



## Government of West Bengal

### West Bengal Health Recruitment Board

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Memo No.: 118/ HFW-53024/8/2025-SECY(HRB)(HFW)-Dept. of H&FW-Part (1)

Dated: 20.01.2026

#### Notice

##### Reference(s):-

- i) Memo No.: 941/HFW-53024/8/2025-SEC(HRB)(HFW)-Dept. of H&FW Date: 03.11.2025
- ii) Memo No.: 1133/HFW-53024/8/2025-SEC(HRB)(HFW)-Dept. of H&FW Date: 21.11.2025

Answer keys to the Computer Based Test (CBT) in connection with recruitment to the posts, mentioned in the table below, are hereby published for information and guidance of candidates.

<b>Name of the Post:</b> Pharmacist Grade III	
<b>Advertisement No.:</b> Advertisement No.: R/Pharmacist Grade III/11/2025 Dated: 07.08.2025	
<b>Date of Computer Based Test (CBT):</b> 14/01/2026 (Wednesday)	
<b>2<sup>nd</sup> Shift Time</b>	<b>3<sup>rd</sup> Shift Time</b>
02:00 pm to 03:00 pm	05:00 pm to 06:00 pm

#### **Notations :**

1. Options shown in **green** color and with  icon are correct.
2. Options shown in **red** color and with  icon are incorrect.

Sd/-

**Secretary & Controller of Examinations  
West Bengal Health Recruitment Board**

# West Bengal Health Recruitment Board

## Notations :

- Options shown in green color and with ✓ icon are correct.
- Options shown in red color and with ✗ icon are incorrect.

Shift 2 (2.00 pm to 3.00 pm)

Question Paper Name :	Pharmacist Grade III
Subject Name :	Pharmacist Grade III
Creation Date :	2026-01-13 12:45:48
Duration :	60
Number of Questions :	50
Total Marks :	100
Display Marks:	Yes
Change Font Color :	No
Change Background Color :	No
Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No

## Pharmacist Grade III

Group Number :	1
Group Id :	4410091752908
Group Maximum Duration :	0
Group Minimum Duration :	60
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0

**PART I**

<b>Section Id :</b>	4410091774398
<b>Section Number :</b>	1
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	26
<b>Number of Questions to be attempted :</b>	26
<b>Section Marks :</b>	52
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	4410091782842
<b>Question Shuffling Allowed :</b>	Yes
<b>Is Section Default? :</b>	No

**Question Number : 1 Question Id : 4410091565234 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

The most commonly used glidant in tablet production is:

**Options :**

1. ❌ Cellulose
2. ✓ Colloidal silicon dioxide
3. ❌ Gelatin
4. ❌ Polyvinyl pyrrolidone

**Question Number : 2 Question Id : 4410091524557 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which statement is a disadvantage in reference to size reduction in tablet manufacturing?

**Options :**

1. ✘ Increased surface area
2. ✘ Improved flow properties
3. ✘ Improved content uniformity
4. ✓ Increased surface energy

**Question Number : 3 Question Id : 4410091565250 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

The main purpose of granulating the powder mixture before tableting is:

**Options :**

1. ✘ To color the tablets
2. ✓ To increase bulk density and improve flowability
3. ✘ To reduce tablet size
4. ✘ To dissolve the drug

**Question Number : 4 Question Id : 4410091524523 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Glass packaging should not be used for aqueous preparations as it releases:

**Options :**

1. ✓ Alkali
2. ✘ Acid
3. ✘ Zinc
4. ✘ Magnesium

**Question Number : 5 Question Id : 4410091524545 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Guar gum is used as a \_\_\_\_\_ in tablet manufacturing.

**Options :**

1.  Binder
2.  Flavoring agent
3.  Wetting agent
4.  Diluent

**Question Number : 6 Question Id : 4410091565558 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

The two novel drug delivery systems that uses physical methods to enhance drug transport through the skin are:

**Options :**

1.  Iontophoresis and phonophoresis
2.  Liposomes and micelles
3.  Dendrimers and hydrogels
4.  Micelles and liposomes

**Question Number : 7 Question Id : 4410091566879 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

The another name for indeterminate errors in pharmaceutical chemistry is:

**Options :**

1.  Systematic errors
2.  Accidental errors
3.  Gross errors
4.  Instrumental errors

**Question Number : 8 Question Id : 4410091566900 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which structural change leads to the formation of benzomorphans from the morphine ring system?

