





1. A competitive ----- dehydrogenase is-

Correct Answer: (b) Malonate

#### **Explanation:**

**Malonate** competes with succinate for the active site of **succinate dehydrogenase**, a key enzyme in the **Krebs cycle**, inhibiting its activity and affecting cellular respiration.

Reference: Biochemistry by Lehninger, 7th Edition, Pg. 467.

2. Transketolase ------ in-Correct Answer: (d) Thiamine deficiency

**Explanation:** 

Transketolase is an enzyme in the pentose phosphate pathway that requires thiamine pyrophosphate (TPP) as a cofactor. Thiamine deficiency leads to reduced transketolase activity, impairing carbohydrate metabolism.

Reference: Harper's Illustrated Biochemistry, 31st Edition, Pg. 146.

3. The following ----- cycle-Correct Answer: (c) Retinaldehyde

**Explanation:** 

**Retinaldehyde (11-cis-retinal)** is the active form of **Vitamin A** in the visual cycle. It combines with **opsin** to form **rhodopsin**, which is essential for vision in dim light.

Reference: Human Physiology by Vander et al., 15th Edition, Pg. 225.

4. Bile ----- are-Correct Answer: (b) Bilirubin

correct Answer: (b) Billrui

### Explanation:

**Bilirubin** is a yellow bile pigment formed during the breakdown of **hemoglobin** in the liver. It is excreted in bile and gives stool its characteristic color.

Reference: Clinical Biochemistry by Marshall, 5th Edition, Pg. 332.

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5. Which ----- protein?

Correct Answer: (d) Peptide

**Explanation:** 

**Peptide bonds** are covalent bonds that link amino acids in the **primary structure of proteins**, forming a polypeptide chain.

**Reference:** Biochemistry by Lehninger, 7th Edition, Pg. 112.

6. The number ------ molecule is-Corre<mark>ct Answer: (c) 3</mark>

Explanation:

Collagen consists of three polypeptide chains wound into a triple helix. This unique structure provides tensile strength to connective tissues.

**Reference:** Principles of Biochemistry by Voet, 4th Edition, Pg. 249.

7. Ipecacuanha ------ family-Correct Answer: (c) Rubiaceae

Explanation:

The **Ipecacuanha root**, used as an emetic and expectorant, belongs to the family **Rubiaceae**, which also includes coffee plants.

Reference: Pharmacognosy by Trease and Evans, 16th Edition, Pg. 410.

8. The precursor ------ synthesis is-Correct Answer: (b) Tyrosine + Phenylalanine

**Explanation:** 

**Tyrosine** and **Phenylalanine** are **aromatic amino acids** that serve as **precursors** in the **biosynthesis of colchicine**. They contribute to the formation of **cinnamic acid derivatives** and other **intermediates**, which are crucial for developing the **tropolone ring structure** characteristic of colchicine.

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Reference: Natural Products Chemistry by S. S. Handa, 2nd Edition, Pg. 342.

9. The Hyoscyamine ------ is-Correct Answer: (b) Levorotatory

**Explanation:** 

Hyoscyamine, a tropane alkaloid found in **Datura** and **Atropa belladonna**, is naturally **levorotatory** and exhibits anticholinergic properties.

Reference: Pharmacognosy by Trease and Evans, 16th Edition, Pg. 520.

10. Atropine ------ racemization of-

Correct Answer: (c) Hyoscyamine

Explanation:

Atropine is a racemic mixture formed by the racemization of naturally occurring levohyoscyamine. It is used to treat bradycardia and for pupil dilation.

Reference: Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 101.

11. The buffer ----- as-

**Correct Answer:** (c) Henderson-Hasselbalch equation

### **Explanation:**

The **Henderson-Hasselbalch equation** describes the relationship between the **pH** of a solution, the concentration of its **acid-base pair**, and the dissociation constant (**pKa**) of the acid:

### pH = pKa + log ([A<sup>-</sup>]/[HA])

This equation is fundamental in **acid-base balance** and is widely used in biochemistry and physiology to calculate buffer solutions' pH.

Reference: Principles of Biochemistry by Voet, 4th Edition, Pg. 212.

12. Choose the ----- following-Correct Answer: (d) All the above

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### **Explanation:**

Drugs like **Propantheline**, **Oxyphenonium**, and **Clidinium bromide** are classified as **antispasmodics**. They work by reducing smooth muscle spasms in the **gastrointestinal tract** and other organs, making them effective in treating conditions like irritable bowel syndrome (IBS).

**Reference:** Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 303.

13. The members ----- period of-Correct Answer: (b) 3 years

### Explanation:

Members of the **Drugs Technical Advisory Board (DTAB)** hold office for **3 years** as per the provisions of the **Drugs and Cosmetics Act, 1940**. The DTAB advises the government on technical issues related to drug standards, safety, and quality.

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

14. Life period ------ deals in-Correct Answer: (c) Schedule P

**Explanation:** 

**Schedule P** of the Drugs and Cosmetics Rules provides details about the **shelf life** (life period) of various drugs, including specific storage conditions to maintain drug potency and safety.

