

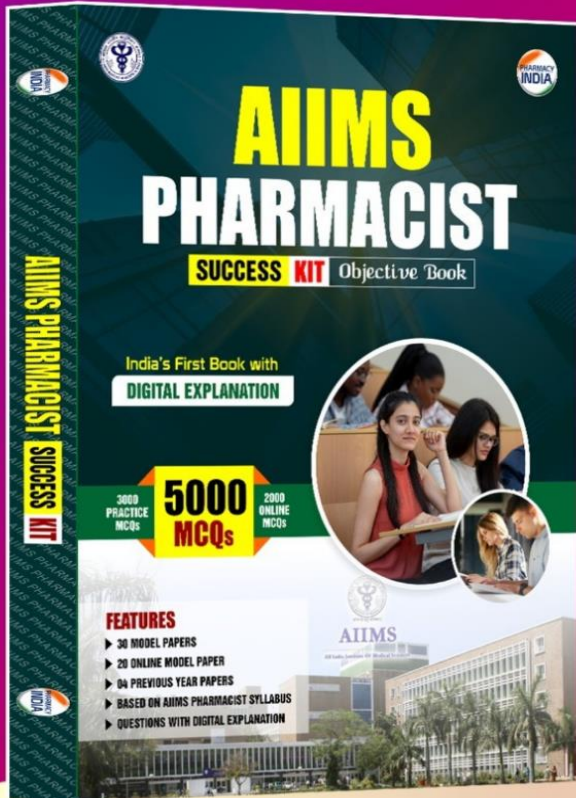


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1. Non ----- called:

Correct Answer: (a) Aglycone

Explanation:

The **non-sugar part** of glycosides is called **aglycone**, while the sugar part is referred to as **glycone**. Aglycones determine the biological activity of glycosides, which are widely used in medicine, especially as cardiac drugs.

Reference: Biochemistry of Glycosides, Pg. 67.

2. All ----- except:

Correct Answer: (d) Ephedrine

Explanation:

Ephedrine is not a heterocyclic alkaloid, as it lacks a ring structure in its molecular composition. Other options, such as **nicotine**, **strychnine**, and **ergotamine**, contain heterocyclic rings.

Reference: Alkaloid Chemistry, Pg. 75.

3. Vitamin ----- A:

Correct Answer: (d) Pantothenic acid

Explanation:

Pantothenic acid, also known as Vitamin B5, is a component of **Coenzyme A**, which plays a crucial role in the synthesis and oxidation of fatty acids. It is vital for metabolic processes and energy production.

Reference: Vitamins in Metabolism, Pg. 89.

4. Which ----- Sugar?:

(a) Sucrose

Explanation:

Reducing sugars have a free aldehyde or ketone group that allows them to act as reducing agents. Among the options:

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- **Glucose, Maltose, and Lactose** are reducing sugars because they contain free aldehyde or ketone groups that participate in reduction reactions.
- **Sucrose** is a **non-reducing sugar** because its glycosidic bond connects the aldehyde group of glucose and the ketone group of fructose, rendering both groups unavailable for reduction.

Reference: Lehninger AL, Nelson DL, Cox MM. Lehninger Principles of Biochemistry, 7th Edition. W.H. Freeman and Company. Chapter on Carbohydrate Structure and Function.

5. Latest ----- year:

Correct Answer: (b) 2014

Explanation:

The latest edition of the **Indian Pharmacopoeia** was published in **2014**, which serves as the official book of standards for the quality and purity of drugs in India. It ensures compliance with safety and efficacy standards.

Reference: Indian Pharmacopoeia Overview, Pg. 102.

6. Use ----- solution:

Correct Answer: (a) Increase the solubility of iodine

Explanation:

Potassium iodide increases the solubility of iodine in aqueous solutions by forming a soluble complex called **triiodide ion (I₃⁻)**. This property is used in iodine tinctures and solutions.

Reference: Applications of Iodine Compounds, Pg. 34.

7. How ----- Solution:

Correct Answer: (d) 35.71 ml

Explanation:

To prepare a **7% solution** of 250 ml, calculate:

$$\text{Amount of solute required} = \text{Volume required (ml)} \times \text{Concentration} = 250 \times \frac{7}{100} = 17.5 \text{ g}$$

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Using a 10% solution:

$$\text{Volume required} = \frac{17.5}{10} \times 100 = 35.71 \text{ ml.}$$

Reference: Pharmaceutical Calculations, Pg. 45.

8. Term ----- tablet:

Correct Answer: (b) Capping

Explanation:

Capping refers to the **partial or complete separation** of the top or bottom crown of a tablet. It occurs due to improper compression, air entrapment, or insufficient binder in the formulation.

Reference: Tablet Manufacturing Defects, Pg. 78.

9. Drug ----- filariasis:

Correct Answer: (c) Diethyl Carbamazine

Explanation:

Diethylcarbamazine (DEC) is the drug of choice for treating **filariasis**, a parasitic infection caused by thread-like worms. It works by disrupting the nervous system of the parasites, killing them effectively.

Reference: Antiparasitic Drugs Handbook, Pg. 90.