**Options :**

1. ❌ Addition of a methyl group
2. ✓ Removal of the C ring
3. ❌ Substitution with a hydroxyl group
4. ❌ Oxidation of the B ring

**Question Number : 9 Question Id : 4410091524609 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following is used to replenish the normal content of body fluids?

**Options :**

1. ✓ Sodium
2. ❌ Talc
3. ❌ Potassium permanganate
4. ❌ Bentonite

**Question Number : 10 Question Id : 4410091566933 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of the following is a characteristic feature of tetracyclines?

**Options :**

1. ❌ They are beta-lactam antibiotics.
2. ✓ They possess a four-ring structure.
3. ❌ They are used only for viral infections.
4. ❌ They have no effect on bacteria.

**Question Number : 11 Question Id : 4410091526114 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of the following is a NSAID?

**Options :**

1. ✓ Aspirin
2. ✗ Morphine
3. ✗ Codeine
4. ✗ Naloxone

**Question Number : 12 Question Id : 4410091526150 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Anti-inflammatory effect of NSAIDs is due to inhibition of \_\_\_\_\_ enzymes.

**Options :**

1. ✗ 5 Lipoxygenase
2. ✗ Fatty acid amide hydrolase
3. ✗  $\gamma$ -Secretase
4. ✓ Cyclooxygenase

**Question Number : 13 Question Id : 4410091524596 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of the following is not considered as an impurity in pharmaceuticals?

**Options :**

1. ✗ Organic
2. ✗ Inorganic
3. ✗ Residual solvent
4. ✓ Excipient

**Question Number : 14 Question Id : 4410091566920 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which class of anti-infective agents does Sparfloxacin belong to?

**Options :**

1. ❌ Macrolides
2. ✓ Quinolones
3. ❌ Tetracyclines
4. ❌ Penicillins

**Question Number : 15 Question Id : 4410091526127 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Diclofenac is a derivative of \_\_\_\_.

**Options :**

1. ❌ Propionic acid
2. ❌ Anthranilic acid
3. ❌ Enolic acid
4. ✓ Phenyl acetic acid

**Question Number : 16 Question Id : 4410091566911 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

NSAIDs typically possess a carboxylic acid group linked to an aromatic ring. What is the purpose of this aromatic ring in the drug's structure?

**Options :**

1. ❌ To increase water solubility
2. ✓ To bind to the hydrophobic pocket of cyclooxygenase
3. ❌ To prevent metabolism
4. ❌ To neutralize the acidic moiety

**Question Number : 17 Question Id : 4410091526218 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following is used as a stimulant laxative?

**Options :**

1. ❌ Fennel
2. ✓ Castor oil
3. ❌ Coriander
4. ❌ Isapgol

**Question Number : 18 Question Id : 4410091526251 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

The permissible limit of aflatoxin B1 in crude drugs as per major pharmacopeial and regulatory standards should not be more than:

**Options :**

1. ❌ 2.0 µg/Kg
2. ✓ 2.5µg/Kg
3. ❌ 3.0µg/Kg
4. ❌ 3.5µg/Kg

**Question Number : 19 Question Id : 4410091526241 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Determination of saponification value of a crude drug is classified as:

**Options :**

1. ❌ Organoleptic evaluation
2. ✓ Chemical evaluation
3. ❌ Biological evaluation
4. ❌ Physical evaluation

**Question Number : 20 Question Id : 4410091567204 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

If a sample of ginger shows a water-soluble ash value of 1.2%, what does this suggest compared to the standard?

**Options :**

1.  It is below the standard value.
2.  It matches the standard value.
3.  It exceeds the standard value.
4.  It cannot be compared.

**Question Number : 21 Question Id : 4410091567287 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which hormone is secreted by the parafollicular cells of the thyroid gland?

**Options :**

1.  Aldosterone
2.  Calcitonin
3.  Growth Hormone
4.  Oxytocin

**Question Number : 22 Question Id : 4410091526313 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following hormones is secreted by the posterior pituitary?

**Options :**

1.  Anti diuretic
2.  Thyroid stimulating
3.  Follicle stimulating
4.  Growth

**Question Number : 23 Question Id : 4410091569368 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

If a country undergo transitions from Stage II to Stage III of the demographic cycle, which changes in birth and death rates are expected?

