A) Peroxisome
- B) Lysosome
- C) Nucleus
- D) Endoplasmic reticulum

**Answer:**

**12. The fluid inside the cell is called:**

- A) Plasma
- B) Interstitial fluid
- C) Intracellular fluid
- D) Lymph

**Answer:**

**13. The tissue that covers body surfaces and lines cavities is:**

- A) Connective tissue
- B) Epithelial tissue
- C) Muscle tissue
- D) Nervous tissue

**Answer:**

**14. Which type of epithelial tissue is found in the skin?**

- A) Simple squamous
- B) Stratified squamous
- C) Simple cuboidal
- D) Columnar

**Answer:**

**15. The tissue that connects, supports, and protects body organs is:**

- A) Epithelial tissue
- B) Muscle tissue
- C) Connective tissue
- D) Nervous tissue

**Answer:**

**16. Blood is a type of:**

- A) Epithelial tissue
- B) Connective tissue
- C) Muscle tissue
- D) Nervous tissue

**Answer:**

**17. Which muscle tissue is striated and voluntary?**

- A) Cardiac muscle
- B) Smooth muscle
- C) Skeletal muscle
- D) All of the above

**Answer:**

**18. Cardiac muscle is found only in the:**

- A) Lungs
- B) Heart
- C) Intestine
- D) Blood vessels

**Answer:**

**19. Neurons are the functional units of:**

- A) Muscle tissue
- B) Connective tissue
- C) Nervous tissue
- D) Epithelial tissue

**Answer:**

**20. The tissue that lines blood vessels and is involved in diffusion is:**

- A) Simple squamous epithelium
- B) Stratified squamous epithelium
- C) Cuboidal epithelium
- D) Columnar epithelium

**Answer:**

**21. The adult human skeleton consists of approximately how many bones?**

- A) 206
- B) 208
- C) 210
- D) 200

**Answer:**

**22. The longest bone in the human body is the:**

- A) Tibia
- B) Fibula
- C) Femur
- D) Humerus

**Answer:**

**23. The smallest bone in the human body is found in the:**

- A) Hand
- B) Foot
- C) Ear
- D) Nose

**Answer:**

**24. Which part of the vertebral column is also known as the neck bones?**

- A) Lumbar vertebrae
- B) Thoracic vertebrae
- C) Cervical vertebrae
- D) Sacrum

**Answer:**

**25. The rib cage is part of the:**

- A) Axial skeleton
- B) Appendicular skeleton
- C) Both A and B
- D) None of the above