10. Antibiotic ----- Syndrome:

Correct Answer: (c) Chloramphenicol

Explanation:

Chloramphenicol causes **Gray Baby Syndrome**, a condition in newborns due to their inability to metabolize the drug. Symptoms include cyanosis, vomiting, and abdominal distension.

Reference: Adverse Drug Reactions, Pg. 112.

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11. Acetazolamide ----- enzyme:

Correct Answer: (c) Carbonic anhydrase

Explanation:

Acetazolamide inhibits the enzyme **carbonic anhydrase**, which reduces the formation of hydrogen and bicarbonate ions in the kidneys. This leads to increased excretion of sodium, potassium, and water, making it effective in treating conditions like glaucoma, altitude sickness, and edema.

Reference: Rang & Dale's Pharmacology, 9th Edition, Pg. 637.

12. Viscosity ----- presence of:

Correct Answer: (a) Agarose

Explanation:

The **viscosity of agar solution** is due to the presence of **agarose**, a linear polysaccharide. Agarose forms a gel-like structure in water, making it useful in microbiological media and electrophoresis for DNA separation.

Reference: Handbook of Pharmaceutical Excipients, 6th Edition, Pg. 30.

13. Which ----- drug:

Correct Answer: (b) Levothyroxine sodium

Explanation:

Levothyroxine sodium is a synthetic form of **thyroxine (T4)** and is used to treat **hypothyroidism**, not as an anti-thyroid drug. Anti-thyroid drugs like **carbimazole** and **propylthiouracil** inhibit thyroid hormone synthesis.

Reference: Goodman & Gilman's The Pharmacological Basis of Therapeutics, 13th Edition, Pg. 1113.

14. Anti-Estrogen ----- infertility:

Correct Answer: (d) Clomiphene

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Explanation:

Clomiphene is an **anti-estrogen** that blocks estrogen receptors in the hypothalamus, increasing the secretion of gonadotropins (FSH and LH). This stimulates ovulation, making it a first-line treatment for infertility in women with anovulation.

Reference: Williams Textbook of Endocrinology, 14th Edition, Pg. 1278.

15. Drugs ----- nucleus:

(a) Nor-adrenaline

Explanation:

A **catechol nucleus** consists of a benzene ring with two hydroxyl groups attached to adjacent carbons (ortho position). **Nor-adrenaline (norepinephrine)** contains this catechol nucleus and is classified as a catecholamine.

Other options like **Ephedrine**, **Phenylephrine**, and **Pseudoephedrine** do not have the ortho-dihydroxybenzene structure, making them non-catechol compounds.

Reference:

Rang HP, Dale MM, Ritter JM, Flower RJ, Henderson G. **Rang & Dale's Pharmacology**, 9th Edition, Elsevier. Page 136.

16. Hydrous ----- known as:

Correct Answer: (a) Lanolin

Explanation:

Lanolin, derived from sheep's wool, is known as **hydrous wool fat**. It is widely used in cosmetics and pharmaceuticals as a moisturizer and base for ointments due to its emollient properties.

Reference: Handbook of Cosmetic Science and Technology, 4th Edition, Pg. 112.

17. Repacking ----- except:

Correct Answer: (b) Schedule C & C1

Explanation:

Repacking licenses are granted for drugs under **Schedules X, H, and Schedule O**, but not

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Schedule C & C1, which covers biological products like sera and vaccines, requiring specialized handling and production.

Reference: Drugs and Cosmetics Rules, 1945, Part XII-B.

18. Antidote ----- poisoning:

Correct Answer: (c) Pralidoxime

Explanation:

Pralidoxime is an antidote for **organophosphate poisoning**. It reactivates acetylcholinesterase, an enzyme inhibited by organophosphates, and restores normal nerve function. It is often used with atropine for effective treatment.

Reference: Goldfrank's Toxicologic Emergencies, 11th Edition, Pg. 1214.

19. Toxic ----- castor seed:

Correct Answer: (d) Ricin

Explanation:

Ricin is a highly toxic protein found in castor seeds. It inhibits protein synthesis by inactivating ribosomes, leading to cell death. Ricin poisoning can cause severe organ damage and is potentially fatal.

Reference: Casarett and Doull's Toxicology: The Basic Science of Poisons, 9th Edition, Pg. 545.

20. Schedule ----- deals with:

Correct Answer: (b) Homeopathic medicines

Explanation:

Schedule M1 of the Drugs and Cosmetics Act, 1940, and Rules, 1945, specifies the **good manufacturing practices (GMP)** for **homeopathic medicines**, ensuring their safety, purity, and quality during production.

Reference: Drugs and Cosmetics Rules, 1945, Rule 85E.

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21. Total ----- body:

Correct Answer: (b) 80

Explanation:

The adult human body has **80 axial bones** forming the axial skeleton. These include:

- Skull: 22 bones
- Vertebral column: 26 bones
- Rib cage: 24 ribs and the sternum (1 bone).

The axial skeleton supports and protects the central nervous system and organs in the thoracic cavity.

Reference: Gray's Anatomy for Students, 4th Edition, Pg. 37.