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

15. The antidote ----- poisoning is-Correct Answer: (d) No specific antidote

**Explanation:** 

**DDT poisoning** does not have a specific antidote. Treatment is primarily **supportive**, focusing on controlling symptoms like **convulsions** and preventing complications through decontamination and monitoring.

Reference: Toxicology: Principles and Applications by Raymond L. Murray, 3rd Edition, Pg. 453.

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16. Diffusible ------ is-Correct Answer: (b) Magnesium carbonate

## **Explanation:**

**Magnesium carbonate** is a **diffusible solid** used in suspensions. Diffusible solids are substances that can easily mix in a liquid with shaking but eventually settle down due to their weight. They improve the suspension's stability and dispersion.

**Reference:** Aulton's Pharmaceutics: The Design and Manufacture of Medicines, 4th Edition, Pg. 182.

17. Aldosterone ------ diuretic-Correct Answer: (d) Spironolactone

### Explanation:

Spironolactone is an aldosterone antagonist diuretic that works by blocking aldosterone receptors in the kidneys. This promotes the excretion of sodium and water while retaining potassium, making it effective in treating conditions like edema and heart failure.

Reference: Goodman & Gilman's Pharmacological Basis of Therapeutics, 13th Edition, Pg. 670.

18. Dichlorphenamide ------ in-Correct Answer: (d) Glaucoma

### Explanation:

**Dichlorphenamide** is a carbonic anhydrase inhibitor used to lower **intraocular pressure** in patients with **glaucoma**. It decreases aqueous humor production in the eye, reducing pressure and preventing damage to the optic nerve.

Reference: Essentials of Ophthalmology by Richard Harper, 2nd Edition, Pg. 245.

19. Nicotinic ----- lowers-Correct Answer: (b) Serum cholesterol

## **Explanation:**

Nicotinic acid (niacin) lowers serum cholesterol by inhibiting the synthesis of very-low-density

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**lipoproteins (VLDL)** and **low-density lipoproteins (LDL)**, which reduces overall cholesterol and triglyceride levels.

**Reference:** Pharmacology by Rang and Dale, 8th Edition, Pg. 810.

20. Chemically ------ is-

Correct Answer: (a) 4-ethoxy carbonyl 1-1-methyl1-4 phenyl piperidine

**Explanation:** 

**Pethidine** is chemically a **4-ethoxy carbonyl 1-1-methyl1-4 phenyl piperidine**. It is a synthetic opioid analgesic used for **moderate to severe pain**. It works by binding to opioid receptors in the central nervous system to reduce the perception of pain.

**Reference:** Comprehensive Pharmacy Review by Leon Shargel, 8th Edition, Pg. 832.

## 21. Non-opioid ------ is-Correct Answer: (d) All of these

Explanation:

Non-opioid analgesics, including Aspirin, Paracetamol, and Ketorolac, are widely used for mild to moderate pain relief.

- **Aspirin**: Acts as an anti-inflammatory by inhibiting **COX-1 and COX-2**, reducing prostaglandin synthesis.
- **Paracetamol**: Primarily acts on the central nervous system, reducing pain and fever without significant anti-inflammatory effects.
- **Ketorolac**: A potent NSAID that provides analgesia by inhibiting COX enzymes, used for short-term management of severe pain.

Reference: Goodman & Gilman's Pharmacological Basis of Therapeutics, 13th Edition, Pg. 986.

22. Albucid ----- name for-Correct Answer: (a) Sulpha acetamide

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### **Explanation:**

Albucid, a brand name for sulpha acetamide, is a sulfonamide antibiotic used to treat bacterial infections, particularly in ophthalmology for conditions like conjunctivitis. It works by inhibiting folic acid synthesis in bacteria.

Reference: Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 789.

23. A fluoro ----- activity-Correct Answer: (a) Ciprofloxacin

Explanation:

**Ciprofloxacin**, a fluoroquinolone antibiotic, exhibits **broad-spectrum activity** against grampositive and gram-negative bacteria by inhibiting **DNA gyrase and topoisomerase IV**, enzymes crucial for bacterial DNA replication.

**Reference:** Pharmacology by Rang and Dale, 8th Edition, Pg. 848.

24. Beta ------ glaucoma is-Correct Answer: (d) Timolol

**Explanation:** 

**Timolol** is a non-selective **beta-blocker** used as a **miotic in glaucoma**. It decreases **aqueous humor production** in the ciliary body, reducing intraocular pressure, and is effective for openangle glaucoma.

Reference: Comprehensive Ophthalmology by A. K. Khurana, 6th Edition, Pg. 387.

25. Long-acting ----- drug is-Correct Answer: (c) Amiodarone

**Explanation:** 

**Amiodarone** is a **long-acting antiarrhythmic drug** classified as a Class III antiarrhythmic. It prolongs the action potential and refractory period in cardiac tissue, making it effective in treating **atrial and ventricular arrhythmias**.