**Answer:**

**26. Which bone protects the brain?**

- A) Sternum
- B) Skull
- C) Pelvis
- D) Ribs

**Answer:**

**27. The joint that allows free movement in all directions (e.g., shoulder) is called:**

- A) Hinge joint
- B) Pivot joint
- C) Ball and socket joint
- D) Gliding joint

**Answer:**

**28. The knee joint is an example of a:**

- A) Hinge joint
- B) Ball and socket joint
- C) Pivot joint
- D) Saddle joint

**Answer:**

**29. The patella is also known as the:**

- A) Shin bone
- B) Thigh bone
- C) Knee cap
- D) Collar bone

**Answer:**

**30. Which of the following is not a part of the appendicular skeleton?**

- A) Clavicle
- B) Scapula
- C) Humerus
- D) Sternum

**Answer:**

**31. The contractile unit of a muscle fiber is called:**

- A) Sarcolemma
- B) Sarcoplasm
- C) Sarcomere
- D) Myofibril

**Answer:**

**32. Which protein is primarily responsible for muscle contraction?**

- A) Collagen
- B) Elastin
- C) Actin and Myosin
- D) Keratin

**Answer:**

**33. The muscle that opposes the action of a prime mover is called:**

- A) Agonist
- B) Antagonist
- C) Synergist
- D) Fixator

**Answer:**

**34. Which of the following is an involuntary muscle?**

- A) Skeletal muscle
- B) Cardiac muscle
- C) Smooth muscle
- D) Both B and C

**Answer:**

**35. The diaphragm is a muscle involved in:**

- A) Digestion
- B) Breathing
- C) Locomotion
- D) Blood circulation

**Answer:**

**36. Rigor mortis after death is due to:**

- A) Lack of ATP
- B) Excess ATP
- C) Lack of calcium
- D) Excess calcium

**Answer:**

**37. The point of attachment of a muscle to a stationary bone is called:**

- A) Insertion
- B) Origin
- C) Belly
- D) Tendon

**Answer:**

**38. A tendon connects:**

- A) Muscle to bone
- B) Bone to bone
- C) Muscle to muscle
- D) Nerve to muscle

**Answer:**

**39. The basic functional unit of the nervous system is the:**

- A) Neuron
- B) Neuroglia
- C) Axon
- D) Dendrite

**Answer:**

**40. The part of the neuron that carries impulses away from the cell body is:**

- A) Dendrite
- B) Axon
- C) Synapse
- D) Myelin sheath

**Answer:**

**41. The gap between two neurons is called:**

- A) Node of Ranvier
- B) Synaptic cleft
- C) Axon hillock
- D) Myelin gap

**Answer:**

**42. Which part of the brain is responsible for balance and coordination?**

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

**Answer:**

**43. The vital centers (heartbeat, breathing) are located in the:**

- A) Cerebrum
- B) Cerebellum
- C) Medulla oblongata
- D) Thalamus

**Answer:**

**44. The largest part of the brain is the:**

- A) Cerebellum
- B) Brainstem
- C) Cerebrum
- D) Hypothalamus

**Answer:**

**45. The autonomic nervous system controls:**

- A) Voluntary movements
- B) Involuntary functions (e.g., heart rate, digestion)
- C) Skeletal muscle contraction
- D) Sensation

**Answer:**

**46. The sympathetic nervous system is associated with:**

- A) Rest and digest
- B) Fight or flight response
- C) Voluntary movement
- D) Sleep

**Answer:**

**47. The meninges that directly cover the brain and spinal cord is the:**

- A) Dura mater
- B) Arachnoid mater
- C) Pia mater
- D) Subarachnoid space

**Answer:**

**48. The longest nerve in the human body is the:**

- A) Vagus nerve
- B) Sciatic nerve
- C) Optic nerve
- D) Trigeminal nerve

**Answer:**

**49. The human heart has how many chambers?**

- A) 2
- B) 3
- C) 4
- D) 5

**Answer:**

**50. The chamber of the heart that pumps blood to the lungs is the:**

- A) Right atrium
- B) Right ventricle
- C) Left atrium
- D) Left ventricle

**Answer:**

**51. The valve between the left atrium and left ventricle is the:**

- A) Tricuspid valve
- B) Mitral (bicuspid) valve
- C) Aortic valve
- D) Pulmonary valve

**Answer:**

**52. The largest artery in the body is the:**

- A) Pulmonary artery
- B) Carotid artery
- C) Aorta
- D) Femoral artery

**Answer:**

**53. The normal resting heart rate for an adult is approximately:**

- A) 40-50 bpm
- B) 60-100 bpm
- C) 100-120 bpm
- D) 120-140 bpm

**Answer:**

**54. Blood pressure is measured in:**

- A) mm Hg
- B) cm H<sub>2</sub>O
- C) Pascals
- D) Atmospheres

**Answer:**

**55. The normal systolic blood pressure is approximately:**

- A) 60 mm Hg
- B) 80 mm Hg
- C) 120 mm Hg
- D) 200 mm Hg

**Answer:**

**56. The blood vessel that carries deoxygenated blood away from the heart is:**

- A) Pulmonary vein
- B) Pulmonary artery
- C) Aorta
- D) Vena cava

**Answer:**

**57. The sinoatrial (SA) node is known as the:**

- A) Pacemaker of the heart
- B) Conduction pathway
- C) Valve
- D) Septum

**Answer:**

**58. The liquid portion of blood is called:**

- A) Serum
- B) Plasma
- C) Lymph
- D) Cytosol

**Answer:**

**59. Which blood cells are responsible for oxygen transport?**

- A) White blood cells
- B) Platelets
- C) Red blood cells (Erythrocytes)
- D) Plasma cells

**Answer:**

**60. Hemoglobin contains which mineral?**

- A) Iron
- B) Copper
- C) Zinc
- D) Magnesium

**Answer:**

**61. White blood cells (leukocytes) function primarily in:**

- A) Oxygen transport
- B) Immunity and defense
- C) Blood clotting
- D) Nutrient transport