22. Indian ----- plant:

Correct Answer: (a) *Cassia angustifolia*

Explanation:

Indian senna is derived from ***Cassia angustifolia***, a plant cultivated in India, particularly in Tamil Nadu and Rajasthan. Its leaves and pods contain **sennosides**, which act as natural laxatives. It is widely used for treating constipation.

Reference: Pharmacognosy by Trease & Evans, 16th Edition, Pg. 254.

23. What ----- X?:

Correct Answer: (d) Stuart Prower factor

Explanation:

Stuart-Prower factor (Factor X) is a **vitamin K-dependent clotting factor** that plays a critical role in the coagulation cascade. It is activated to Factor Xa, which converts prothrombin to thrombin during clot formation.

Reference: Guyton and Hall Textbook of Medical Physiology, 14th Edition, Pg. 450.

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24. Which ----- preparation?:

Correct Answer: (c) Ophthalmic Preparations

Explanation:

Ophthalmic preparations are sterile formulations used for eye conditions. Sterility is crucial to prevent infections in the sensitive ocular environment. Common examples include eye drops, ointments, and intraocular injections.

Reference: Remington: The Science and Practice of Pharmacy, 22nd Edition, Pg. 839.

25. Which ----- refrigerator?:

Correct Answer: (c) Vaccines

Explanation:

Vaccines must be stored in refrigerators at **2–8°C** to maintain their potency. Exposure to temperatures outside this range can degrade the active components, reducing their effectiveness.

Reference: WHO Vaccine Storage and Handling Guidelines, Pg. 12.

26. Which ----- alkaloid?:

Correct Answer: (a) Nicotine

Explanation:

Nicotine is a liquid alkaloid found in tobacco plants. It stimulates nicotinic acetylcholine receptors in the central nervous system, leading to increased dopamine release, which contributes to its addictive properties.

Reference: Katzung's Basic and Clinical Pharmacology, 14th Edition, Pg. 125.

27. Schedule ----- deals with:

Correct Answer: (c) Mechanical Contraceptives

Explanation:

Schedule R of the Drugs and Cosmetics Act deals with **mechanical contraceptives**, such as

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condoms, diaphragms, and intrauterine devices. It specifies quality standards to ensure their effectiveness and safety.

Reference: Drugs and Cosmetics Rules, 1945, Schedule R.

28. Sterilization ----- IP:

Correct Answer: (a) 121°C at 15 psi for 30 minutes

Explanation:

According to the **Indian Pharmacopoeia**, steam sterilization at **121°C under 15 psi pressure for 30 minutes** effectively kills bacteria, viruses, and spores. This method is widely used for sterilizing heat-resistant medical instruments and pharmaceuticals.

Reference: Indian Pharmacopoeia, 2018 Edition, Volume II, Pg. 744.

29. One ----- equivalent to:

Correct Answer: (b) 15 ml

Explanation:

One **teaspoon** is equivalent to **15 ml**, a standard measurement in cooking and pharmaceutical dosing. This unit is widely used for administering liquid medications in households.

Reference: Handbook of Pharmaceutical Calculations, Pg. 23.

30. Iatrogenic ----- disease:

Correct Answer: (c) Physician-induced disease

Explanation:

Iatrogenic diseases are caused by medical treatment, diagnostic procedures, or medications administered by healthcare professionals. Examples include drug-induced liver injury or infections due to surgical errors.

Reference: Harrison's Principles of Internal Medicine, 20th Edition, Pg. 25.

31. Which ----- Tuberculosis?:

Correct Answer: (b) Ethionamide

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Explanation:

Ethionamide is not a first-line drug for tuberculosis (TB). It is a **second-line anti-tubercular agent** used in multidrug-resistant TB (MDR-TB). First-line drugs include **Rifampicin, Isoniazid, Pyrazinamide, and Ethambutol**, which are preferred for initial treatment due to their efficacy and lower toxicity.

Reference: Global Tuberculosis Report by WHO, 2021 Edition, Pg. 56.

32. Which ----- Cephalosporin?:

Correct Answer: (d) Cephalexin

Explanation:

Cephalexin is a first-generation cephalosporin effective against **Gram-positive bacteria** like Staphylococcus and Streptococcus. It is commonly used for treating respiratory tract infections, skin infections, and UTIs.

Reference: Goodman & Gilman's The Pharmacological Basis of Therapeutics, 13th Edition, Pg. 1125.

33. Which ----- Propranolol?:

Correct Answer: (b) Cataract

Explanation:

Propranolol, a non-selective beta-blocker, is primarily used for managing hypertension, arrhythmias, and migraines. It is not used for treating **cataracts**, as they require surgical intervention or medications to prevent progression.

Reference: Katzung's Basic and Clinical Pharmacology, 14th Edition, Pg. 154.

34. Vitamin ----- oil:

Correct Answer: (a) Vitamin A

Explanation:

Vitamin A is abundant in **shark liver oil**, making it an excellent source of this fat-soluble vitamin. Vitamin A is crucial for vision, immune function, and skin health. Shark liver oil has historically been used as a dietary supplement.

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Reference: Biochemistry by Lehninger, 7th Edition, Pg. 98.

35. Who ----- Committee?:

Correct Answer: (b) Pharmacist

Explanation:

The **Secretary of Pharmacy and Therapeutic Committee** is typically a **pharmacist**. They oversee medication management, evaluate drug efficacy, and promote the rational use of drugs in healthcare settings.

