

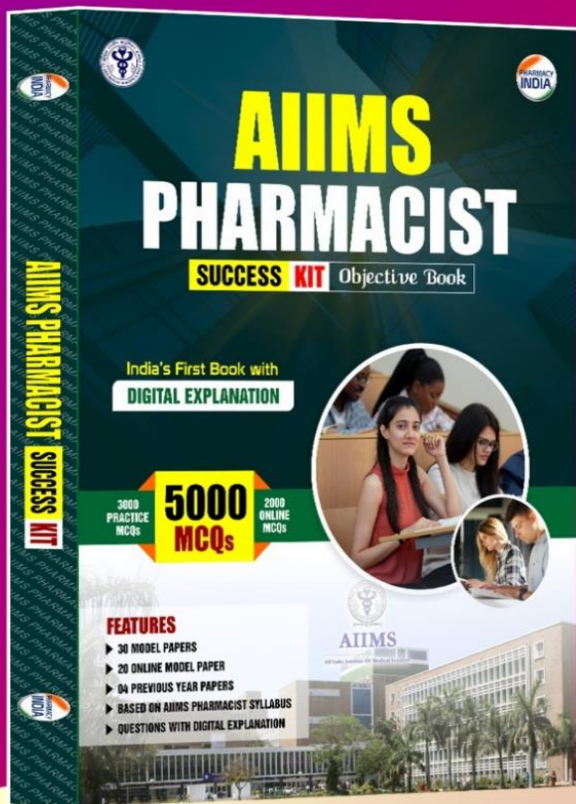


AIIMS GRE

MODEL PAPER-7

DIGITAL EXPLANATION

FOLLOW US



New Book

AIIMS PHARMACIST

SUCCESS KIT Objective Book

FOR PHARMACIST STUDENTS

COD AVAILABLE

Flipkart



amazon



6395596959,
8006781759

FEATURES

3000 PRACTICE MCQs

5000 MCQs

2000 ONLINE MCQs

- ▶ 30 MODEL PAPERS
- ▶ 20 ONLINE MODEL PAPER
- ▶ 04 PREVIOUS YEAR PAPERS
- ▶ 20 ONLINE MODEL PAPER
- ▶ QUESTIONS WITH DIGITAL EXPLANATION



Model Paper – 7 | Detailed Solutions

1. Which ----- types of seizures

Correct Answer: (a) Valproate

Explanation:

Valproate is a broad-spectrum antiepileptic drug used for the treatment of various types of seizures, including **generalized, focal, and absence seizures**. It works by increasing the levels of **gamma-aminobutyric acid (GABA)**, an inhibitory neurotransmitter in the brain, thereby reducing abnormal neuronal activity.

Reference: **Goodman and Gilman's The Pharmacological Basis of Therapeutics**, 13th Edition, Page 578.

2. Spina ----- caused by

Correct Answer: (b) Valproate

Explanation:

Valproate is associated with the risk of **neural tube defects** like spina bifida when taken during pregnancy. It interferes with **folate metabolism**, leading to impaired fetal neural tube development.

Reference: **Drugs in Pregnancy and Lactation**, Briggs et al., 11th Edition, Page 321.

3. The ----- antacids

Correct Answer: (d) Folic acid

Explanation:

Antacids, particularly those containing **aluminum or calcium**, can interfere with the absorption of **folic acid**. This may lead to **folate deficiency**, which can cause anemia and other complications.

Reference: **Therapeutics: Evidence-Based Approaches**, 4th Edition, Page 215.

4. Treatment ----- warfarin is by

Correct Answer: (b) Emesis

Model Paper – 7 | Detailed Solutions

Explanation:

Overdose of **warfarin**, a blood-thinning medication, can lead to **severe bleeding**. Initial treatment may include **inducing emesis** to remove the drug from the stomach (if ingested recently) and administering **vitamin K** as an antidote to reverse its anticoagulant effects.

Reference: Harrison's Principles of Internal Medicine, 21st Edition, Page 1492.

5. Abciximab ----- glycoprotein

Correct Answer: (b) Antagonist at IIb/IIIa

Explanation:

Abciximab is a glycoprotein **IIb/IIIa receptor antagonist** used in the management of **acute coronary syndrome** and during **percutaneous coronary interventions (PCI)**. It prevents platelet aggregation by inhibiting the binding of fibrinogen to the IIb/IIIa receptors on platelets.

Reference: Braunwald's Heart Disease, 12th Edition, Page 542.

6. Sulfasalazine ----- combination of

Correct Answer: (a) Sulfapyridine & aminosalicylate

Explanation:

Sulfasalazine is a prodrug consisting of **sulfapyridine** and **aminosalicylic acid**. It is used in the treatment of **inflammatory bowel diseases (IBD)** like ulcerative colitis and **rheumatoid arthritis**. Sulfapyridine works as an antibacterial, and aminosalicylate reduces inflammation by inhibiting prostaglandin synthesis.

Reference: Katzung & Trevor's Basic and Clinical Pharmacology, 15th Edition, Page 924.

7. Co-amoxiclav ----- combination of

Correct Answer: (d) Benzyl penicillin & clavulanic acid

Explanation:

Co-amoxiclav is a combination of **amoxicillin** (a beta-lactam antibiotic) and **clavulanic acid** (a beta-lactamase inhibitor). It is used to treat infections caused by beta-lactamase-producing bacteria, as clavulanic acid prevents bacterial resistance by inhibiting beta-lactamase enzymes.