**Options :**

1. ❌ Both birth and death rates increase
2. ❌ Birth rate declines while death rate remains unchanged
3. ✓ Death rate declines further and birth rate begins to fall
4. ❌ Both birth and death rates remain high

**Question Number : 24 Question Id : 4410091569378 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

How does breastfeeding contribute to the postpartum health of mothers?

**Options :**

1. ❌ Increases postpartum bleeding and risk of depression
2. ✓ Stimulates uterine contractions and reduces urinary tract infections
3. ❌ Reduces weight gain and increases anemia risk
4. ❌ Prevents uterine contraction and increases urinary tract infections

**Question Number : 25 Question Id : 4410091533283 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Cost Minimization Analysis (CMA) includes prescribing \_\_\_\_\_ medicines.

**Options :**

1. ✓ only Generic
2. ❌ Branded
3. ❌ only Patented
4. ❌ Generic & patented

Question Number : 26 Question Id : 4410091533296 Question Type : MCQ Option Shuffling : Yes

Correct Marks : 2 Wrong Marks : 0.5

The direct cost in reference to health care includes cost borne by the patient in \_\_\_\_\_ of a disease.

Options :

1.  Only Prevention & treatment
2.  Only Treatment & detection
3.  Only Prevention & detection
4.  Prevention, detection & treatment

## PART II

Section Id :	4410091774399
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	24
Number of Questions to be attempted :	24
Section Marks :	48
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	4410091782843
Question Shuffling Allowed :	Yes
Is Section Default? :	No

**Question Number : 27 Question Id : 4410091567667 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Thioamides inhibit thyroid hormone synthesis by which two mechanisms?

**Options :**

1.  Inhibiting iodination and coupling of iodotyrosine residues
2.  Blocking androgen receptors and reducing DHT levels
3.  Stimulating estrogen production and inhibiting progesterone
4.  Increasing conversion of testosterone to DHT and inhibiting aromatase

**Question Number : 28 Question Id : 4410091535631 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Vasopressin is also known as \_\_\_\_\_ hormone.

**Options :**

1.  Anti-diuretic
2.  Anti-stress
3.  Anti-diabetic
4.  Anti-thyroid

**Question Number : 29 Question Id : 4410091533363 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following is a calcium channel blocker?

**Options :**

1.  Amlodipine
2.  Diazoxide
3.  Hydralazine
4.  Nitroprusside sodium

**Question Number : 30 Question Id : 4410091567639 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which statement best describes clinical pharmacology?

**Options :**

1. ❌ Study of chemical structures of drugs
2. ❌ Study of drug effects in animals only
3. ✓ Scientific study of drugs in humans including pharmacodynamics and pharmacokinetics
4. ❌ Development of new drug formulations

**Question Number : 31 Question Id : 4410091567648 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Brimonidine lowers intraocular tension primarily by which two mechanisms?

**Options :**

1. ❌ Increasing aqueous production and reducing uveoscleral flow
2. ✓ Reducing aqueous production and increasing uveoscleral flow
3. ❌ Blocking beta receptors and decreasing aqueous production
4. ❌ Inhibiting prostaglandin synthesis and increasing uveoscleral flow

**Question Number : 32 Question Id : 4410091535601 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following drugs is a bulk forming laxative?

**Options :**

1. ❌ Castor oil
2. ✓ Methyl cellulose
3. ❌ Lactulose
4. ❌ Docusate calcium

**Question Number : 33 Question Id : 4410091567658 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which drug is classified as a second-generation H2 blocker and is claimed to enhance nitric oxide production?

**Options :**

1. ✗ Sucralfate
2. ✓ Lafutidine
3. ✗ Metoclopramide
4. ✗ Aprepitant

**Question Number : 34 Question Id : 4410091567660 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which drug acts by inhibiting both 5-HT2 receptor and dopamine D2 receptors, while stimulating 5-HT4 receptors in the myenteric plexus?

**Options :**

1. ✗ Metoclopramide
2. ✗ Lafutidine
3. ✓ Cinitapride
4. ✗ Sucralfate

**Question Number : 35 Question Id : 4410091535643 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of the following anticancer drugs is derived from a plant source?