Reference: Hospital Pharmacy Practice by Ashworth, 3rd Edition, Pg. 125.

36. Which ----- enzymes?:

Correct Answer: (d) Phenytoin

Explanation:

Phenytoin induces **hepatic microsomal enzymes**, increasing the metabolism of other drugs like warfarin and oral contraceptives. This enzyme induction may lead to reduced therapeutic effects of these drugs.

Reference: Goodman & Gilman's The Pharmacological Basis of Therapeutics, 13th Edition, Pg. 325.

37. Which ----- cavity?:

Correct Answer: (c) Douches

Explanation:

Douches are aqueous solutions applied to body cavities, primarily the vaginal cavity, for cleaning or administering medication. They are used for hygiene or to deliver treatments like antifungal agents.

Reference: Remington: The Science and Practice of Pharmacy, 22nd Edition, Pg. 745.

38. 1mg ----- to:

Correct Answer: (a) 1000 µg

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Explanation:

1 milligram (mg) equals **1000 micrograms (µg)**. This unit conversion is standard in pharmaceutical calculations, ensuring precise dosing for medications like vitamin supplements.

Reference: Handbook of Pharmaceutical Calculations, 13th Edition, Pg. 12.

39. Example ----- blood:

Correct Answer: (d) No preservative

Explanation:

Whole human blood does not contain preservatives to maintain its natural state for transfusions. However, anticoagulants like **citrate-phosphate-dextrose (CPD)** may be added to stored blood to prevent clotting.

Reference: Modern Blood Banking and Transfusion Practices, 6th Edition, Pg. 88.

40. Meaning ----- mane:

Correct Answer: (d) Early in the morning

Explanation:

The Latin term "**primo mane**" translates to "**early in the morning**". It is often used in medical prescriptions to indicate the time for administering medications.

Reference: Medical Terminology: A Guide to Latin and Greek Terms, 3rd Edition, Pg. 34.

41. A ----- is called:

Correct Answer: (a) Drug Tolerance

Explanation:

Drug tolerance refers to a **decreased responsiveness** to a drug after repeated use, requiring higher doses to achieve the same effect. It results from physiological adaptations, such as enzyme induction or receptor downregulation, commonly seen with opioids, benzodiazepines, and alcohol.

Reference: Goodman & Gilman's The Pharmacological Basis of Therapeutics, 13th Edition, Pg. 336.

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42. Which ----- poisoning?:

Correct Answer: (b) Sodium Nitrite

Explanation:

Sodium nitrite is used in cyanide poisoning treatment. It converts hemoglobin to methemoglobin, which binds to cyanide and prevents it from inhibiting cytochrome oxidase, allowing cellular respiration to continue. It is often administered alongside sodium thiosulfate for enhanced efficacy.

Reference: Goldfrank's Toxicologic Emergencies, 11th Edition, Pg. 1278.

43. Siam ----- content of:

Correct Answer: (b) Cinnamic acid

Explanation:

Siam benzoin differs from **Sumatra benzoin** due to a lower content of **cinnamic acid**. Benzoin resins are used in perfumes, incense, and as expectorants. The difference in chemical composition influences their fragrance and medicinal properties.

Reference: Trease and Evans' Pharmacognosy, 16th Edition, Pg. 485.

44. Glycoside ----- bark:

Correct Answer: (d) Quinovin

Explanation:

Quinovin is a glycoside found in the bark of **Cinchona**, a plant historically significant for its use in treating malaria due to its alkaloid content, particularly quinine. Quinovin has mild anti-inflammatory properties.

Reference: Pharmacognosy by Wallis, 6th Edition, Pg. 389.

45. Which ----- powder?:

Correct answer: (c) Sodium potassium tartrate

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Explanation:

Sodium potassium tartrate, also known as **Rochelle salt**, is commonly used as an ingredient in **compound effervescent powders**. It acts as a mild laxative and helps to improve the effervescence of the formulation. It is included to enhance the solubility and taste of the preparation.

Reference:

Aulton ME. **Aulton's Pharmaceutics: The Design and Manufacture of Medicines**, 5th Edition, Elsevier. Page 345.

46. Solution ----- Oxygen:

Correct Answer: (b) 20 times its volume of available oxygen

Explanation:

A **6% w/v hydrogen peroxide solution** releases **20 times its volume of oxygen** during decomposition. This property makes it useful as an antiseptic and a disinfectant for cleaning wounds and surfaces.

Reference: Indian Pharmacopoeia, 2018 Edition, Volume II, Pg. 758.

47. Green ----- sulfate:

Correct Answer: (a) Ferrous sulfate

Explanation:

Green vitriol is the common name for **ferrous sulfate** ($\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$). It is used in treating iron-deficiency anemia and as a mordant in dyeing textiles. Its greenish-blue color comes from hydrated iron ions.

Reference: Textbook of Inorganic Chemistry by J.D. Lee, 5th Edition, Pg. 130.

48. An ----- sterilization:

Correct Answer: (d) Ethylene oxide

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Explanation:

Ethylene oxide is used for **gaseous sterilization**, especially for heat-sensitive medical equipment like plastics and electronics. It disrupts DNA and proteins in microorganisms, ensuring sterility.