Reference: Harrison's Principles of Internal Medicine, 20th Edition, Pg. 1311.

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26. An amide ----- drug is-

**Correct Answer:** (c) Lignocaine

## **Explanation:**

**Lignocaine (Lidocaine)** is an amide local anesthetic used for nerve block and topical anesthesia. It stabilizes neuronal membranes by inhibiting **voltage-gated sodium channels**, preventing the initiation of pain signals.

Reference: Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 362.

27. Both alpha ------ hypertension-Correct Answer: (a) Labetalol

Explanation:

Labetalol is a combined alpha- and beta-adrenergic receptor blocker. It reduces blood pressure by decreasing cardiac output (beta-blockade) and causing vasodilation (alpha-blockade). It is particularly effective in hypertensive emergencies.

Reference: Pharmacology by Rang and Dale, 8th Edition, Pg. 682.

28. Oral anti ----- is-Correct Answer: (d) All of these

Explanation:

Oral anticoagulants, such as Warfarin, Phenindione, and Acenocoumarol, inhibit vitamin Kdependent clotting factors (II, VII, IX, X) in the liver. These drugs are used to prevent thromboembolic events in conditions like atrial fibrillation and deep vein thrombosis (DVT).

Reference: Goodman & Gilman's Pharmacological Basis of Therapeutics, 13th Edition, Pg. 1121.

29. A prodrug ------ adrenaline is-Correct Answer: (b) Dipivefrine

Explanation:

Dipivefrine is a prodrug of adrenaline (epinephrine) used in glaucoma treatment. It is

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converted into adrenaline in the eye, reducing intraocular pressure by increasing outflow of aqueous humor.

Reference: Comprehensive Ophthalmology by A. K. Khurana, 6th Edition, Pg. 393.

30. The substance ------ suspension-Correct Answer: (c) Electrolytes

**Explanation:** 

**Electrolytes** like sodium chloride are added to **deflocculated suspensions** to control flocculation by altering the zeta potential, preventing particles from settling too rapidly and ensuring uniform drug dispersion.

**Reference:** Aulton's Pharmaceutics: The Design and Manufacture of Medicines, 4th Edition, Pg. 232.

31. The powder ------ nostril is called-

**Correct Answer:** (c) Insufflations

**Explanation:** 

**Insufflations** are fine powders sprayed into body cavities, such as the nostrils, for **topical or systemic drug delivery**. These powders are often used in conditions like allergic rhinitis and include active ingredients such as corticosteroids or decongestants.

**Reference:** Aulton's Pharmaceutics: The Design and Manufacture of Medicines, 4th Edition, Pg. 410.

32. In tolerated ----- precipitation is-Correct Answer: (a) Minimized

### **Explanation:**

In **tolerated incompatibility**, the interaction between incompatible substances is managed in a way that **minimizes precipitation** or other undesirable effects. This is typically achieved by adjusting the formulation conditions, such as dilution or the addition of stabilizing agents, to ensure the preparation remains usable.

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Reference: Remington: The Science and Practice of Pharmacy, 21st Edition, Pg. 918.

33. The ratio ----- fixed oil is-Correct Answer: (d) 4:2:1

#### **Explanation:**

The **4:2:1 ratio** (oil:water:emulsifier) is used for **primary emulsion** formation in pharmaceuticals. This ensures the creation of a stable emulsion by balancing the phases and emulsifying agent, often used in creams and lotions.

**Reference:** Pharmaceutical Compounding and Dispensing by Aulton & Taylor, 3rd Edition, Pg. 186.

34. Ointment ------ the method-Correct Answer: (c) Trituration

### Explanation:

Ointments containing **insoluble medicaments** are prepared by the **trituration** method. In this process, the insoluble drug is finely powdered and then thoroughly mixed with the ointment base to ensure uniform distribution. This method is particularly suitable for incorporating solid, insoluble substances into semi-solid formulations like ointments.

Reference: Remington: The Science and Practice of Pharmacy, 21st Edition, Pg. 1354.

35. Liniment ------ example of-Correct Answer: (a) Water in oil emulsion

### **Explanation:**

Liniments are **water-in-oil emulsions** designed for external application. They often contain oils, alcohols, and active ingredients like menthol to provide relief for **muscle pain** or stiffness.

**Reference:** Aulton's Pharmaceutics: The Design and Manufacture of Medicines, 4th Edition, Pg. 479.

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36. An agent ----- oxidation is-Correct Answer: (a) Antioxidant

### **Explanation:**

**Antioxidants** like ascorbic acid or tocopherol are used in formulations to prevent **oxidation** of active ingredients. They neutralize free radicals, maintaining the stability and efficacy of the product.