**Answer:**

**62. Platelets (thrombocytes) are essential for:**

- A) Fighting infection
- B) Blood clotting
- C) Carrying oxygen
- D) Producing antibodies

**Answer:**

**63. The blood group known as the universal donor is:**

- A) A
- B) B
- C) AB
- D) O

**Answer:**

**64. The universal recipient blood group is:**

- A) A
- B) B
- C) AB
- D) O

**Answer:**

**65. The main organ of the respiratory system is the:**

- A) Nose
- B) Trachea
- C) Lungs
- D) Diaphragm

**Answer:**

**66. The flap that covers the trachea during swallowing is the:**

- A) Epiglottis
- B) Glottis
- C) Uvula
- D) Pharynx

**Answer:**

**67. The air sacs where gas exchange occurs are called:**

- A) Bronchi
- B) Bronchioles
- C) Alveoli
- D) Pleura

**Answer:**

**68. The diaphragm contracts during:**

- A) Exhalation
- B) Inhalation
- C) Both
- D) Neither

**Answer:**

**69. The volume of air inhaled and exhaled during normal breathing is called:**

- A) Vital capacity
- B) Tidal volume
- C) Residual volume
- D) Total lung capacity

**Answer:**

**70. The pigment responsible for carrying oxygen in the blood is:**

- A) Myoglobin
- B) Hemoglobin
- C) Cytochrome
- D) Melanin

**Answer:**

**71. Which gas is primarily exhaled during respiration?**

- A) Oxygen
- B) Nitrogen
- C) Carbon dioxide
- D) Hydrogen

**Answer:**

**72. The respiratory center is located in the:**

- A) Cerebrum
- B) Cerebellum
- C) Medulla oblongata
- D) Thalamus

**Answer:**

**73. The process of breaking down food into absorbable nutrients is called:**

- A) Digestion
- B) Absorption
- C) Assimilation
- D) Egestion

**Answer:**

**74. The enzyme in saliva that breaks down starch is:**

- A) Pepsin
- B) Trypsin
- C) Amylase
- D) Lipase

**Answer:**

**75. The stomach secretes hydrochloric acid and which enzyme?**

- A) Amylase
- B) Pepsin
- C) Trypsin
- D) Lipase

**Answer:**

**76. The finger-like projections in the small intestine that increase surface area for absorption are called:**

- A) Villi
- B) Microvilli
- C) Crypts
- D) Papillae

**Answer:**

**77. The largest gland in the human body is the:**

- A) Pancreas
- B) Thyroid
- C) Liver
- D) Salivary gland

**Answer:**

**78. The liver produces which digestive juice?**

- A) Bile
- B) Pancreatic juice
- C) Gastric juice
- D) Intestinal juice

**Answer:**

**79. Bile is stored in the:**

- A) Liver
- B) Gallbladder
- C) Pancreas
- D) Stomach

**Answer:**

**80. The function of the pancreas includes:**

- A) Producing insulin
- B) Producing digestive enzymes
- C) Both A and B
- D) Producing bile

**Answer:**

**81. Which part of the digestive system absorbs water and forms feces?**

- A) Small intestine
- B) Large intestine (colon)
- C) Stomach
- D) Esophagus

**Answer:**

**82. The appendix is attached to which part of the digestive tract?**

- A) Stomach
- B) Small intestine
- C) Large intestine (cecum)
- D) Rectum

**Answer:**

**83. The functional unit of the kidney is the:**

- A) Nephron
- B) Glomerulus
- C) Bowman's capsule
- D) Ureter

**Answer:**

**84. The process of filtration in the kidney occurs in the:**

- A) Loop of Henle
- B) Collecting duct
- C) Glomerulus
- D) Renal pelvis

**Answer:**

**85. The tube that carries urine from the kidney to the bladder is the:**

- A) Urethra
- B) Ureter
- C) Renal tubule
- D) Collecting duct

**Answer:**

**86. The waste product excreted in urine is primarily:**

- A) Uric acid
- B) Ammonia
- C) Urea
- D) Creatinine

**Answer:**

**87. The normal pH of urine is approximately:**

- A) 7.0
- B) 6.0 (range 4.5-8.0)
- C) 8.5
- D) 9.0

**Answer:**

**88. ADH (antidiuretic hormone) regulates:**

- A) Blood sugar
- B) Water reabsorption in kidneys
- C) Heart rate
- D) Blood pressure only