Reference: Remington: The Science and Practice of Pharmacy, 22nd Edition, Pg. 859.

49. Which ----- Cinchona?:

Correct Answer: (c) *Remijia pedunculata*

Explanation:

Remijia pedunculata is used as a substitute for **Cinchona** due to its quinoline alkaloids like quinine. It is effective in treating malaria, although Cinchona remains the primary source for anti-malarial drugs.

Reference: Trease and Evans' Pharmacognosy, 16th Edition, Pg. 490.

50. Oxytocic ----- Presence of:

Correct Answer: (b) Ergometrine

Explanation:

Ergometrine, an alkaloid from **ergot fungus**, has **oxytocic activity**, causing uterine contractions. It is used to manage postpartum hemorrhage by stimulating uterine muscles to reduce blood loss.

Reference: Katzung's Basic and Clinical Pharmacology, 14th Edition, Pg. 235

51. Which ----- emulsion?:

Correct Answer: (d) Flashing

Explanation:

Flashing is an instability problem in emulsions where the dispersed phase moves rapidly, creating a "flash" effect, particularly during sudden temperature changes or improper homogenization. Proper formulation and surfactant use help prevent this.

Reference: Remington: The Science and Practice of Pharmacy, 22nd Edition, Pg. 728.

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52. Which ----- acidifier?:

Correct Answer: (c) Ammonium Chloride

Explanation:

Ammonium chloride acts as a systemic acidifier by increasing the acidity of urine. It is used to treat conditions like metabolic alkalosis and to maintain the solubility of drugs that are prone to crystallization in the urinary tract.

Reference: Goodman & Gilman's The Pharmacological Basis of Therapeutics, 13th Edition, Pg. 1295.

53. Radioisotope ----- treatment of:

Correct Answer: (d) Polycythemia Vera

Explanation:

P-32 (Phosphorus-32) is a beta-emitting radioisotope used to treat **Polycythemia Vera**, a condition characterized by excessive red blood cell production. P-32 helps suppress bone marrow activity to reduce RBC counts.

Reference: Nuclear Medicine Physics by Cherry et al., 4th Edition, Pg. 218.

54. Which ----- aid?:

Correct Answer: (d) Polyethylene Glycol

Explanation:

Polyethylene glycol (PEG) is used as a filtering aid due to its water solubility and non-toxic nature. It is commonly utilized in pharmaceutical formulations to enhance drug solubility and stability.

Reference: Handbook of Pharmaceutical Excipients, 6th Edition, Pg. 494.

55. Radiopaque ----- tract:

Correct Answer: (d) Barium Sulphate

Explanation:

Barium sulphate is a radiopaque agent used for gastrointestinal imaging. It absorbs X-rays,

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providing a clear contrast in the digestive tract, making it useful in diagnosing abnormalities like ulcers or tumors.

Reference: Diagnostic Imaging in Gastroenterology by McNulty, 2nd Edition, Pg. 134.

56. Which ----- Tablet?:

Correct Answer: (c) Sodium nitrite

Explanation:

Sodium nitrite is used in preparing **anti-rust tablets** due to its ability to inhibit corrosion by neutralizing acids and creating a protective barrier. This property is vital for preserving metal-based materials.

Reference: Industrial Chemistry and Applications, 7th Edition, Pg. 215.

57. Method ----- diluent is:

Correct Answer: (b) Geometric dilution

Explanation:

Geometric dilution involves mixing a small amount of a potent drug with a large amount of diluent in a systematic manner. This ensures uniform distribution of the active ingredient in the final mixture.

Reference: Remington: The Science and Practice of Pharmacy, 22nd Edition, Pg. 695.

58. Modified ----- glycosides:

Correct Answer: (c) C glycosides

Explanation:

The **Modified Borntrager's test** is used to identify **C-glycosides** like aloin, which are compounds where the sugar molecule is directly attached to the aglycone via a carbon atom. This test involves hydrolysis and color change in the presence of C-glycosides.

Reference: Pharmacognosy by Wallis, 6th Edition, Pg. 188.

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59. Cinnamon ----- form of:

Correct Answer: (a) Compound quills

Explanation:

Cinnamon is marketed in the form of **compound quills**, which are rolls of dried bark layers. It is commonly used as a spice and in medicinal applications for its anti-inflammatory and antimicrobial properties.

Reference: Trease and Evans' Pharmacognosy, 16th Edition, Pg. 455.

60. Heavy ----- differ in their:

Correct Answer: (d) Bulk density

Explanation:

Heavy and light **magnesium oxides** differ primarily in their **bulk density** due to differences in particle size and porosity. Heavy magnesium oxide has a higher density and is used in industrial applications, while the light form is used in pharmaceuticals.

Reference: Handbook of Pharmaceutical Excipients, 6th Edition, Pg. 430.

61. An ----- enzyme:

Correct Answer: (c) Homogentisate oxidase

Explanation:

Alkaptonuria is caused by a deficiency of **homogentisate oxidase**, an enzyme involved in the metabolism of tyrosine and phenylalanine. This results in the accumulation of homogentisic acid, leading to dark urine, ochronosis (bluish-black pigmentation in connective tissues), and arthritis.