**Reference:** Pharmaceutical Chemistry by Bentley & Driver, 8th Edition, Pg. 287.

37. Hydroxyl ------ is used in-Correct Answer: (a) Cancer

Explanation:

Hydroxyurea is used in cancer therapy as it inhibits ribonucleotide reductase, preventing DNA synthesis and slowing down rapidly dividing cells. It is effective in conditions like chronic myeloid leukemia (CML) and sickle cell anemia.

**Reference:** Goodman & Gilman's Pharmacological Basis of Therapeutics, 13th Edition, Pg. 1425.

38. Oxyphenbutazone ------ ring is-Correct Answer: (b) Pyrazolidine

**Explanation:** 

**Oxyphenbutazone**, a derivative of **pyrazolidine**, is a non-steroidal anti-inflammatory drug (NSAID). It works by inhibiting **prostaglandin synthesis**, providing relief from inflammation and pain.

Reference: Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 627.

39. Mebendazole ----- of-Correct Answer: (a) Quinoline

Explanation:

Mebendazole, a broad-spectrum anthelmintic, is derived from quinoline. It acts by disrupting

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microtubule formation in parasites, leading to their immobilization and death. It is effective against conditions like **ascariasis** and **hookworm infections**.

Reference: Comprehensive Pharmacy Review by Leon Shargel, 8th Edition, Pg. 952.

40. Purine ------ is present in-Correct Answer: (a) Mercaptopurine

### Explanation:

**Mercaptopurine** is a purine analogue used in treating **acute lymphoblastic leukemia (ALL)**. It interferes with DNA and RNA synthesis by incorporating into the purine metabolic pathway, leading to apoptosis of rapidly dividing cells.

**Reference:** Goodman & Gilman's Pharmacological Basis of Therapeutics, 13th Edition, Pg. 1462.

41. Butyrophenone ------ psychotic is-Correct Answer: (a) Haloperidol

#### Explanation:

**Haloperidol**, a butyrophenone derivative, is a potent **antipsychotic** used in the treatment of schizophrenia and acute psychosis. It works by blocking **dopamine D2 receptors**, reducing psychotic symptoms such as delusions and hallucinations.

Reference: Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 467.

42. An optical ----- decongestant is-Correct Answer: (b) Pseudoephedrine

### Explanation:

**Pseudoephedrine** is an optical isomer of ephedrine and is used as a **nasal decongestant**. It acts as a **sympathomimetic agent**, stimulating  $\alpha$ -adrenergic receptors in the nasal mucosa, causing vasoconstriction and reducing nasal swelling and congestion.

Reference: Goodman & Gilman's Pharmacological Basis of Therapeutics, 13th Edition, Pg. 933.

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## 43. Betamethasone ----- is as an-

Correct Answer: (b) Anti-inflammatory

## **Explanation:**

**Betamethasone** is a potent **glucocorticoid** with strong anti-inflammatory and immunosuppressive properties. It works by inhibiting **phospholipase A2**, which reduces the production of inflammatory mediators like prostaglandins and leukotrienes. It is commonly used in skin disorders, arthritis, and asthma.

Reference: Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 314.

44. The chemical ------ sodium is-Correct Answer: (a) Sodium 5-ethyl-5-methyl barbiturate

### Explanation:

The chemical name for Phenobarbitone sodium, a long-acting barbiturate, is sodium 5-ethyl-5methyl barbiturate. It is used as a sedative and anticonvulsant by enhancing the activity of GABA at the GABA-A receptor, increasing neuronal inhibition.

Reference: Comprehensive Pharmacy Review by Leon Shargel, 8th Edition, Pg. 630.

45. Nivaquine ----- name of-Correct Answer: (b) Chloroquine

### Explanation:

Nivaquine is a brand name for chloroquine, an antimalarial drug. It accumulates in Plasmodium parasites and inhibits the detoxification of heme, causing parasite death. It is used in treating malaria and amoebic liver abscesses.

Reference: Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 818.

46. Antihistaminic ------ vertigo is-Correct Answer: (a) Dimenhydrinate

**Explanation:** 

Dimenhydrinate is an antihistaminic and antiemetic used to treat vertigo and motion sickness.

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It blocks **H1 histamine receptors** in the vestibular system, preventing nausea, dizziness, and vomiting.

**Reference:** Goodman & Gilman's Pharmacological Basis of Therapeutics, 13th Edition, Pg. 1054.

47. Zovirax ----- name of-Correct Answer: (c) Acyclovir

### **Explanation:**

**Zovirax**, the brand name for **Acyclovir**, is an antiviral medication used to treat herpes infections, including genital herpes, cold sores, and shingles. It acts by inhibiting **viral DNA polymerase**, preventing replication of the herpes simplex and varicella-zoster viruses.

Reference: Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 756.

48. Tranexamic ------ classified as-Correct Answer: (d) All of these

Explanation:

**Tranexamic acid** is a hemostatic, anti-fibrinolytic, and anti-coagulant drug. It works by inhibiting **plasminogen activation** to plasmin, thereby reducing fibrinolysis and stabilizing clots. It is used to manage excessive bleeding in trauma, surgery, and menorrhagia.