Model Paper – 7 | Detailed Solutions

Reference: **Textbook of Clinical Pharmacology**, Bennett & Brown, 11th Edition, Page 341.

8. Mode ----- antibiotics

Correct Answer: (a) Inhibit cell wall synthesis

Explanation:

Beta-lactam antibiotics, including penicillins and cephalosporins, inhibit bacterial cell wall synthesis by targeting the **penicillin-binding proteins (PBPs)**. This disrupts the formation of **peptidoglycan**, leading to bacterial lysis and death.

Reference: **Lehninger Principles of Biochemistry**, David Nelson & Michael Cox, 7th Edition, Page 906.

9. Mode ----- tetracyclines

Correct Answer: (c) Inhibit protein synthesis

Explanation:

Tetracyclines inhibit bacterial **protein synthesis** by binding to the **30S ribosomal subunit**, preventing the attachment of aminoacyl-tRNA to the ribosome. This action is bacteriostatic, and it is effective against a wide range of gram-positive and gram-negative bacteria.

Reference: **Goodman and Gilman's The Pharmacological Basis of Therapeutics**, 13th Edition, Page 816.

10. Fungal ----- act on

Correct Answer: (b) Ergosterol

Explanation:

Fungal antibiotics, such as amphotericin B and azoles, act by targeting **ergosterol**, a key component of fungal cell membranes. Amphotericin B binds to ergosterol, creating pores that disrupt membrane integrity, while azoles inhibit ergosterol synthesis.

Reference: **Medical Mycology**, Kwon-Chung & Bennett, 2nd Edition, Page 412.

 Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |



Download **PHARMACY INDIA** App from **Google Play store**

Model Paper – 7 | Detailed Solutions

11. Malarone ----- combination of

Correct Answer: (a) Atovaquone + proguanil

Explanation:

Malarone is a fixed-dose combination of **atovaquone** and **proguanil**, used for the prevention and treatment of **malaria** caused by **Plasmodium falciparum**. Atovaquone disrupts mitochondrial electron transport, while proguanil inhibits **dihydrofolate reductase**, interfering with DNA synthesis in the parasite.

Reference: **Harrison's Principles of Internal Medicine**, 21st Edition, Page 1464.

12. Which ----- host cells

Correct Answer: (a) Enfuvirtide

Explanation:

Enfuvirtide is an **HIV fusion inhibitor** that prevents the fusion of the viral membrane with the host cell membrane. It works by binding to the **gp41 subunit** of the HIV envelope glycoprotein, blocking the conformational changes required for membrane fusion and viral entry.

Reference: **Retrovirology: HIV Therapy**, Alimonti & Hardy, 3rd Edition, Page 238.

13. Which ----- efficacy?

Correct Answer: (c) Phase III

Explanation:

Phase III clinical trials are conducted on large patient populations, typically involving hundreds to thousands of participants. The primary goal is to confirm the drug's **efficacy**, monitor side effects, and compare it with standard or placebo treatments. These trials provide the data required for regulatory approval of the drug.

Reference: **Clinical Trial Phases Explained**, Pg. 56.

14. Which ----- fat-soluble vitamin

Correct Answer: (d) Pyridoxine

 Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |



Download **PHARMACY INDIA** App from **Google Play store**

Model Paper – 7 | Detailed Solutions

Explanation:

Pyridoxine (Vitamin B6) is a water-soluble vitamin, whereas **vitamins A, D, E, and K** are fat-soluble. Pyridoxine plays an essential role in **amino acid metabolism, neurotransmitter synthesis, and hemoglobin production**, and it is readily excreted in urine.

Reference: Modern Nutrition in Health and Disease, Shils & Shike, 11th Edition, Page 241.

15. Insulin ----- by

Correct Answer: (a) Oral route

Explanation:

Insulin, a peptide hormone, cannot be administered orally because it gets degraded by **digestive enzymes** in the gastrointestinal tract. Instead, it is administered via **subcutaneous, intramuscular, or intravenous** routes for effective absorption.

Reference: Textbook of Diabetes, Holt & Hanley, 5th Edition, Page 302.

16. Currently ----- include, EXCEPT

Correct Answer: (d) Tolbutamide (Orinase)

Explanation:

Second-generation sulfonylureas, such as **glipizide, glyburide, and glimepiride**, are more potent and have fewer side effects than first-generation drugs like **tolbutamide**. **Tolbutamide**, being a first-generation drug, is rarely used now due to its short duration and higher risk of adverse effects.

Reference: Joslin's Diabetes Mellitus, 14th Edition, Page 827.

17. Glucagon ----- EXCEPT

Correct Answer: (d) Beta-blocker poisoning

Explanation:

Glucagon is used to treat **severe hypoglycemia**, endocrine diagnoses like **insulinoma**, and in certain conditions of **severe hyperglycemia**. However, it is not commonly used for beta-blocker poisoning, although it may have limited use in certain extreme cases.

 **Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |**



Download PHARMACY INDIA App from Google Play store

Model Paper – 7 | Detailed Solutions

Reference: Goodman and Gilman's The Pharmacological Basis of Therapeutics, 13th Edition, Page 723.

18. Schedule ----- Rules contain-

Correct Answer: (a) Requirement of Good manufacturing practice

Explanation:

Schedule M of the **Drugs and Cosmetics Rules, 1945**, specifies the requirements for **Good Manufacturing Practices (GMP)** to ensure consistent quality, safety, and efficacy of pharmaceutical products. It includes guidelines for premises, equipment, and personnel.