Reference: Harrison's Principles of Internal Medicine, 20th Edition, Pg. 2385.

62. Synthetic ----- Vitamin K:

Correct Answer: (a) Menadione

Explanation:

Menadione is a synthetic analogue of **Vitamin K**. It is converted into active Vitamin K₂ in the

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liver and plays a critical role in the synthesis of clotting factors (II, VII, IX, and X) and proteins involved in bone metabolism.

Reference: Goodman & Gilman's The Pharmacological Basis of Therapeutics, 13th Edition, Pg. 822.

63. "Caution ----- label of:

Correct Answer: (a) Schedule G drugs

Explanation:

Drugs under **Schedule G** are labeled with the caution: "**Caution: It is dangerous to take this preparation except under medical supervision.**" Examples include phenobarbitone and chlorpromazine, requiring strict medical monitoring due to potential side effects.

Reference: Drugs and Cosmetics Rules, 1945, Schedule G.

64. Plant ----- corticosteroid:

Correct Answer: (b) Diosgenin

Explanation:

Diosgenin, a steroidal sapogenin derived from plants like **Dioscorea**, is a precursor in the synthesis of corticosteroids and sex hormones. It is used in pharmaceutical manufacturing for creating steroids like hydrocortisone and progesterone.

Reference: Trease and Evans' Pharmacognosy, 16th Edition, Pg. 627.

65. The ----- ototoxicity is:

Correct Answer: (c) Neomycin

Explanation:

Neomycin, an aminoglycoside antibiotic, is associated with **ototoxicity** due to its accumulation in the inner ear, causing damage to the cochlear and vestibular hair cells. This can lead to irreversible hearing loss and balance issues.

Reference: Katzung's Basic and Clinical Pharmacology, 14th Edition, Pg. 792.

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66. Which ----- Ring?:

Correct Answer: (b) Vitamin K

Explanation:

Vitamin K has a **naphthoquinone ring**, which is essential for its biological activity. The ring structure enables Vitamin K to function as a cofactor in the gamma-carboxylation of glutamate residues in clotting factors, crucial for blood coagulation.

Reference: Biochemistry by Lehninger, 7th Edition, Pg. 765.

67. Alcohol ----- Sphingolipid:

Correct Answer: (a) Sphingosine

Explanation:

Sphingosine is the alcohol component of **sphingolipids**, a class of lipids found in cell membranes. Sphingolipids are involved in signal transduction, cell recognition, and apoptosis.

Reference: Harper's Illustrated Biochemistry, 31st Edition, Pg. 185.

68. Which ----- Country?:

Correct Answer: (a) Drug Consultative Committee

Explanation:

The **Drug Consultative Committee (DCC)** advises the government and DTAB on the uniform implementation of the Drugs and Cosmetics Act across the country. It ensures the enforcement of drug regulations and harmonization of standards.

Reference: Drugs and Cosmetics Act, 1940, Section 5.

69. Devil's ----- synonym of:

Correct Answer: (b) Asafoetida

Explanation:

Asafoetida, also called **Devil's dung**, is a resin obtained from the roots of certain *Ferula* species. It is known for its pungent smell and is used as a flavoring agent, as well as for its antispasmodic and expectorant properties in traditional medicine.

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Reference: Pharmacognosy by Wallis, 6th Edition, Pg. 255.

70. Disease ----- blood:

Correct Answer: (d) Thrombocythemia

Explanation:

Thrombocythemia is characterized by an abnormally high platelet count, which increases the risk of thrombosis (blood clots). It is caused by a myeloproliferative disorder and requires treatment to prevent complications like stroke or heart attack.

Reference: Harrison's Principles of Internal Medicine, 20th Edition, Pg. 640.

71. Transfer ----- bacteriophage is called:

Correct Answer: (a) Transduction

Explanation:

Transduction is the process by which genetic material is transferred from one bacterium to another via a **bacteriophage (a virus)**. It is a common mechanism of horizontal gene transfer and is significant in spreading antibiotic resistance genes among bacteria.

Reference: Molecular Biology of the Cell by Alberts et al., 6th Edition, Pg. 426.

72. Macroglobulin ----- is:

Correct Answer: (a) IgM

Explanation:

IgM (Immunoglobulin M) is the largest antibody, often referred to as a **macroglobulin** due to its high molecular weight. It is the first antibody produced during an immune response and plays a crucial role in activating the complement system.

Reference: Janeway's Immunobiology, 9th Edition, Pg. 276.

73. Schick ----- presence of:

Correct Answer: (c) Diphtheria

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Explanation:

The **Schick test** is a diagnostic skin test to determine immunity against **diphtheria**. A small amount of diphtheria toxin is injected intradermally, and a reaction indicates susceptibility, while no reaction indicates immunity.

Reference: Immunology by Roitt et al., 13th Edition, Pg. 345.

74. Cassia ----- Sudan:

Correct Answer: (d) Sudan

Explanation:

Cassia senna is primarily cultivated in **Sudan** and parts of India. Its leaves and pods contain **sennosides**, which are used as laxatives. Sudan is one of the largest exporters of senna in the global market.