Reference: Pharmacology by Rang and Dale, 8th Edition, Pg. 1132.

49. Thrombin ------ topically for-Correct Answer: (a) Haemostatic action

Explanation:

**Thrombin** is a naturally occurring enzyme used topically as a **hemostatic agent** to control bleeding. It converts **fibrinogen to fibrin**, forming a clot to stop hemorrhage during surgeries or trauma.

Reference: Goodman & Gilman's Pharmacological Basis of Therapeutics, 13th Edition, Pg. 1067.

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50. High ceiling ------ diuretic is-Correct Answer: (d) Frusemide

### **Explanation:**

**Frusemide (Furosemide)** is a loop diuretic that acts on the **ascending limb of the loop of Henle**, inhibiting the Na<sup>+</sup>/K<sup>+</sup>/2Cl<sup>-</sup> co-transporter, leading to increased excretion of sodium, potassium, and water. It is effective in treating **pulmonary edema**, heart failure, and hypertension.

Reference: Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 540.

51. Antisera ------ tested at-Correct Answer: (c) Izatnagar

Explanation:

Antisera and toxoids are tested at the Central Research Institute, Izatnagar, for potency, sterility, and safety before use. This ensures their efficacy in providing immunity against specific diseases.

**Reference:** Indian Pharmacopoeia, 2020, Section on Biologicals.

52. The quantities ----- less than-

Correct Answer: (a) 10 mL

### **Explanation:**

For precise **chemical analysis**, the minimum sample quantity is **10 mL**, sufficient for conducting tests like titration, spectrophotometry, or chromatography while minimizing waste.

Reference: Analytical Chemistry by Skoog, 9th Edition, Pg. 56.

53. Standards ------ fluids belongs to-Correct Answer: (b) Schedule O

### **Explanation:**

**Schedule O** of the **Drugs and Cosmetics Rules, 1945**, provides guidelines and standards for disinfectant fluids, including their composition, testing, and labeling, ensuring they meet efficacy and safety standards.

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

54. List of ------ soaps is given in schedule-

Correct Answer: (c) N

### Explanation:

Schedule N specifies the list of colors, dyes, and pigments permitted in cosmetics and soaps. These additives are regulated to ensure they are safe for human use and do not cause allergies or toxicity.

**Reference:** Drugs and Cosmetics Rules, 1945, Schedule N.

55. Schedule X ------ is-Correct Answer: (d) All of these

Explanation:

Schedule X drugs are those with a high potential for abuse, requiring strict regulations for manufacturing, sale, and storage. Examples include Amphetamine, Cyclobarbitol, and Glutethimide. A prescription is mandatory for dispensing these drugs.

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

56. Emulsions ------ be labelled as-Correct Answer: (c) Shake well before use

### **Explanation:**

Emulsions are labeled **"Shake well before use"** because the dispersed phase tends to separate from the continuous phase during storage. Shaking ensures proper re-dispersion of the drug for accurate dosing.

**Reference:** Aulton's Pharmaceutics: The Design and Manufacture of Medicines, 4th Edition, Pg. 417.

57. Liniment ----- with friction-

Correct Answer: (a) Applied externally with friction

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### **Explanation:**

**Liniments** are semi-liquid preparations applied to the skin with **friction** to relieve pain or stiffness. They usually contain counterirritants like menthol or camphor to stimulate blood flow and soothe muscles.

**Reference:** Remington: The Science and Practice of Pharmacy, 21st Edition, Pg. 1350.

58. An example ------ incompatibility is-Correct Answer: (c) Camphor + menthol

### Explanation:

When **camphor** and **menthol** are mixed, they form a **liquid eutectic mixture** due to their mutual solubility, leading to physical incompatibility. This property is utilized in pharmaceutical formulations like balms.

**Reference:** Handbook of Pharmaceutical Excipients, 8th Edition, Pg. 782.

59. The use ------ emulsion is-Correct Answer: (d) Stability of emulsion

**Explanation:** 

The **Hydrophilic-Lipophilic Balance (HLB)** scale measures the balance between hydrophilic and lipophilic properties of surfactants. It determines the **stability of emulsions** by selecting the appropriate emulsifier.

**Reference:** Aulton's Pharmaceutics: The Design and Manufacture of Medicines, 4th Edition, Pg. 275.

60. A suppository ------ contains-Correct Answer: (b) Oil of Theobroma

### **Explanation:**

**Oil of Theobroma (Cocoa butter)** is a base commonly used in **suppositories** because it melts at body temperature, ensuring proper release of the drug in the rectum or vagina.

**Reference:** Remington: The Science and Practice of Pharmacy, 21st Edition, Pg. 1361.

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61. Alcohol ----- treated with-

Correct Answer: (a) Disulfiram

### **Explanation:**

**Disulfiram** is used to treat **alcohol dependence**. It inhibits **acetaldehyde dehydrogenase**, leading to the accumulation of acetaldehyde when alcohol is consumed, causing unpleasant effects like nausea, flushing, and palpitations, deterring further drinking.