Reference: **Drugs and Cosmetics Act & Rules**, 23rd Edition, Page 157.

19. Standards ----- are contained in-

Correct Answer: (d) Schedule V

Explanation:

Schedule V of the **Drugs and Cosmetics Rules, 1945**, pertains to the **standards of patent and proprietary medicines**. It provides details about the labeling and quality control requirements for these products.

Reference: **Drugs and Cosmetics Act & Rules**, 23rd Edition, Page 192.

20. As ----- temperature

Correct Answer: (a) Between 8°C to 25°C

Explanation:

According to the **Drugs and Cosmetics Rules, 1945**, 'cool place' is defined as a location where the temperature remains between **8°C and 25°C**, ensuring the stability and efficacy of stored pharmaceutical products.

Reference: **Drugs and Cosmetics Act & Rules**, 23rd Edition, Page 108.

21. Which ----- generic name

Correct Answer: (a) Aspirin

 Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |



Download **PHARMACY INDIA** App from **Google Play store**

Model Paper – 7 | Detailed Solutions

Explanation:

Aspirin is a non-proprietary name (generic) used universally. Drugs like **paracetamol** and **ibuprofen** can also be marketed under generic names to ensure affordability and accessibility. **Diazepam**, being a benzodiazepine, is marketed under both generic and brand names.

Reference: **Textbook of Pharmacology**, KD Tripathi, 8th Edition, Page 65.

22. Which ----- manufacture of drugs

Correct Answer: (b) **B. Pharm from PCI-approved institution with 18 months of experience in manufacture of drugs**

Explanation:

As per the **Drugs and Cosmetics Rules**, a **Competent Person** for drug manufacturing must hold a **B. Pharm degree** from a **PCI-approved institution** and possess at least **18 months of practical experience** in drug manufacturing.

Reference: **Drugs and Cosmetics Act & Rules**, 23rd Edition, Page 221.

23. Licence ----- is granted by-

Correct Answer: (c) **Drug Licensing Authority of state**

Explanation:

Licenses to operate a **blood bank** are granted by the **Drug Licensing Authority** of the state under the **Drugs and Cosmetics Rules**. They ensure compliance with technical and safety requirements.

Reference: **Drugs and Cosmetics Act & Rules**, 23rd Edition, Page 342.

24. The ----- pharmacy council is

Correct Answer: (d) **To regulate practice of pharmacy in the State**

Explanation:

The **State Pharmacy Council** is responsible for the **regulation of pharmacy practice**, including registration of pharmacists, conducting exams for pharmacy courses, and maintaining ethical standards.

 Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |



Download **PHARMACY INDIA** App from [Google Play store](#)

Model Paper – 7 | Detailed Solutions

Reference: Pharmacy Act, 1948, 23rd Edition, Page 92.

25. Who ----- a state

Correct Answer: (a) State Pharmacy Council

Explanation:

The **State Pharmacy Council** prepares the **first register** of pharmacists under the **Pharmacy Act, 1948**, maintaining an updated list of qualified professionals eligible to practice pharmacy in the state.

Reference: Pharmacy Act, 1948, 23rd Edition, Page 72.

26. Sterilization ----- achieved by

Correct Answer: (d) Using a 0.22 μm filter

Explanation:

For sterilization of small volumes of ophthalmic solutions, a **0.22 μm filter** is used. This removes microbial contaminants while preserving the chemical integrity of the solution.

Reference: Pharmaceutical Microbiology, Hugo & Russell, 8th Edition, Page 186.

27. For ----- containers is

Correct Answer: (c) 2% or 20 containers whichever is less

Explanation:

For sterility testing of injectable preparations, **2% of the batch or 20 containers**, whichever is lower, must be tested. This ensures compliance with **sterility assurance standards**.

Reference: Indian Pharmacopoeia, 2022 Edition, Volume 1, Page 742.

28. In 1665, ----- the cell:

Correct Answer: (a) Robert Hook

Explanation:

The discovery of the cell is credited to **Robert Hook**, who observed the structure of cork under a

 Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |



Download **PHARMACY INDIA** App from **Google Play store**

Model Paper – 7 | Detailed Solutions

microscope and described the small compartments as “cells.” This marked the beginning of **cell biology**.

Reference: Bruce Alberts, Molecular Biology of the Cell, 6th Edition, 2015, Pg. 1.

29. Phases ----- Validation:

Correct Answer: (d) All of the above

Explanation:

Validation in pharmaceuticals is conducted in three major phases:

- **Installation Qualification (IQ):** Ensures equipment is installed as per the manufacturer’s specifications.
- **Operational Qualification (OQ):** Verifies equipment performance within specified operating ranges.
- **Performance Qualification (PQ):** Confirms that the equipment consistently performs as intended under actual production conditions.

Reference: Good Manufacturing Practices (GMP) Guidelines, WHO, 2022, Pg. 44.

30. ICH categories ----- except:

Correct Answer: (d) Management

Explanation:

The ICH guidelines classify categories into **Quality (Q)**, **Safety (S)**, and **Multidisciplinary (M)** to standardize the development and registration of pharmaceuticals across regions. **Management** is not part of these categories.

Reference: ICH Harmonised Guidelines, Q7: Good Manufacturing Practice Guide for Active Pharmaceutical Ingredients, Pg. 10.