**Options :**

1. ✗ Cisplatin
2. ✗ Doxorubicin
3. ✓ Vincristine
4. ✗ Methotrexate

**Question Number : 36 Question Id : 4410091567674 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Why is sulfamethoxazole selected to combine with trimethoprim in cotrimoxazole?

**Options :**

1. ❌ Both are bactericidal
2. ✅ Both have similar half-life
3. ❌ Both inhibit protein synthesis
4. ❌ Both bind to the same ribosomal subunit

**Question Number : 37 Question Id : 4410091567662 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which drug polymerizes at pH less than 4 to form a sticky gel-like consistency, providing a protective effect in the gastrointestinal tract?

**Options :**

1. ❌ Cinitapride
2. ✅ Sucralfate
3. ❌ Metoclopramide
4. ❌ Lafutidine

**Question Number : 38 Question Id : 4410091567654 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which two main pharmacological actions characterize inamrinone's effect on the cardiovascular system?

**Options :**

1. ❌ Negative chronotropy and vasoconstriction
2. ✅ Positive inotropy and direct vasodilatation
3. ❌ Negative inotropy and preload increase
4. ❌ Positive chronotropy and afterload increase

**Question Number : 39 Question Id : 4410091537355 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

A good patient counselor should not be:

**Options :**

1.  Tolerant
2.  Flexible
3.  Listener
4.  Judgmental

**Question Number : 40 Question Id : 4410091537380 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following is not a patient -based barrier in reference to effective communication?

**Options :**

1.  Regulatory guidelines
2.  Cultural difference
3.  Gender difference
4.  Lack of interest

**Question Number : 41 Question Id : 4410091537372 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following is not applicable to Patient counseling?

**Options :**

1.  Medication adherence
2.  Increasing health care cost
3.  Decreasing medication error
4.  Understanding medication therapy

**Question Number : 42 Question Id : 4410091570882 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

When reviewing progress to overcome medication non-adherence, which two actions are recommended?

**Options :**

1. ❌ Avoiding patient feedback and skipping follow-ups
2. ✓ Timing follow-ups and advising on changes in dosage
3. ❌ Limiting access to medical devices and shortening treatment duration
4. ❌ Ignoring expected effects and side effects

**Question Number : 43 Question Id : 4410091570873 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of the following actions best demonstrate medication adherence?

**Options :**

1. ❌ Filling prescriptions but forgetting doses
2. ✓ Taking medication at the prescribed time and following directions
3. ❌ Skipping doses intentionally
4. ❌ Stopping medication after feeling better

**Question Number : 44 Question Id : 4410091570924 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

What are mouth ulcers commonly known as?

**Options :**

1. ❌ Cold sores
2. ✓ Aphthous ulcers
3. ❌ Oral thrush
4. ❌ Dental caries

**Question Number : 45 Question Id : 4410091570608 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

What is the primary purpose of a prescription in community pharmacy practice?

**Options :**

1. ❌ To diagnose illness
2. ✅ To instruct pharmacists on preparing and dispensing medicines
3. ❌ To record patient history
4. ❌ To advertise medications

**Question Number : 46 Question Id : 4410091570636 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

A patient receives a prescription with the Latin instruction 'Haustus omni mane.' How should the community pharmacist interpret and counsel the patient?

**Options :**

1. ✅ Take a draught every morning
2. ❌ Take a powder every hour
3. ❌ Take a powder every morning
4. ❌ Take a draught every hour

**Question Number : 47 Question Id : 4410091570922 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which two roles do pharmacists play to promote safe self-medication practices?

**Options :**

1. ✅ Educating patients and recommending appropriate medications
2. ❌ Prescribing antibiotics and reviewing laboratory results
3. ❌ Dispensing only prescription drugs and monitoring blood pressure
4. ❌ Diagnosing diseases and performing surgeries

**Question Number : 48 Question Id : 4410091535692 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

The signature: 'Four times daily' is represented by -----

**Options :**

1. ✗ OD
2. ✗ BID
3. ✗ TID
4. ✓ QID

**Question Number : 49 Question Id : 4410091537478 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Application of pharmacology with knowledge of disease to prevent or cure it is called:

**Options :**

1. ✗ Pharmacoeconomics
2. ✗ Pharmaceutics
3. ✗ Biopharmaceutics
4. ✓ Pharmacotherapeutics

**Question Number : 50 Question Id : 4410091569519 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

What is one key objective of pharmacotherapeutics for pharmacists and nurses in hospitals?