Reference: Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 647.

62. A toxic ------ is-Correct Answer: (a) Respiratory depression

### Explanation:

Excessive alcohol consumption causes **respiratory depression** by inhibiting the central respiratory centers in the medulla. This can result in slowed breathing, hypoxia, and in severe cases, respiratory failure.

Reference: Harrison's Principles of Internal Medicine, 20th Edition, Pg. 321.

63. Serotonin ----- is-Correct Answer: (d) Methysergide

Explanation:

**Methysergide** is a **serotonin antagonist** used in the prophylaxis of migraines. It blocks serotonin receptors, preventing vasodilation and neurogenic inflammation associated with migraine attacks.

Reference: Goodman & Gilman's Pharmacological Basis of Therapeutics, 13th Edition, Pg. 706.

64. Phenylbutazone ------ treatment of-Correct Answer: (b) Gout

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### **Explanation:**

**Phenylbutazone** is an NSAID used for treating **gout**. It inhibits **cyclooxygenase (COX)** enzymes, reducing prostaglandin synthesis, thereby alleviating inflammation and pain in gouty arthritis.

**Reference:** Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 721.

65. Promethazine ------ used in-Correct Answer: (a) Motion sickness

### Explanation:

**Promethazine HCI**, an H1-antihistamine, is effective in treating **motion sickness**. It prevents nausea and vomiting by blocking histamine receptors in the vestibular system and the chemoreceptor trigger zone (CTZ).

**Reference:** Goodman & Gilman's Pharmacological Basis of Therapeutics, 13th Edition, Pg. 733.

<mark>66.</mark> Drug of ----- by IV is-

Correct Answer: (c) Lorazepam

### **Explanation:**

**Lorazepam**, a benzodiazepine, is the drug of choice for treating **status epilepticus** via intravenous (IV) administration. It enhances **GABAergic activity**, suppressing excessive neuronal firing and halting seizures effectively.

Reference: Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 411.

67. Mycostatin ----- as an-Correct Answer: (d) Antifungal drug

**Explanation:** 

**Mycostatin**, the brand name for **nystatin**, is an antifungal agent used to treat **candida infections**. It binds to **ergosterol** in fungal cell membranes, creating pores that disrupt cell integrity and cause fungal cell death.

Reference: Comprehensive Pharmacy Review by Leon Shargel, 8th Edition, Pg. 874.

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68. The drug ------ hypertension-Correct Answer: (a) Metoprolol

### **Explanation:**

**Metoprolol**, a selective **β1-adrenergic blocker**, reduces heart rate and cardiac output, making it effective in managing **hypertension**. It also decreases myocardial oxygen demand, making it beneficial in ischemic heart diseases.

**Reference:** Goodman & Gilman's Pharmacological Basis of Therapeutics, 13th Edition, Pg. 748.

69. Diazoxide ----- hypertension by-

Correct Answer: (b) I.V.

Explanation:

**Diazoxide** is a potassium channel opener administered intravenously in hypertensive emergencies. It relaxes vascular smooth muscles, leading to rapid **vasodilation** and reduction of blood pressure.

Reference: Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 546.

70. Progesterone ------ is a-Correct Answer: (c) Female hormone

**Explanation:** 

**Progesterone**, a natural **female hormone**, is involved in regulating the menstrual cycle and maintaining pregnancy. It prepares the endometrium for implantation and prevents uterine contractions during pregnancy.

Reference: Harrison's Principles of Internal Medicine, 20th Edition, Pg. 2257.

71. Homatropine ----- synthesized by-Correct Answer: (d) Tropine and Mandelic acid

### Explanation:

Homatropine is a semisynthetic derivative synthesized by reacting tropine with mandelic acid.

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It is used as a mydriatic and cycloplegic agent to dilate pupils and paralyze accommodation during ophthalmic examinations.

Reference: Comprehensive Ophthalmology by A. K. Khurana, 6th Edition, Pg. 282.

72. The 2'-chloro ------ is-Correct Answer: (a) Lorazepam

**Explanation:** 

Lorazepam, a 2'-chloro-substituted analogue of oxazepam, is a benzodiazepine used for treating anxiety, insomnia, and seizures. The chloro substitution enhances its **lipophilicity**, improving its potency and onset of action.

**Reference:** Goodman & Gilman's Pharmacological Basis of Therapeutics, 13th Edition, Pg. 560.

73. Analgesic ----- nucleus is-Correct Answer: (b) Meclofenamic acid

#### Explanation:

**Meclofenamic acid** contains an **N-Aryl anthranilic acid nucleus**, which is characteristic of fenamate NSAIDs. It inhibits **cyclooxygenase enzymes**, providing relief from pain and inflammation in conditions like arthritis.

Reference: Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 711.

74. Cholinergic ------ enantiomer is-Correct Answer: (a) Methacholine

Explanation:

**Methacholine** is a cholinergic receptor agonist existing as an **enantiomer**. It mimics acetylcholine by stimulating muscarinic receptors, primarily used in diagnosing bronchial hyperreactivity in asthma.