**Answer:**

**89. The term "micturition" means:**

- A) Filtration
- B) Reabsorption
- C) Urination
- D) Secretion

**Answer:**

**90. Which organ is not part of the urinary system?**

- A) Kidney
- B) Ureter
- C) Urethra
- D) Liver

**Answer:**

**91. The master gland of the endocrine system is the:**

- A) Thyroid
- B) Adrenal
- C) Pituitary
- D) Pancreas

**Answer:**

**92. Insulin is secreted by the:**

- A) Liver
- B) Pancreas (beta cells of islets of Langerhans)
- C) Adrenal gland
- D) Thyroid gland

**Answer:**

**93. The hormone that increases blood sugar level is:**

- A) Insulin
- B) Glucagon
- C) Thyroxine
- D) Cortisol

**Answer:**

**94. The thyroid gland produces:**

- A) Thyroxine (T4) and triiodothyronine (T3)
- B) Adrenaline
- C) Cortisol
- D) Estrogen

**Answer:**

**95. Goiter is caused by deficiency of:**

- A) Iron
- B) Iodine
- C) Calcium
- D) Vitamin D

**Answer:**

**96. Adrenaline (epinephrine) is produced by the:**

- A) Pituitary
- B) Thyroid
- C) Adrenal medulla
- D) Adrenal cortex

**Answer:**

**97. Cortisol is produced by the:**

- A) Adrenal medulla
- B) Adrenal cortex
- C) Pancreas
- D) Thyroid

**Answer:**

**98. The hormone melatonin is secreted by the:**

- A) Pineal gland
- B) Thymus
- C) Hypothalamus
- D) Parathyroid

**Answer:**

**99. Which hormone regulates calcium levels in the blood?**

- A) Insulin
- B) Parathyroid hormone (PTH)
- C) Thyroxine
- D) Adrenaline

**Answer:**

**100. Growth hormone (GH) is secreted by the:**

- A) Thyroid
- B) Adrenal
- C) Anterior pituitary
- D) Posterior pituitary

**Answer:**

# **Social Pharmacy**

**1. The term "Social Pharmacy" primarily deals with:**

- A) The chemical synthesis of drugs
- B) The social, cultural, and economic aspects of healthcare and medicine use
- C) The manufacturing of pharmaceutical dosage forms
- D) The anatomy of the human body

**Answer:**

**2. WHO defined health as a state of complete physical, mental, and social well-being in:**

- A) 1946
- B) 1948
- C) 1950
- D) 1965

**Answer:**

**3. Which of the following is a key determinant of health identified by WHO?**

- A) Income and social status
- B) Education
- C) Physical environment
- D) All of the above

**Answer:**

**4. The term "morbidity" refers to:**

- A) Death rate in a population
- B) Disease rate in a population
- C) Birth rate in a population
- D) Migration rate

**Answer:**

**5. "Crude death rate" is defined as:**

- A) Number of deaths due to a specific disease per 1000 population
- B) Number of deaths per 1000 population per year
- C) Number of infant deaths per 1000 live births
- D) Number of maternal deaths per 1000 deliveries

**Answer:**

**6. A "pandemic" refers to:**

- A) A disease that occurs occasionally in a region
- B) A disease that is constantly present in a population
- C) An epidemic that spreads across continents or worldwide
- D) A disease outbreak confined to a small area

**Answer:**

**7. Which of the following is a "socio-economic indicator" of health?**

- A) Literacy rate
- B) Infant mortality rate
- C) Life expectancy
- D) Crude birth rate

**Answer:**

**8. The first National Health Policy in India was declared in:**

- A) 1947
- B) 1950
- C) 1983
- D) 2000

**Answer:**

**9. The Millennium Development Goals (MDGs) were adopted by the United Nations in:**

- A) 1990
- B) 1995
- C) 2000
- D) 2005

**Answer:**

**10. Which of the following is NOT a dimension of health?**

- A) Physical health
- B) Mental health
- C) Social health
- D) Economic health

**Answer:**

**11. The FIP Development Goals are related to:**

- A) Pharmaceutical workforce development
- B) Agricultural development
- C) Industrial growth
- D) Information technology