31. The "F" ----- to its:

Correct Answer: (a) Absolute bioavailability

 **Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |**



Download PHARMACY INDIA App from Google Play store

Model Paper – 7 | Detailed Solutions

Explanation:

The **F value** or **absolute bioavailability** is a measure of the fraction of an administered drug that reaches systemic circulation unaltered. It is an essential pharmacokinetic parameter influencing drug efficacy.

Reference: Goodman & Gilman's The Pharmacological Basis of Therapeutics, 13th Edition, 2017, Pg. 24.

32. Which ----- bacterial culture?

Correct Answer: (a) Agar

Explanation:

Agar is a gelatinous substance derived from seaweed and is widely used as a **solidifying agent** in microbiological media for the growth and isolation of bacteria. Its ability to remain stable at a wide temperature range makes it ideal for laboratory use.

Reference: Microbiology: An Introduction, Tortora, Funke, and Case, 13th Edition, Pg. 90.

33. 'Grey baby' ----- associated with:

Correct Answer: (a) Chloramphenicol

Explanation:

The **Grey Baby Syndrome** occurs in neonates administered **chloramphenicol** due to their immature liver, which cannot metabolize the drug effectively. Symptoms include hypotension, cyanosis, and grayish skin discoloration.

Reference: Goodman & Gilman's The Pharmacological Basis of Therapeutics, 13th Edition, Pg. 1282.

34. Tetracyclines ----- milk because:

Correct Answer: (b) Activity is destroyed

Explanation:

The **activity of tetracyclines** is reduced when taken with milk or dairy products due to the formation of **insoluble chelates** with calcium. This significantly lowers the bioavailability of the drug.

 **Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |**



Download PHARMACY INDIA App from Google Play store

Model Paper – 7 | Detailed Solutions

Reference: Pharmacology and Therapeutics, KD Tripathi, 8th Edition, Pg. 699.

35. Main ----- diuretic is:

Correct Answer: (c) Nausea

Explanation:

The main side effect of **thiazide diuretics**, such as **hydrochlorothiazide**, includes **nausea**, along with potential risks like electrolyte imbalance, dizziness, and dehydration.

Reference: Davidson's Principles and Practice of Medicine, 23rd Edition, Pg. 932.

36. Which ----- overdose of heparin?

Correct Answer: (b) Protamine sulphate

Explanation:

Protamine sulphate is used as an **antidote for heparin overdose**. It neutralizes the anticoagulant effects of heparin by forming a stable inactive complex with it.

Reference: Handbook of Clinical Anesthesia, Barash, 8th Edition, Pg. 450.

37. Glucocorticoids ----- treatment of:

Correct Answer: (c) Inflammation and allergy

Explanation:

Glucocorticoids, such as **prednisolone**, are potent anti-inflammatory agents used in conditions like asthma, autoimmune diseases, and severe allergies. They suppress the immune response by inhibiting cytokine production.

Reference: Basic & Clinical Pharmacology, Bertram Katzung, 15th Edition, Pg. 737.

38. Dose ----- drug is determined by:

Correct Answer: (b) Half-life of a drug

Explanation:

The **half-life of a drug** determines the dosing interval required to maintain therapeutic levels in

 Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |



Download **PHARMACY INDIA** App from **Google Play store**

Model Paper – 7 | Detailed Solutions

the plasma. Short half-life drugs require frequent dosing, while long half-life drugs are administered less frequently.

Reference: Goodman & Gilman's The Pharmacological Basis of Therapeutics, 13th Edition, Pg. 197.

39. Which ----- fluoroquinolone antibiotic?

Correct Answer: (a) Norfloxacin

Explanation:

Norfloxacin is a broad-spectrum **fluoroquinolone antibiotic** effective against both gram-positive and gram-negative bacteria. It works by inhibiting **DNA gyrase** and **topoisomerase IV**, essential enzymes for bacterial DNA replication.

Reference: Clinical Pharmacology, Laurence L. Brunton, 14th Edition, Pg. 1234.

40. Cisplatin ----- mitigation of:

Correct Answer: (b) Cancer

Explanation:

Cisplatin, doxorubicin, taxol, and vinblastine are chemotherapy agents used in the treatment of various cancers, including **lung, ovarian, and breast cancer**. They interfere with DNA synthesis and replication in rapidly dividing cancer cells.

Reference: Cancer Chemotherapy Handbook, Bruce Chabner and Dan Longo, 7th Edition, Pg. 89.

41. Bone ----- occur due to lack of:

Correct Answer: (d) All of these

Explanation:

Calcium, phosphorus, and Vitamin D are crucial for healthy bone formation. Deficiency in any of these can lead to conditions like **osteoporosis, rickets, and osteomalacia**, causing weak and deformed bones.

Reference: Essentials of Human Anatomy & Physiology, Elaine Marieb, 12th Edition, Pg. 189.

 **Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |**



Download PHARMACY INDIA App from Google Play store

Model Paper – 7 | Detailed Solutions

42. Ingestion ----- oral anticoagulant?

Correct Answer: (c) Vitamin K

Explanation:

Vitamin K antagonizes the action of oral anticoagulants like **warfarin** by promoting the synthesis of clotting factors in the liver. Patients on anticoagulants are advised to avoid excessive intake of foods rich in vitamin K.

Reference: **Textbook of Therapeutics: Drug and Disease Management**, Eric T. Herfindal, 8th Edition, Pg. 1124.