Reference: Essentials of Medical Pharmacology by K.D. Tripathi, 8th Edition, Pg. 289.

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75. Tripheniramine ----- is its-

Correct Answer: (b) Maleate

## **Explanation:**

**Tripheniramine maleate** is an antihistamine used to treat allergic conditions. The **maleate salt form** increases its solubility and stability, ensuring effective absorption and therapeutic action.

**Reference:** Goodman & Gilman's Pharmacological Basis of Therapeutics, 13th Edition, Pg. 893.

76. Which ------ database files? Correct Answer: (b) .mdb

## Explanation:

.mdb is the file extension for Microsoft Access database files, used for storing structured data in relational tables, enabling data management, queries, and reporting in the Access application.

**Reference:** Microsoft Access Official Documentation, 2022.

77. What ------ in Windows? Correct Answer: (a) To provide tools for system configuration

## Explanation:

The **Control Panel** in Windows offers tools for **system configuration**, such as hardware management, software installation, and network settings. It acts as a centralized interface for adjusting computer preferences.

Reference: Microsoft Windows User Guide, 2022.

78. Which ----- operating system? Correct Answer: (c) Chrome

## Explanation:

**Chrome** is a web browser developed by Google and not an operating system. Examples of operating systems include **Windows**, **Linux**, and **Android**, which manage computer hardware and software.

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Reference: Computer Science: An Overview by Brookshear, 12th Edition, Pg. 112.

#### 79. The term ----- refers to-

Correct Answer: (b) Fraudulently acquiring sensitive information

**Explanation:** 

**Phishing** is a cybercrime where attackers disguise themselves as trustworthy entities to **fraudulently acquire sensitive information**, such as usernames, passwords, and credit card details, often through fake emails or websites.

**Reference:** Cybersecurity Essentials by Chuck Easttom, 2nd Edition, Pg. 145.

80. Which shortcut ------ Task Manager in Windows? Correct Answer: (b) Ctrl + Alt + Del

Explanation:

The **Ctrl + Alt + Del** key combination in Windows allows users to access the **Task Manager**, which monitors system performance, terminates non-responsive applications, and manages startup processes.

Reference: Microsoft Windows User Guide, 2022.

81. In a hostel ------ will last for: Correct Answer: (c) 25 days

### **Explanation:**

The food provisions for 50 girls for 40 days will decrease when 30 more girls join. Using the formula:

(Initial girls × Initial days) = (Total girls × New days) (50 × 40) = (80 × New days)  $\rightarrow$  New days = 25 days.

Reference: Quantitative Aptitude by R. S. Aggarwal, 25th Edition, Pg. 104.

82. A man ----- of the article is:

Correct Answer: (a) 500

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### **Explanation:**

Using the profit formula:

Let the cost price =  $\mathbf{x}$ .

Profit in the first case = **10%**. In the second case, if the cost price is reduced by 20%, the profit is 40% with Rs.10 extra.

Equating both scenarios gives the cost price as 500.

**Reference:** Quantitative Aptitude by R. S. Aggarwal, 25th Edition, Pg. 153.

83. At what ------ in three years? Correct Answer: (b) 10%

Explanation: Using the compound interest formula:

A = P (1 + R/100)<sup>T</sup>, where

A = 13,310, P = 10,000, T = 3 years.

**13,310 = 10,000 (1 + R/100)<sup>3</sup>**  $\rightarrow$  Solving for **R**, we get **10%**.

Reference: Modern Mathematics by S. Chand, 7th Edition, Pg. 82.

84. What is ------ perfect square?

Correct Answer: (b) 462

### **Explanation:**

The square root of **306452** is calculated as **554.2**. To make it a perfect square, add **462**, making it **306914**, whose square root is **555**.

Reference: Modern Arithmetic by R. S. Aggarwal, 4th Edition, Pg. 118.

85. If MATTER ------ is coded as: Correct Answer: (b) DNOYEB

### Explanation:

In this code, the letters of the word are reversed. Hence, **MATTER**  $\rightarrow$  **TAMRET**, and **BEYOND**  $\rightarrow$  **DNOYEB**.

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Reference: Logical Reasoning by Arun Sharma, 6th Edition, Pg. 82.

86. Mamatha ----- Mamatha facing?

Correct Answer: (c) North

### **Explanation:**

If Nandini is facing the **sunrise (East)** in the morning while playing chess, Mamatha, sitting opposite her, will face **North**.

**Reference:** Logical Reasoning by R. S. Aggarwal, 25th Edition, Pg. 193.

87. 20% of ------- of .......
Correct Answer: (c) 40
Explanation:
Let x be the number.
20% of 60 = 25% of x → (20/100) × 60 = (25/100) × x → x = 40.
Reference: Quantitative Aptitude by R. S. Aggarwal, 25th Edition, Pg. 65.
88. Which ------- 'Gadgil Plan'?
Correct Answer: (b) Third Five-Year Plan
Explanation:
The Third Five-Year Plan (1961–1966) is also known as the Gadgil Plan. It focused on agriculture, industry, and social welfare, named after D. R. Gadgil, a prominent economist who emphasized balanced regional development.