Reference: Trease and Evans' Pharmacognosy, 16th Edition, Pg. 508.

75. Naphthalene ----- glucoside:

Correct Answer: (d) 6-hydroxymusizin glucoside

Explanation:

6-hydroxymusizin glucoside is a naphthalene glycoside found in senna leaves and pods. It contributes to the laxative properties of senna by stimulating the colon and enhancing bowel movements.

Reference: Pharmacognosy by Wallis, 6th Edition, Pg. 290.

76. What ----- Interface:

Correct Answer: (b) Graphical User Interface

Explanation:

Graphical User Interface (GUI) is a user-friendly interface that allows users to interact with electronic devices through visual elements such as windows, icons, and menus, as opposed to command-line interfaces.

Reference: Introduction to Computing Systems by Patt & Patel, 3rd Edition, Pg. 125.

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77. Which ----- digitally?:

Correct Answer: (d) Digital Camera

Explanation:

A **digital camera** captures images using electronic sensors and stores them digitally in formats such as JPEG or RAW. It has replaced traditional film cameras due to its convenience and ability to preview and edit photos.

Reference: Digital Photography: The Basics by Ang, 2nd Edition, Pg. 45.

78. The ----- known as:

Correct Answer: (c) Defragmentation

Explanation:

Defragmentation is the process of reorganizing fragmented data on a hard disk to improve access speed and optimize storage efficiency. It consolidates scattered files, reducing read/write times.

Reference: Operating Systems Concepts by Silberschatz et al., 10th Edition, Pg. 476.

79. The ----- Windows is:

Correct Answer: (b) Ctrl + Shift + N

Explanation:

The shortcut **Ctrl + Shift + N** is used in Windows to quickly create a new folder in the current directory. It is a productivity feature integrated into the Windows operating system.

Reference: Microsoft Windows User Manual, Windows 10 Edition, Pg. 89.

80. Which ----- data?:

Correct Answer: (b) Byte

Explanation:

A **byte** is a unit of digital data that typically consists of **8 bits**. It is the smallest addressable unit

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of memory in many computer architectures and is commonly used to encode a single character of text.

Reference: Computer Organization and Design by David A. Patterson & John L. Hennessy, 5th Edition, Pg. 26.

81. If ----- code?:

(a) OMNO

Explanation:

In the given example, the word **STAR** is coded as **TSRA**. The pattern of coding involves swapping the first and second letters, and the third and fourth letters.

Let's break down the logic from **STAR** to **TSRA**:

1. **S** and **T** (the first and second letters) are swapped.
2. **A** and **R** (the third and fourth letters) are swapped.

Applying this same pattern to **MOON**:

1. Swap the first and second letters: **M** and **O** become **O** and **M**.
2. Swap the third and fourth letters: **O** and **N** become **N** and **O**.

So, **MOON** is coded as **OMNO**.

Thus, the correct code for **MOON** is **OMNO**.

82. "Yakshagana" ----- state?:

Correct Answer: (b) Karnataka

Explanation:

Yakshagana is a traditional dance-drama performance originating from **Karnataka**. It blends storytelling, music, and elaborate costumes to narrate mythological stories, often based on the Mahabharata and Ramayana.

Reference: Indian Classical Dance and Theatre by Kapila Vatsyayan, 3rd Edition, Pg. 220.

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83. Calculate ----- years:

Correct Answer: (b) 441

Explanation:

To calculate compound interest:

$$A = P \left(1 + \frac{r}{100}\right)^t$$

Where:

P = 400, r = 5%, t=2.

$$A = 400 \left(1 + \frac{5}{100}\right)^2 = 400(1.05)^2 = 400 \times 1.1025 = 441$$

Reference: Financial Mathematics by Clendenen & Salzman, 6th Edition, Pg. 72.

84. Indian ----- crop in the World:

Correct Answer: (b) Sugarcane

Explanation:

India has the largest area under **sugarcane cultivation**, primarily in states like Uttar Pradesh, Maharashtra, and Karnataka. Sugarcane is a crucial crop for sugar production and related industries like ethanol and biofuel.

Reference: Indian Agricultural Statistics by Ministry of Agriculture, Government of India, 2021 Report.

85. The ----- circle is:

Correct Answer: (b) Diameter

Explanation:

The **diameter** is the longest chord in a circle. It passes through the center of the circle, and its length is twice the radius of the circle. It is a fundamental property in circle geometry.

Reference: Geometry by Euclid, Elements Book III, Proposition 7.

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86. Four ----- different from the rest?:

Correct Answer: (b) Long : High

Explanation:

All other pairs (**Hard : Soft, Sweet : Sour, Pointed : Blunt**) are opposites, while **Long : High** represents related but not opposite terms.

Reference: Analytical Reasoning by M.K. Pandey, 3rd Edition, Pg. 45.

87. If ----- Cost Price:

Correct Answer: (a) Rs. 70

Explanation:

Let the cost price (CP) be x.

Selling Price (SP) = x + 20% of x = 84

$$SP = 1.2x \quad \text{so, } x = \frac{84}{1.2} = 70$$

The cost price is **Rs. 70**.