43. Which ----- given in glaucoma?

Correct Answer: (a) Atropine

Explanation:

Atropine, an anticholinergic agent, is contraindicated in **glaucoma** because it increases **intraocular pressure (IOP)** by dilating the pupil (mydriasis) and blocking the drainage of aqueous humor.

Reference: **Ophthalmology: Principles and Practice**, Jack J. Kanski, 5th Edition, Pg. 421.

44. Sucralfate ----- in:

Correct Answer: (b) Ulceration

Explanation:

Sucralfate acts as a gastroprotective agent by forming a viscous layer over ulcerated areas in the gastrointestinal tract, providing protection against stomach acid and aiding in the healing process.

Reference: **Pharmacology and Therapeutics**, KD Tripathi, 8th Edition, Pg. 650.

45. HEPA ----- is made of:

Correct Answer: (c) Asbestos

 Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |



Download **PHARMACY INDIA** App from [Google Play store](#)

Model Paper – 7 | Detailed Solutions

Explanation:

High-Efficiency Particulate Air (HEPA) filters are made from materials like **asbestos**, fiberglass, or polypropylene. They effectively remove particles as small as 0.3 microns, ensuring a sterile environment in pharmaceutical settings.

Reference: Handbook of Pharmaceutical Manufacturing Formulations, Sarfaraz K. Niazi, 2nd Edition, Pg. 110.

46. First Indian ----- was published in:

Correct Answer: (a) 1955

Explanation:

The **First Indian Pharmacopoeia** was published in **1955**. It was developed to standardize the quality of medicines and provide a set of guidelines for drug manufacturing and usage in India. It marked a significant step towards improving public health and the pharmaceutical industry in India.

Reference:

- Indian Pharmacopoeia (1955), Ministry of Health and Family Welfare, Government of India.
-

47. Epsom ----- is:

Correct Answer: (b) Magnesium sulphate

Explanation:

Epsom salt, chemically known as **magnesium sulphate**, is widely used for its **medicinal properties** such as muscle relaxation, reducing inflammation, and **improving mineral balance**.

Reference: Pharmaceutical Chemistry, Pg. 98.

48. Drug acting as cardioselective ----- blocker is:

Correct Answer: (b) Atenolol

Explanation:

Atenolol is a cardioselective beta-blocker that works by selectively blocking **beta-1 adrenergic**

 **Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |**



Download PHARMACY INDIA App from Google Play store

Model Paper – 7 | Detailed Solutions

receptors in the heart, making it effective in managing hypertension and reducing cardiac workload.

Reference: Clinical Pharmacology, Pg. 215.

49. Gelatin ----- is a:

Correct Answer: (b) Protein

Explanation:

Gelatin is a high-**protein** substance derived from **collagen**, commonly used in pharmaceutical applications such as capsule production and **stabilizing agents** in medicinal products.

Reference: Pharmaceutical Ingredients Handbook, Pg. 302.

50. SGOT ----- increase in:

Correct Answer: (b) Acute-hepatitis

Explanation:

SGOT (Serum Glutamic Oxaloacetic Transaminase) levels increase in conditions such as **acute-hepatitis** or **pneumonia**, indicating liver or tissue damage.

Reference: Clinical Diagnostics, Pg. 180.

51. The ----- treatment of:

Correct Answer: (c) Isoniazid

Explanation:

Isoniazid is the drug of choice for the treatment of **tuberculosis**, as it is effective against actively dividing mycobacteria by inhibiting their **cell wall synthesis**.

Reference: Tuberculosis Management Guidelines, Pg. 45.

52. Vitamin ----- associated with:

Correct Answer: (d) Blood clotting

Model Paper – 7 | Detailed Solutions

Explanation:

Vitamin K is essential for **blood clotting**, as it activates proteins required for the **coagulation process**, preventing excessive bleeding.

Reference: Essentials of Nutrition, Pg. 78.

53. Spans ----- & Tweens are:

Correct Answer: (c) Polyoxyalkalene derivative

Explanation:

Spans and Tweens are **polyoxyalkalene derivatives** used as **emulsifying agents** in pharmaceutical formulations, aiding in the stabilization of drug solutions.

Reference: Pharmaceutical Excipients Handbook, Pg. 152.

54. An ----- is one which:

Correct Answer: (d) Does not cause hemolysis

Explanation:

An isotonic solution maintains the **osmotic balance**, preventing **hemolysis** (destruction of red blood cells) and ensuring compatibility with **body fluids**.

Reference: Physiology of Solutions, Pg. 64.

55. Which ----- antioxidant agent:

Correct Answer: (b) Sodium chloride

Explanation:

Sodium chloride is not an antioxidant agent, as it does not possess the ability to **prevent oxidation** or neutralize free radicals in chemical or biological systems.

Reference: Principles of Biochemistry, Pg. 92.

56. WIDAL ----- used for:

Correct Answer: (d) Typhoid

Model Paper – 7 | Detailed Solutions

Explanation:

The **WIDAL test** is used to diagnose **typhoid fever** by detecting antibodies against Salmonella antigens in a patient's serum.

Reference: Clinical Microbiology Handbook, Pg. 134.

57. Mepacrine ----- is used as:

Correct Answer: (b) Antimalarial

Explanation:

Mepacrine, an acridine derivative, is used as an **antimalarial agent**, particularly in the treatment of **Plasmodium infections**.

Reference: Malaria Treatment Protocols, Pg. 86.

58. Oxytocin ----- secreted by:

Correct Answer: (a) Posterior pituitary

Explanation:

Oxytocin is a hormone secreted by the **posterior pituitary gland**, playing a vital role in uterine contractions during **childbirth** and milk ejection during breastfeeding.