**Answer:**

**12. Social health is defined as:**

- A) Absence of disease
- B) State of balance between the individual and the surrounding world
- C) High income and social status
- D) Genetic superiority

**Answer:**

**13. The WHO identified how many determinants of health?**

- A) 6
- B) 8
- C) 10
- D) 12

**Answer:**

**14. Mental health is a connecting link between:**

- A) Physiology and psychology
- B) Sociology and economics
- C) Anatomy and physiology
- D) Chemistry and biology

**Answer:**

**15. Which of the following is a temporary method of family planning?**

- A) Tubectomy
- B) Vasectomy
- C) Oral contraceptive pills
- D) Hysterectomy

**Answer:**

**16. The ideal gap between two children for maternal and child health is:**

- A) 1 year
- B) 2 years
- C) 3 years
- D) 5 years

**Answer:**

**17. Which of the following is NOT a barrier method of contraception?**

- A) Condom
- B) Diaphragm
- C) Cervical cap
- D) Copper-T (IUD)

**Answer:**

**18. The full form of IUD is:**

- A) Intra Uterine Device
- B) Inter Uterine Device
- C) Intra Urinary Device
- D) Inter Urinary Device

**Answer:**

**19. Which of the following is a permanent method of family planning for males?**

- A) Tubectomy
- B) Vasectomy
- C) Hysterectomy
- D) Laparoscopy

**Answer:**

**20. The National Family Planning Programme was launched in India in:**

- A) 1947
- B) 1952
- C) 1960
- D) 1975

**Answer:**

**21. Breastfeeding should be initiated within how many hours after birth for optimal benefits?**

- A) Within 1 hour
- B) Within 6 hours
- C) Within 12 hours
- D) Within 24 hours

**Answer:**

**22. Exclusive breastfeeding is recommended for the first:**

- A) 2 months
- B) 4 months
- C) 6 months
- D) 12 months

**Answer:**

**23. Which of the following is an ill effect of bottle feeding?**

- A) Increased risk of infections
- B) Higher cost
- C) Lack of antibodies
- D) All of the above

**Answer:**

**24. The term "demography" refers to the study of:**

- A) Human population statistics
- B) Drug formulations
- C) Disease patterns
- D) Environmental pollution

**Answer:**

**25. Maternal mortality rate (MMR) is defined as:**

- A) Number of maternal deaths per 1000 live births
- B) Number of maternal deaths per 100,000 live births
- C) Number of infant deaths per 1000 live births
- D) Number of deaths per 1000 population

**Answer:**

**26. Which of the following vaccines is NOT included in the Universal Immunization Programme (UIP) of India?**

- A) BCG
- B) OPV
- C) Hepatitis B
- D) HPV

**Answer:**

**27. The "Mission Indradhanush" is a health mission related to:**

- A) Family planning
- B) Universal immunization
- C) Maternal health
- D) Child nutrition

**Answer:**

**28. Which of the following is a sign of dehydration in a child with diarrhea?**

- A) Sunken eyes
- B) Decreased urine output
- C) Dry mouth
- D) All of the above

**Answer:**

**29. ORS stands for:**

- A) Oral Rehydration Solution
- B) Oral Replacement Solution
- C) Oral Rehydration Salt
- D) Oral Replacement Salt

**Answer:**

**30. Zinc supplementation during diarrhea helps to:**

- A) Reduce the duration and severity of diarrhea
- B) Increase appetite
- C) Prevent vomiting
- D) Cure bacterial infection

**Answer:**

**31. Macronutrients include:**

- A) Carbohydrates, proteins, and fats
- B) Vitamins and minerals
- C) Water and fiber
- D) All of the above

**Answer:**

**32. Micronutrients include:**

- A) Carbohydrates and proteins
- B) Fats and water
- C) Vitamins and minerals
- D) Fiber and carbohydrates

**Answer:**

**33. Which vitamin deficiency causes night blindness?**

- A) Vitamin A
- B) Vitamin B1
- C) Vitamin C
- D) Vitamin D

**Answer:**

**34. Scurvy is caused by a deficiency of:**

- A) Vitamin A
- B) Vitamin B12
- C) Vitamin C
- D) Vitamin D

**Answer:**

**35. Rickets in children is caused by a deficiency of:**

- A) Calcium
- B) Vitamin D
- C) Phosphorus
- D) All of the above

**Answer:**

**36. Beri-beri is caused by a deficiency of:**

- A) Vitamin B1 (Thiamine)
- B) Vitamin B2 (Riboflavin)
- C) Vitamin B3 (Niacin)
- D) Vitamin B12