Reference: Quantitative Aptitude by R.S. Aggarwal, 2021 Edition, Pg. 342.

88. Find ----- divisible by 698:

Correct Answer: (b) 125

Explanation:

To find the least number that must be subtracted from **87375** to make it divisible by **698**:

Divide $87375 \div 698$:

Quotient = 125, Remainder = 125.

Thus, subtract **125** to make the number divisible.

Reference: Elementary Number Theory by David M. Burton, 7th Edition, Pg. 60.

89. Which ----- Software in 2007?:

Correct Answer: (b) Google Corp.

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Explanation:

The **Android OS**, the most widely used mobile operating system, was developed by **Google Corp.** in 2007. Android is based on the Linux kernel and is open-source, facilitating widespread adoption.

Reference: Android Development Essentials by Joseph Annuzzi, 2nd Edition, Pg. 2.

90. In ----- coded as?:

Correct Answer: (a) 5323684

Explanation:

Using the coding pattern from **HISTORY** (7326845) and **CIVICS** (135312):

- V -> 5
- I -> 3
- S -> 2
- I -> 3
- T -> 6
- O -> 8
- R -> 4

So, **VISITOR** is coded as **5323684**

91. Who ----- Bengal in 1905?:

Correct Answer: (a) Lord Curzon

Explanation:

Lord Curzon, the Viceroy of India from 1899 to 1905, ordered the **Partition of Bengal** in 1905. The division aimed to weaken the growing nationalist movement by splitting Bengal into predominantly Hindu and Muslim areas. This move was widely opposed, leading to the Swadeshi Movement.

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Reference: India's Struggle for Independence by Bipan Chandra, Pg. 136.

92. Which ----- 'Land of Orchids':

Correct Answer: (b) Arunachal Pradesh

Explanation:

Arunachal Pradesh is known as the '**Land of Orchids**' due to its vast variety of over 600 species of orchids, which thrive in its diverse climatic conditions. It accounts for a significant portion of India's orchid diversity.

Reference: Arunachal Pradesh Biodiversity Profile, Government of Arunachal Pradesh, Pg. 22.

93. Who ----- Bharat Ratna?:

(a) Indira Gandhi

Explanation:

Indira Gandhi, the first woman Prime Minister of India, was the first woman to receive the **Bharat Ratna**, India's highest civilian award. She was honored with this prestigious award in 1971.

Reference:

- Government of India, **Bharat Ratna Awardees** List.
-

94. The ----- river?:

Correct Answer: (a) Sutlej

Explanation:

The **Bhakra Nangal Dam** is built on the **Sutlej River**, in Himachal Pradesh and Punjab. It is one of India's largest dams and a key component of the Bhakra-Beas Management Board (BBMB), providing irrigation and hydroelectric power.

Reference: India's Water Resources by R.K. Sharma, 2nd Edition, Pg. 114.

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95. Which ----- Jai Kisan'?:

Correct Answer: (a) Green Revolution

Explanation:

The slogan “**Jai Jawan, Jai Kisan**” was coined by **Lal Bahadur Shastri** during the **Green Revolution** to highlight the importance of soldiers (jawans) and farmers (kisans) in building the nation. The Green Revolution significantly increased India’s agricultural productivity.

Reference: Indian Agriculture and Green Revolution by D.R. Gupta, 3rd Edition, Pg. 256.

96. Which ----- security?:

Correct Answer: (a) Article 51

Explanation:

Article 51 of the Indian Constitution promotes international peace and security by encouraging peaceful resolution of conflicts, honoring international law, and fostering respect for treaties and obligations.

Reference: The Constitution of India by P.M. Bakshi, 16th Edition, Pg. 138.

97. Which ----- in India?:

Correct Answer: (a) Wular Lake

Explanation:

Wular Lake, located in **Jammu and Kashmir**, is the largest freshwater lake in India. It plays a crucial role in the region’s ecology by regulating water flow in the Jhelum River and supporting biodiversity.

Reference: India’s Lakes and Wetlands by S. Mani, 2nd Edition, Pg. 54.

98. Which ----- Delhi?:

Correct Answer: (c) Shah Jahan

Explanation:

The **Jama Masjid**, one of the largest mosques in India, was built by **Mughal Emperor Shah**

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Jahan in 1656 in Delhi. It showcases the grandeur of Mughal architecture with its red sandstone and white marble design.

Reference: History of Mughal Architecture by R. Nath, 4th Edition, Pg. 312.

99. Which ----- Sri Lanka?:

Correct Answer: (c) Operation Pawan

Explanation:

Operation Pawan was launched by the Indian government in the late 1980s to assist Sri Lanka during the **Civil War**. It involved deploying the Indian Peacekeeping Force (IPKF) to enforce the Indo-Sri Lankan Accord and mediate peace.

Reference: India's Foreign Policy by Muchkund Dubey, 2nd Edition, Pg. 165.

100. Which ----- States?:

Correct Answer: (a) Seventh Schedule

Explanation:

The **Seventh Schedule** of the Indian Constitution outlines the distribution of powers between the Union and the States through the Union List, State List, and Concurrent List. It forms the basis for India's federal structure.

Reference: The Constitution of India by D.D. Basu, 24th Edition, Pg. 167.