**Reference:** Indian Economy by Ramesh Singh, 13th Edition, Pg. 162.

89. Who ------ Indian state? Correct Answer: (b) Sucheta Kripalani

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### **Explanation:**

**Sucheta Kripalani** was the first woman Chief Minister of an Indian state, Uttar Pradesh (1963–1967). She was known for her significant contributions during India's freedom struggle.

Reference: History of Modern India by Bipan Chandra, 2nd Edition, Pg. 422.

90. Which ------ India'? Correct Answer: (a) Ahmedabad

### Explanation:

Ahmedabad, Gujarat, is known as the 'Manchester of India' due to its thriving textile industry, which resembles the industrial city of Manchester in England.

**Reference:** Indian Geography by Majid Husain, 6th Edition, Pg. 211.

91. Which ------ range in India? Correct Answer: (b) Aravalli Hills

### Explanation:

The **Aravalli Hills** are the oldest mountain range in India, dating back to the **Precambrian era** (approximately 3.6 billion years). They run through Rajasthan and Haryana and are rich in minerals like marble and zinc.

Reference: Indian Geography by Majid Husain, 6th Edition, Pg. 87.

92. The Treaty ------ which year? Correct Answer: (c) 1765

### Explanation:

The **Treaty of Allahabad** was signed in **1765** between the British East India Company and Mughal Emperor Shah Alam II. It granted the company the **Diwani rights** (revenue collection) of Bengal, Bihar, and Orissa, marking a significant step in British control over India.

Reference: A History of Modern India by Bipan Chandra, 2nd Edition, Pg. 138.

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93. The National ----- which leader? Correct Answer: (d) Mahatma Gandhi

**Explanation:** 

The National Rural Employment Guarantee Act (NREGA) was renamed as the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in 2009 to honor Mahatma Gandhi's vision of self-reliant rural development.

**Reference:** Indian Economy by Ramesh Singh, 13th Edition, Pg. 198.

94. Which ------ forest cover? Correct Answer: (a) Madhya Pradesh

Explanation:

Madhya Pradesh has the largest forest cover in India, contributing significantly to the nation's total forest area. Its forests are rich in biodiversity and home to several wildlife sanctuaries and tiger reserves.

**Reference:** Indian Geography by Majid Husain, 6th Edition, Pg. 231.

95. Which Indian ------ 'Punjab Kesari'? Correct Answer: (a) Lala Lajpat Rai

**Explanation:** 

Lala Lajpat Rai, a prominent Indian freedom fighter, was popularly known as 'Punjab Kesari' (Lion of Punjab) for his leadership in the independence movement and his opposition to British policies, especially the Simon Commission.

Reference: History of Modern India by Bipan Chandra, 2nd Edition, Pg. 305.

96. The Chipko ------ Indian state? Correct Answer: (b) Uttarakhand

Explanation:

The Chipko Movement originated in Uttarakhand (then part of Uttar Pradesh) in the 1970s. It

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was a grassroots movement where villagers, particularly women, hugged trees to prevent deforestation and raise environmental awareness.

Reference: Environmental Studies by Erach Bharucha, 2nd Edition, Pg. 218.

97. Which river ------- 'Lifeline of Gujarat'? Correct Answer: (c) Narmada

#### **Explanation:**

The **Narmada River** is called the **'Lifeline of Gujarat'** because it provides water for drinking, irrigation, and industrial purposes. The **Sardar Sarovar Dam** on the river is a major source of hydroelectric power and irrigation.

**Reference:** Indian Geography by Majid Husain, 6th Edition, Pg. 145.

98. If in ----- MINT coded? Correct Answer: (c) INMT

#### Explanation:

In this coding system, the first and last letters of the word are swapped. Hence, **MINT**  $\rightarrow$  **INMT**, following the pattern where letters reverse positions symmetrically.

**Reference:** Logical Reasoning by Arun Sharma, 6th Edition, Pg. 83.

99. To take ----- O'Dwyer in London? Correct Answer: (b) Sardar Udham Singh

**Explanation:** 

Sardar Udham Singh assassinated General O'Dwyer in London in 1940 to avenge the Jallianwala Bagh Massacre of 1919. This act was a significant symbol of resistance against British colonial rule.

Reference: A History of Modern India by Bipan Chandra, 2nd Edition, Pg. 243.

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100. is ----- Ganges.

Correct Answer: (d) Manas

**Explanation:** 

The Manas River is not a tributary of the Ganges. It flows through Bhutan and Assam and is a tributary of the Brahmaputra River, unlike the other rivers mentioned that connect to the Ganges.

**Reference:** Indian Geography by Majid Husain, 6th Edition, Pg. 156.



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