**Answer:**

**37. Pellagra is caused by a deficiency of:**

- A) Vitamin B1
- B) Vitamin B2
- C) Vitamin B3 (Niacin)
- D) Vitamin B6

**Answer:**

**38. Pernicious anemia is caused by a deficiency of:**

- A) Iron
- B) Folic acid
- C) Vitamin B12
- D) Vitamin B6

**Answer:**

**39. Iron deficiency leads to:**

- A) Megaloblastic anemia
- B) Microcytic hypochromic anemia
- C) Hemolytic anemia
- D) Aplastic anemia

**Answer:**

**40. Goiter is caused by a deficiency of:**

- A) Iron
- B) Iodine
- C) Calcium
- D) Zinc

**Answer:**

**41. A balanced diet contains:**

- A) All nutrients in adequate amounts
- B) Only carbohydrates and proteins
- C) Only vitamins and minerals
- D) Only fats and water

**Answer:**

**42. Which of the following is a rich source of omega-3 fatty acids?**

- A) Rice
- B) Fish oil
- C) Wheat
- D) Sugarcane

**Answer:**

**43. Junk foods are characterized by:**

- A) High calorie and low nutritional value
- B) Low calorie and high nutritional value
- C) High fiber content
- D) High protein content

**Answer:**

**44. Food fortification refers to:**

- A) Adding artificial colors to food
- B) Adding essential micronutrients to food
- C) Preserving food with chemicals
- D) Genetically modifying food

**Answer:**

**45. Which of the following is an example of food adulteration?**

- A) Adding water to milk
- B) Adding stones to grains
- C) Mixing vegetable oil in ghee
- D) All of the above

**Answer:**

**46. Genetically Modified (GM) foods are produced by:**

- A) Cross-breeding plants
- B) Altering the genetic material using biotechnology
- C) Using organic fertilizers
- D) Growing crops in greenhouses

**Answer:**

**47. Which of the following is a nutraceutical?**

- A) Paracetamol
- B) Amoxicillin
- C) Omega-3 fatty acid supplement
- D) Aspirin

**Answer:**

**48. Dietary supplements are used to:**

- A) Replace meals entirely
- B) Provide nutrients that may be insufficient in the diet
- C) Cure diseases
- D) Increase body weight only

**Answer:**

**49. Which of the following is a drug-food interaction?**

- A) Tetracycline with milk decreases absorption
- B) Grapefruit juice increases statin levels
- C) Warfarin with vitamin K-rich foods affects anticoagulation
- D) All of the above

**Answer**

**50. Which of the following is a waterborne disease?**

- A) Malaria
- B) Cholera
- C) Dengue
- D) Tuberculosis

**Answer:**

**51. Cholera is caused by:**

- A) Virus
- B) Bacteria (*Vibrio cholerae*)
- C) Protozoa
- D) Fungus

**Answer:**

**52. Which of the following is an air pollutant that causes respiratory diseases?**

- A) Particulate matter (PM<sub>2.5</sub>, PM<sub>10</sub>)
- B) Carbon monoxide
- C) Sulfur dioxide
- D) All of the above

**Answer:**

**53. Noise pollution can lead to:**

- A) Hearing loss
- B) Hypertension
- C) Sleep disturbances
- D) All of the above

**Answer:**

**54. The safe source of drinking water should be free from:**

- A) Pathogens
- B) Toxic chemicals
- C) Turbidity
- D) All of the above

**Answer:**

**55. The process of making water safe for drinking by adding chlorine is called:**

- A) Filtration
- B) Sedimentation
- C) Chlorination
- D) Boiling

**Answer:**

**56. Which of the following is an occupational lung disease?**

- A) Silicosis
- B) Asthma
- C) Bronchitis
- D) Pneumonia

**Answer:**

**57. Solid waste disposal by burning at high temperatures is called:**

- A) Landfill
- B) Composting
- C) Incineration
- D) Recycling

**Answer:**

**58. The presence of pharmaceutical residues in the environment is mainly due to:**

- A) Improper disposal of unused medicines
- B) Excretion of drugs by humans and animals
- C) Industrial effluents
- D) All of the above