**Options :**

1. ✓ To increase knowledge and skills for safe medicine use and distribution
2. ✗ To develop new drugs
3. ✗ To manufacture medicines
4. ✗ To conduct surgical procedures

# West Bengal Health Recruitment Board

## Shift 3 (5.00 pm to 6 pm)

### Notations :

- Options shown in green color and with  icon are correct.
- Options shown in red color and with  icon are incorrect.

Question Paper Name :	Pharmacist Grade III 1
Subject Name :	Pharmacist Grade III
Creation Date :	2026-01-13 12:33:28
Duration :	60
Number of Questions :	50
Total Marks :	100
Display Marks:	Yes
Change Font Color :	No
Change Background Color :	No
Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No

## Pharmacist Grade III

Group Number :	1
Group Id :	4410091752908
Group Maximum Duration :	0
Group Minimum Duration :	60
Show Attended Group? :	No
Edit Attended Group? :	No
Break time :	0

**PART I**

<b>Section Id :</b>	4410091774398
<b>Section Number :</b>	1
<b>Section type :</b>	Online
<b>Mandatory or Optional :</b>	Mandatory
<b>Number of Questions :</b>	26
<b>Number of Questions to be attempted :</b>	26
<b>Section Marks :</b>	52
<b>Maximum Instruction Time :</b>	0
<b>Sub-Section Number :</b>	1
<b>Sub-Section Id :</b>	4410091782842
<b>Question Shuffling Allowed :</b>	Yes
<b>Is Section Default? :</b>	No

**Question Number : 1 Question Id : 4410091563970 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

What is the primary pack in pharmaceutical packaging?

**Options :**

1. ✘ The pack containing ancillary components
2. ✓ The pack in direct contact with the product
3. ✘ The pack storing information leaflets
4. ✘ The outermost shipping box

**Question Number : 2 Question Id : 4410091524564 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which drug delivery system achieves a prolonged therapeutic effect?

**Options :**

1.  Sustained release
2.  ✗ Intravenous
3.  ✗ Inhalation aerosols
4.  ✗ Topical creams

**Question Number : 3 Question Id : 4410091565287 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which method is considered the oldest for applying pharmaceutical coatings to tablets?

**Options :**

1.  Sugar coating
2.  ✗ Film coating
3.  ✗ Microencapsulation
4.  ✗ Compression coating

**Question Number : 4 Question Id : 4410091524558 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of the following processes is involved in sugar bonding to tablet?

**Options :**

1.  ✗ Sealing
2.  ✗ Finishing
3.  Sub-coating
4.  ✗ Imprinting

**Question Number : 5 Question Id : 4410091565556 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

What is the main structural characteristic of dendrimers among novel drug delivery systems?

**Options :**

1. ❌ Loosely bound aggregation
2. ✓ Highly branched symmetrical architecture
3. ❌ Single-layered membrane
4. ❌ Small lipoidal vesicles enclosing aqueous solution

**Question Number : 6 Question Id : 4410091563973 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

A pharmaceutical company wants to design a packaging laminate that is strong, easy to print on, and heat-sealable, while also protecting the product from light and moisture. Which combination of materials would best achieve these goals?

**Options :**

1. ❌ Glass and plastic
2. ✓ Paper and Metal foil
3. ❌ Lead oxide and alumina
4. ❌ Boron compounds and cobalt oxides

**Question Number : 7 Question Id : 4410091566899 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Tolmetin sodium belongs to which class of analgesic agents?

**Options :**

1. ✓ Arylacetic acid derivatives
2. ❌ Benzomorphans
3. ❌ Salicylates
4. ❌ Pyrazolones

**Question Number : 8 Question Id : 4410091566927 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

The moiety at 3-position of Cephalosporins associated with a higher incidence of hypoprothrombinemia is:

**Options :**

1.  N-methyl-5-thiotetrazole
2.  Sulfonamide
3.  Thiazole
4.  Piperazine

**Question Number : 9 Question Id : 4410091566890 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

The principal ingredient that forms the cement in Zinc-Oxide Eugenol (ZOE) cement is:

**Options :**

1.  Zinc acetate
2.  Sodium bicarbonate
3.  Zinc oxide
4.  Magnesium sulfate

**Question Number : 10 Question Id : 4410091524584 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

The study of synthesis, analysis and production of chemical compounds for curing diseases is known as:

**Options :**

1.  Pharmaceutical Chemistry
2.  Pharmaceutical Biotechnology
3.  Pharmaceutics
4.  Pharmacology

**Question Number : 11 Question Id : 4410091524590 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Error caused by change in temperature, pressure and humidity is called as:

**Options :**

1. ✘ Experimental
2. ✘ Measurement
3. ✘ Gross
4. ✓ Environmental

**Question Number : 12 Question Id : 4410091566909 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

The functional group commonly found in most NSAIDs to enable an ionic interaction with the cyclooxygenase enzyme is:

**Options :**

1. ✘ Hydroxyl group
2. ✘ Amine group
3. ✓ Carboxylic acid group
4. ✘ Aldehyde group

**Question Number : 13 Question Id : 4410091566915 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

The mechanism of action of allylamine antifungal agents is:

**Options :**

1. ✘ Inhibition of DNA replication
2. ✓ Interference with ergosterol biosynthesis
3. ✘ Inhibition of protein synthesis
4. ✘ Disruption of cell wall synthesis

**Question Number : 14 Question Id : 4410091524617 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

The first important synthetic nitrogen inorganic compound was \_\_\_\_\_ for soil fertilization.

**Options :**

1.  Calcium nitrate
2.  Ammonium sulphate
3.  Anhydrous ammonia
4.  Potassium nitrate

**Question Number : 15 Question Id : 4410091566883 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which class of residual solvents should be avoided due to their maximum toxicity in pharmaceutical products?

**Options :**

1.  Class I
2.  Class II
3.  Class III
4.  Class IV

**Question Number : 16 Question Id : 4410091526210 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Tetracyclines are effective against \_\_\_\_\_.

**Options :**

1.  Gram positive bacteria only
2.  Gram negative bacteria only
3.  Atypical bacteria only
4.  Gram positive, Gram negative and Atypical bacteria

**Question Number : 17 Question Id : 4410091567205 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which factor is NOT commonly associated with the unintentional adulteration of crude drugs?

**Options :**

1. ❌ Confusion in vernacular names
2. ❌ Lack of knowledge about authentic plant
3. ❌ Similarity in morphology
4. ✓ Intentional substitution

**Question Number : 18 Question Id : 4410091567174 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Vasaka leaves are traditionally used for the treatment of which respiratory conditions?

**Options :**

1. ✓ Asthma and bronchitis
2. ❌ Diabetes and hepatic dysfunction
3. ❌ Gastroenteritis and fever
4. ❌ Astringent and tonic

**Question Number : 19 Question Id : 4410091567172 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

What is the biological source of Punarnava?

**Options :**

1. ❌ Adhatoda vasica
2. ✓ Boerhaavia diffusa
3. ❌ Berberis aristata
4. ❌ Ocimum tenuiflorum

**Question Number : 20 Question Id : 4410091526233 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Barbaloin is a chemical constituent of \_\_\_\_\_.

**Options :**

1. ✘ Senna
2. ✘ Catechu
3. ✘ Isapgol
4. ✓ Aloe

**Question Number : 21 Question Id : 4410091526293 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following acts as control center for endocrine system that regulates the pituitary gland?

**Options :**

1. ✓ Hypothalamus
2. ✘ Adrenal gland
3. ✘ Pancreas
4. ✘ Parathyroid glands

**Question Number : 22 Question Id : 4410091567289 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which two hormones are released from axon terminals within the posterior pituitary?

**Options :**

1. ✓ Oxytocin and ADH
2. ✘ Calcitonin and Aldosterone
3. ✘ Growth Hormone and Glucagon
4. ✘ Insulin and Somatostatin

**Question Number : 23 Question Id : 4410091533265 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following vaccines is/are most sensitive to heat?

**Options :**

1. ✗ Diphtheria & Tetanus
2. ✗ Diphtheria, Pertussis & Tetanus
3. ✗ Bacillus Calmette-Guerin
4. ✓ Oral polio

**Question Number : 24 Question Id : 4410091569396 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which pharmacoeconomic tool is specifically used when comparing the costs of drugs that have equal efficacy and tolerability?