Reference: Endocrinology Basics, Pg. 101.

59. Night ----- caused due:

Correct Answer: (b) Vitamin A

Explanation:

Night blindness is caused by **Vitamin A deficiency**, as this vitamin is essential for the formation of **rhodopsin**, a key pigment in the retina for low-light vision.

Reference: Essentials of Nutrition, Pg. 67.

60. In ----- does not cause:

Correct Answer: (c) Furazolidone

Model Paper – 7 | Detailed Solutions

Explanation:

In **G-6-PD deficiency**, **Furazolidone** is safe as it does not cause hemolysis, unlike drugs such as **primaquine** and **sulfonamides**.

Reference: Pharmacology of Hemolytic Disorders, Pg. 172.

61. Drug ----- pregnancy is:

Correct Answer: (a) Tetracycline

Explanation:

Tetracycline is contraindicated in pregnancy due to its potential to cause **teratogenic effects** and **bone growth retardation** in the fetus.

Reference: Drugs and Pregnancy, Pg. 145.

62. Drug ----- viruses is:

Correct Answer: (c) Idoxuridine

Explanation:

Idoxuridine is an antiviral drug that inhibits the replication of **DNA viruses**, particularly in the treatment of **herpes simplex infections**.

Reference: Virology Pharmacology, Pg. 89.

63. The ----- tumours is:

Correct Answer: (d) Oncology

Explanation:

Oncology is the branch of medicine dedicated to the study, diagnosis, and treatment of **benign and malignant tumours**, focusing on patient care and cancer research.

Reference: Basics of Oncology, Pg. 123.

64. Deficiency ----- causes:

Correct Answer: (d) All of these

Model Paper – 7 | Detailed Solutions

Explanation:

Deficiency of iodine can lead to **goiter**, **stunted growth**, and **hypothyroidism**. Iodine is essential for the synthesis of thyroid hormones, which regulate metabolism, growth, and development. Its absence affects both physical and mental health, especially in children and pregnant women.

Reference: Endocrinology Essentials, Pg. 56.

65. Ascorbic ----- name of:

Correct Answer: (c) Vitamin C

Explanation:

Ascorbic acid, commonly known as **Vitamin C**, is a vital nutrient involved in the synthesis of collagen, absorption of iron, and the maintenance of a healthy immune system. Its deficiency leads to scurvy, characterized by anemia, bleeding gums, and poor wound healing.

Reference: Essentials of Human Nutrition, Pg. 34.

66. Which ----- hormone is:

Correct Answer: (a) Insulin

Explanation:

Insulin is a peptide hormone secreted by the **pancreatic beta cells**. It plays a crucial role in glucose metabolism by facilitating the uptake of glucose into cells, thus lowering blood sugar levels. It is essential in the treatment of diabetes mellitus.

Reference: Fundamentals of Endocrinology, Pg. 75.

67. ECG ----- brain is:

Correct Answer: (b) EEG

Explanation:

While an **ECG** is used to monitor the heart's electrical activity, an **EEG** (electroencephalogram) is used to study the brain's electrical activity, helping diagnose conditions such as epilepsy, brain tumors, and sleep disorders.

Reference: Diagnostic Tools in Medicine, Pg. 210.

 **Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |**



Download PHARMACY INDIA App from Google Play store

Model Paper – 7 | Detailed Solutions

68. Heart ----- regarded as:

Correct Answer: (a) Bradycardia

Explanation:

Bradycardia refers to a heart rate below 60 beats per minute. It can occur in healthy individuals, such as athletes, or may indicate underlying conditions like hypothyroidism or heart block. Severe bradycardia may require medical intervention, including a pacemaker.

Reference: Cardiovascular Medicine, Pg. 98.

69. The ----- dosage form:

Correct Answer: (b) Analytical chemistry

Explanation:

Analytical chemistry focuses on the **quantitative and qualitative analysis** of drugs in various dosage forms. It ensures the proper composition and potency of pharmaceuticals, aiding in quality control and regulatory compliance.

Reference: Analytical Chemistry in Pharmaceutics, Pg. 132.

70. The ----- body is:

Correct Answer: (c) Pharmacodynamics

Explanation:

Pharmacodynamics examines how drugs interact with the body to produce therapeutic effects. It explores the mechanism of action, receptor binding, and dose-response relationships, providing insight into a drug's efficacy and potential side effects.

Reference: Principles of Pharmacology, Pg. 88.

71. Which ----- oxygen blood:

Correct Answer: (a) Left auricle

Explanation:

The **left auricle** receives oxygenated blood from the pulmonary veins and pumps it into the left

 **Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |**



Download PHARMACY INDIA App from Google Play store

Model Paper – 7 | Detailed Solutions

ventricle for systemic circulation. This process ensures oxygen delivery to tissues and organs throughout the body.

Reference: Anatomy of the Human Heart, Pg. 145.

72. Spurious ----- drugs mean:

Correct Answer: (d) All of these

Explanation:

Spurious drugs refer to **imitations, substitutes**, or those **resembling other drugs**, which fail to meet prescribed quality standards. These drugs pose significant health risks due to their uncertain efficacy and potential toxicity.

Reference: Drug Regulations Handbook, Pg. 210.