**Answer:**

**59. Which disease is transmitted by the bite of an infected female Anopheles mosquito?**

- A) Dengue
- B) Malaria
- C) Chikungunya
- D) Japanese encephalitis

**Answer:**

**60. The vector responsible for transmitting Dengue and Chikungunya is:**

- A) Anopheles mosquito
- B) Culex mosquito
- C) Aedes mosquito
- D) Sandfly

**Answer:**

**61. Which of the following is a water purification method at the household level?**

- A) Boiling
- B) Chlorination
- C) Filtration through cloth
- D) All of the above

**Answer:**

**62. The term "epidemiology" is the study of:**

- A) Drug manufacturing
- B) Distribution and determinants of health-related states in populations
- C) Plant taxonomy
- D) Chemical reactions

**Answer:**

**63. An "epidemic" refers to:**

- A) A disease that is constantly present in a population
- B) A sudden outbreak of a disease in a specific population and area
- C) A disease that affects animals only
- D) A disease that has been eradicated

**Answer:**

**64. "Quarantine" refers to:**

- A) Complete isolation of a patient
- B) Restriction of movement of healthy individuals who may have been exposed to a disease
- C) Vaccination of a community
- D) Disinfection of contaminated areas

**Answer:**

**65. "Isolation" refers to:**

- A) Separation of healthy individuals from the community
- B) Separation of an infected person from healthy individuals
- C) Vaccination of the entire population
- D) Distribution of medicines

**Answer:**

**66. The "incubation period" of a disease is:**

- A) The time between exposure to the pathogen and the appearance of symptoms
- B) The time during which the disease is most contagious
- C) The duration of the illness
- D) The time taken to recover from the disease

**Answer:**

**67. Tuberculosis is caused by:**

- A) Virus
- B) Bacteria (*Mycobacterium tuberculosis*)
- C) Fungus
- D) Parasite

**Answer:**

**68. The Bacillus Calmette-Guérin (BCG) vaccine provides protection against:**

- A) Polio
- B) Tuberculosis
- C) Measles
- D) Tetanus

**Answer:**

**69. Which of the following is a viral disease?**

- A) Cholera
- B) Typhoid
- C) Measles
- D) Tetanus

**Answer:**

**70. Poliomyelitis is caused by:**

- A) Bacteria
- B) Virus
- C) Protozoa
- D) Fungus

**Answer:**

**71. The oral polio vaccine (OPV) contains:**

- A) Inactivated (killed) virus
- B) Live attenuated virus
- C) Toxoid
- D) Recombinant protein

**Answer:**

**72. Which of the following is a bacterial sexually transmitted infection (STI)?**

- A) HIV/AIDS
- B) Herpes simplex
- C) Syphilis
- D) Hepatitis B

**Answer:**

**73. COVID-19 is caused by:**

- A) SARS-CoV-2 virus
- B) Influenza virus
- C) Rhinovirus
- D) Adenovirus

**Answer:**

**74. The DOTS strategy is used for the control of:**

- A) Malaria
- B) Tuberculosis
- C) HIV/AIDS
- D) Leprosy

**Answer:**

**75. Which of the following is a vector-borne disease?**

- A) Typhoid
- B) Cholera
- C) Malaria
- D) Hepatitis A

**Answer:**

**76. Active immunity is acquired by:**

- A) Vaccination or natural infection
- B) Receiving pre-formed antibodies
- C) Breastfeeding
- D) Administration of antiserum

**Answer:**

**77. Passive immunity is acquired by:**

- A) Vaccination
- B) Natural infection
- C) Receiving antibodies from an external source (e.g., mother to fetus, antiserum)
- D) Both A and B

**Answer:**

**78. A "vaccine" is a biological preparation that provides:**

- A) Passive immunity
- B) Active acquired immunity
- C) Innate immunity
- D) Herd immunity only

**Answer:**

**79. Herd immunity refers to:**

- A) Immunity developed by a single individual
- B) Resistance to the spread of a contagious disease within a population due to a high proportion of immune individuals
- C) Immunity acquired by vaccination only
- D) Immunity acquired by natural infection only