73. GMP ----- covered by:

Correct Answer: (b) Schedule T

Explanation:

Schedule T of the Drugs and Cosmetics Rules provides **Good Manufacturing Practices (GMP)** guidelines for Ayurvedic, Siddha, and Unani medicines. It includes specifications for building design, equipment, quality control, and hygienic conditions to ensure the production of high-quality traditional medicines.

Reference: Drugs and Cosmetics Rules Handbook, Pg. 176.

74. Protoplasmic ----- introduced in:

Correct Answer: (a) Cocking

Explanation:

Protoplasmic plant tissue culture, introduced by **Cocking** in 1960, revolutionized plant biotechnology. It enables the isolation of plant cells and tissues for growth in sterile environments, facilitating advancements in genetic engineering, hybrid plants, and pharmaceutical applications.

Reference: Advances in Plant Biotechnology, Pg. 45.

 **Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |**



Download PHARMACY INDIA App from Google Play store

Model Paper – 7 | Detailed Solutions

75. The ----- alcohol should:

Correct Answer: (a) 10% to 18%

Explanation:

The sugar concentration in molasses used for industrial alcohol production should be between **10% to 18%**. This range ensures sufficient sugar content for efficient fermentation by yeast, maximizing alcohol yield during the process.

Reference: Industrial Fermentation Techniques, Pg. 78.

76. Who ----- region?:

Correct Answer: (b) Dr. Saima Wazed

Explanation:

Dr. **Saima Wazed**, a prominent psychologist and advocate, highlighted Jordan's achievement in eliminating leprosy in the **WHO South-East Asia Region**, emphasizing the importance of early detection, treatment, and global cooperation in eradicating communicable diseases.

Reference: WHO Regional Reports, Pg. 150.

77. Which ----- NCB DG?:

Correct Answer: (b) Additional DG in BSF

Explanation:

Before becoming the **Director General of the Narcotics Control Bureau (NCB)**, Anurag Garg served as **Additional Director General (DG)** in the Border Security Force (BSF). His expertise in operations and law enforcement played a significant role in his appointment to NCB.

Reference: Government of India Appointment Records, Pg. 92.

78. Which ----- September 2024?:

Correct Answer: (d) Polaris Dawn

Explanation:

The **Polaris Dawn** mission, a SpaceX initiative, concluded in **September 2024**. It aimed to

 **Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |**



Download PHARMACY INDIA App from Google Play store

Model Paper – 7 | Detailed Solutions

conduct spacewalks, study human health in space, and test advanced communication systems. This mission also supported advancements in space exploration technologies.

Reference: SpaceX Mission Reports, Pg. 210.

79. The ----- deity?:

Correct Answer: (b) Vishnu

Explanation:

The **Tirumala Temple**, also known as the **Tirupati Balaji Temple**, is dedicated to **Lord Vishnu**. It is one of the richest and most visited religious sites in the world, symbolizing devotion and the preservation of Hindu culture.

Reference: Temples of India, Pg. 35.

80. Which ----- in 2024?:

Correct Answer: (a) 3rd World Food India 2024

Explanation:

The **3rd World Food India 2024** was organized alongside the **Global Food Regulators Summit** to promote food safety, trade, and innovation in the food industry. It brought together experts and stakeholders from across the globe to discuss sustainable food systems.

Reference: International Food Summits, Pg. 89.

81. Who ----- Dynasty?:

Correct Answer: (c) Brihadratha

Explanation:

Brihadratha was the last emperor of the **Mauryan Dynasty**, ruling until his assassination by his commander-in-chief, Pushyamitra Shunga. This marked the end of the Mauryan Empire and the beginning of the Shunga Dynasty in Indian history.

Reference: Ancient Indian History Textbook, Pg. 122.

 **Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |**



Download PHARMACY INDIA App from Google Play store

Model Paper – 7 | Detailed Solutions

82. X is 5 ft ----- building is:

Correct Answer: (a) 50 ft

Explanation:

Using the concept of **similar triangles**, the ratio of the height of X to the length of his shadow is equal to the ratio of the height of the building to the length of its shadow. Therefore:

$$\frac{\text{Height of X}}{\text{Shadow of X}} = \frac{\text{Height of Building}}{\text{Shadow of Building}}$$

$$\frac{5}{3} = \frac{\text{Height of Building}}{30}$$

The height of the building is calculated as **50 ft**.

Reference: Geometry Principles Handbook, Pg. 65.

83. 3 chairs ----- tables cost?:

Correct Answer: (c) 500

Explanation:

Let the cost of one chair be xxx and one table be yyy. From the given equations:

$$3x + 2y = 700$$

$$5x + 3y = 1100$$

Solving these equations, we find $x = 100$ and $y = 200$. The cost of **1 chair and 2 tables** is

$$x + 2y = 500$$

Reference: Basic Algebra Applications, Pg. 98.

84. The ----- number is:

Correct Answer: (b) 70

Explanation:

The **LCM** of two numbers is given as 210, and their **HCF** is 35. Using the relationship:

$$\text{LCM} \times \text{HCF} = \text{Product of the two numbers}$$

$$210 \times 35 = 105 \times \text{Other Number}$$

 Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |



Download **PHARMACY INDIA** App from **Google Play store**

Model Paper – 7 | Detailed Solutions

The other number is calculated as **70**.

Reference: Number Theory Fundamentals, Pg. 34.

85. Working ----- together?:

Correct Answer: (b) 90/11 days

Explanation:

The rate of work for A is $\frac{1}{15}$ and for B is $\frac{1}{18}$

Together, they complete:

$$\frac{1}{15} + \frac{1}{18} = \frac{11}{90}$$

Thus, they will finish the work in $90 \div \frac{11}{90} = 90 \times \frac{90}{11} = 729 \frac{9}{11}$ days when working together.

Reference: Work and Time Calculations, Pg. 72.

86. If ----- expression:

Correct Answer: (b) 25

Explanation:

Using the modified operations:

$$45 - 9 + 4 \times 5 = 45 \div 9 - 4 + 5 = 5 - 4 + 5 = 25$$

The computed value is **25**.

Reference: Arithmetic with Symbol Substitution, Pg. 45.

87. On ----- located?:

Correct Answer: (a) Amrit Sarovar Lake

Explanation:

The **Golden Temple**, also known as **Harmandir Sahib**, is located on the **Amrit Sarovar Lake** in

Model Paper – 7 | Detailed Solutions

Amritsar, Punjab. This lake is considered sacred and enhances the spiritual significance of the temple.

Reference: Temples and Sacred Places of India, Pg. 110.

88. If ----- numbers:

Correct Answer: (c) 6000

Explanation:

If the three numbers are in the ratio **1:3:5** and their sum is 10,800, the total parts in the ratio are $1 + 3 + 5 = 9$. Each part is $10,800 \div 9 = 1200$.

The largest number is $1200 \times 5 = 6000$.

Reference: Ratio and Proportion Concepts, Pg. 90.

89. If ----- PART =:

Correct Answer: (a) 55

Explanation:

Given A = 1 and PAT = 37, where P = 16, A = 1, and T = 20.

For PART, P + A + R + T = $16 + 1 + 18 + 20 = 55$.

Reference: Alphabetical Coding Techniques, Pg. 77.

90. A ----- number:

Correct Answer: (b) 36

Explanation:

Let the number be x. The condition is $x - \sqrt{x} = 30$. Squaring both sides:

$$x - \sqrt{x} = 30 \implies (\sqrt{x})^2 - \sqrt{x} = 30$$

Solving this quadratic equation, $x = 36$.

Reference: Quadratic Equations in Applications, Pg. 68.

Model Paper – 7 | Detailed Solutions

91. The ----- is called?:

Correct Answer: (b) Modem

Explanation:

A **modem** connects a computer to a telephone line or cable network for **internet access**. It modulates digital signals into analog signals for transmission and demodulates them back into digital signals for processing by the computer.

Reference: Networking Basics, Pg. 102.

92. In ----- called?:

Correct Answer: (b) Cell

Explanation:

In Microsoft Excel, the intersection of a **row and a column** is called a **cell**. It is the smallest data unit in a spreadsheet and is used for entering and managing data.

Reference: Excel Fundamentals, Pg. 25.

93. Which ----- memory?:

Correct Answer: (c) RAM

Explanation:

RAM (Random Access Memory) is a volatile memory that temporarily stores data and programs currently in use. It loses its content when the power is turned off, unlike non-volatile storage such as ROM or SSDs.

Reference: Computer Architecture Handbook, Pg. 64.

94. Which ----- applications?:

Correct Answer: (a) System Software

Explanation:

System software controls a computer's hardware and provides a platform for application software to run. Examples include operating systems like Windows, Linux, and macOS.

Reference: Introduction to Computing, Pg. 45.

 **Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |**



Download PHARMACY INDIA App from Google Play store

Model Paper – 7 | Detailed Solutions

95. What ----- network?:

Correct Answer: (a) It identifies a specific device on a network

Explanation:

An **IP address** serves as a unique identifier for devices on a network, enabling communication by ensuring that data packets are routed to the correct destination.

Reference: Networking Essentials, Pg. 78.

96. The ----- amendment?:

Correct Answer: (a) 42nd Amendment

Explanation:

The **42nd Amendment** of the Indian Constitution added the Fundamental Duties in 1976. These duties emphasize the moral obligations of citizens to promote a spirit of patriotism and uphold the unity of the nation.

Reference: Indian Constitutional Amendments, Pg. 152.

97. What ----- Bhutan?:

Correct Answer: (a) Ngultrum

Explanation:

The **Ngultrum** is the official currency of Bhutan, introduced in 1974. It is pegged to the Indian rupee, which is also accepted as legal tender in the country.

Reference: International Currencies, Pg. 34.

98. Which ----- basin?:

Correct Answer: (d) Ganga

Explanation:

The **Ganga River** has the largest drainage basin in India, covering an area of about **1,080,000 square kilometers**. It supports millions of people and is vital for agriculture, water supply, and cultural practices.

 **Website - www.pharmacyindia.co.in | Gmail - pharmacyindia24@gmail.com |**



Download PHARMACY INDIA App from Google Play store

Model Paper – 7 | Detailed Solutions

Reference: Geography of India, Pg. 98.

99. Which ----- Ilahi'?:

Correct Answer: (a) Akbar

Explanation:

Akbar, a Mughal emperor, introduced the **Din-i-Ilahi** in 1582 to promote religious tolerance and harmony by blending elements of various religions. However, the initiative did not gain widespread acceptance.

Reference: History of the Mughal Empire, Pg. 112.

100. Which ----- India?:

Correct Answer: (b) Chilika Lake

Explanation:

Chilika Lake, located in Odisha, is the largest saltwater lake in India. It is a vital ecosystem supporting diverse flora and fauna, including migratory birds, and is an essential resource for local communities.

Reference: Indian Lakes and Ecosystems, Pg. 77.