**Answer:**

**80. The Expanded Programme on Immunization (EPI) was launched by WHO in:**

- A) 1960
- B) 1974
- C) 1985
- D) 1990

**Answer:**

**81. Which of the following vaccines is given at birth in the Universal Immunization Programme (UIP) of India?**

- A) BCG
- B) OPV (zero dose)
- C) Hepatitis B (birth dose)
- D) All of the above

**Answer:**

**82. The full form of DPT vaccine is:**

- A) Diphtheria, Pertussis, Tetanus
- B) Diphtheria, Polio, Tetanus
- C) Diphtheria, Pertussis, Typhoid
- D) Diphtheria, Polio, Typhoid

**Answer:**

**83. MMR vaccine provides protection against:**

- A) Measles, Mumps, Rubella
- B) Measles, Meningitis, Rubella
- C) Meningitis, Mumps, Rubella
- D) Measles, Mumps, Respiratory syncytial virus

**Answer:**

**84. The Hepatitis B vaccine is a:**

- A) Live attenuated vaccine
- B) Inactivated (killed) vaccine
- C) Recombinant vaccine
- D) Toxoid vaccine

**Answer:**

**85. Tetanus toxoid vaccine is an example of:**

- A) Live attenuated vaccine
- B) Killed vaccine
- C) Toxoid vaccine
- D) Recombinant vaccine

**Answer:**

**86. Which of the following is a narcotic drug?**

- A) Caffeine
- B) Morphine
- C) Nicotine
- D) Ethanol

**Answer:**

**87. Which of the following is a psychotropic substance?**

- A) Diazepam
- B) Paracetamol
- C) Amoxicillin
- D) Insulin

**Answer:**

**88. Tobacco use is a major risk factor for:**

- A) Lung cancer
- B) Cardiovascular disease
- C) Chronic obstructive pulmonary disease (COPD)
- D) All of the above

**Answer:**

**89. Alcohol abuse can lead to:**

- A) Liver cirrhosis
- B) Pancreatitis
- C) Neurological disorders
- D) All of the above

**Answer:**

**90. Which of the following is a stimulant drug?**

- A) Cocaine
- B) Heroin
- C) Alcohol
- D) Benzodiazepines

**Answer:**

**91. The term "drug abuse" refers to:**

- A) Use of drugs as prescribed by a doctor
- B) Use of drugs for non-medical purposes despite harmful consequences
- C) Use of over-the-counter medications
- D) Use of generic medicines

**Answer:**

**92. "De-addiction" refers to:**

- A) Starting the use of addictive substances
- B) The process of stopping the use of addictive substances
- C) Increasing the dose of addictive substances
- D) Prescribing addictive substances

**Answer:**

**93. Which of the following is a common withdrawal symptom of alcohol?**

- A) Seizures
- B) Tremors
- C) Anxiety
- D) All of the above

**Answer:**

**94. The "Narcotic Drugs and Psychotropic Substances (NDPS) Act" was enacted in India in:**

- A) 1940
- B) 1970
- C) 1985
- D) 1995

**Answer:**

**95. Which of the following is a health consequence of smoking?**

- A) Chronic bronchitis
- B) Emphysema
- C) Bladder cancer
- D) All of the above

**Answer:**

**96. Pharmacoeconomics is the study of:**

- A) Drug manufacturing costs only
- B) The cost-effectiveness and value of pharmaceutical interventions
- C) The chemical structure of drugs
- D) The marketing of drugs

**Answer:**

**97. Cost-plus pricing in pharmaceuticals means:**

- A) Setting price based on the value to the patient
- B) Adding a fixed percentage profit margin to the cost of production
- C) Setting price based on competitor's prices
- D) Setting the price lower than the cost of production

**Answer:**

**98. The National Pharmaceutical Pricing Authority (NPPA) in India is responsible for:**

- A) Promoting drug exports
- B) Regulating drug prices and ensuring affordable access to essential medicines
- C) Approving new drug applications
- D) Conducting clinical trials

**Answer:**

**99. DPCO stands for:**

- A) Drug Price Control Order
- B) Drug Pricing and Control Organization
- C) Drug Price Calculation Order
- D) Drug Product Control Order

**Answer:**

**100. MRP (Maximum Retail Price) on a medicine package is inclusive of:**

- A) Only manufacturing cost
- B) All taxes and retailer's profit margin
- C) Only GST
- D) Only wholesale price

**Answer:**