**Options :**

1. ✗ Cost-effectiveness analysis
2. ✓ Cost minimization analysis
3. ✗ Cost-utility analysis
4. ✗ Cost-benefit analysis

**Question Number : 25 Question Id : 4410091569391 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of the following is a primary use of pharmacoeconomics in the private sector?

**Options :**

1. ✓ Finding optimal therapy at lowest price and designing insurance benefit coverage
2. ✗ Designing program benefits and research alternatives
3. ✗ Deciding research and development alternatives
4. ✗ Determining program prices

Question Number : 26 Question Id : 4410091569375 Question Type : MCQ Option Shuffling : Yes

Correct Marks : 2 Wrong Marks : 0.5

A pharmacist is designing a preventive healthcare program for a factory. Which combined approach addresses both psychosocial and chemical hazards?

Options :

1. ❌ Providing safety goggles only
2. ✓ Offering counseling services and monitoring chemical exposure
3. ❌ Installing more vending machines
4. ❌ Scheduling longer work shifts

## PART II

Section Id :	4410091774399
Section Number :	2
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	24
Number of Questions to be attempted :	24
Section Marks :	48
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	4410091782843
Question Shuffling Allowed :	Yes
Is Section Default? :	No

**Question Number : 27 Question Id : 4410091567638 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

What is the main purpose of chemotherapy in pharmacology?

**Options :**

1. ❌ To enhance host cell function
2. ✅ To treat systemic infection or malignancy
3. ❌ To prevent drug resistance
4. ❌ To increase metabolism

**Question Number : 28 Question Id : 4410091533346 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Pilocarpine belongs to which of following categories of drugs?

**Options :**

1. ✅ Miotics
2. ❌ Adrenergics
3. ❌ Osmotics
4. ❌ Beta-receptor blockers

**Question Number : 29 Question Id : 4410091567652 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which drug acts by selectively binding to the catalytic site of renin and blocking angiotensinogen access?

**Options :**

1. ❌ Macitentan
2. ✅ Aliskiren
3. ❌ Inamrinone
4. ❌ Digoxin

**Question Number : 30 Question Id : 4410091535609 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which one of the following is an antacid?

**Options :**

1. ❌ Cyclizine
2. ✓ Magnesium carbonate
3. ❌ Omeprazole
4. ❌ Copper sulphate

**Question Number : 31 Question Id : 4410091533331 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following categories of drugs lowers the intraocular pressure (IOP) of eyes?

**Options :**

1. ✓ Beta-blockers
2. ❌ Corticosteroids
3. ❌ Anti-histamines
4. ❌ Antibiotics

**Question Number : 32 Question Id : 4410091535651 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following chemotherapy drugs is a mitotic inhibitor?

**Options :**

1. ❌ Cisplatin
2. ❌ Bleomycin
3. ✓ Paclitaxel
4. ❌ Flurouracil

**Question Number : 33 Question Id : 4410091535615 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Chemically, thyroid hormones are iodinated derivatives of which of the following?

**Options :**

1.  Amino acids
2.  Peptide
3.  Polypeptide
4.  Glucocorticoids

**Question Number : 34 Question Id : 4410091533376 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following is an anti-anginal long acting drug?

**Options :**

1.  Isosorbide dinitrate
2.  Glyceryl trinitrate
3.  Verapamil
4.  Propranolol

**Question Number : 35 Question Id : 4410091567675 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

How does chloramphenicol inhibit bacterial protein synthesis?

**Options :**

1.  By blocking attachment of aminoacyl-tRNA to the 30S ribosome
2.  By preventing peptide bond formation at the 50S ribosome
3.  By binding to the 30S ribosome and stopping mRNA translation
4.  By degrading the mRNA template

**Question Number : 36 Question Id : 4410091567649 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Why is dorzolamide typically used only as an add-on therapy to topical beta-blockers or prostaglandin analogues in glaucoma management?

**Options :**

1.  It is less effective when used alone.
2.  It causes more side effects alone.
3.  It increases intraocular tension when used alone.
4.  It is contraindicated with other eye drops.

**Question Number : 37 Question Id : 4410091535623 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Acarbose belongs to which class of drugs?

**Options :**

1.  Alpha-glucosidase inhibitors
2.  Anti-androgens
3.  Anti-estrogens
4.  Anti-mineralocorticoids

**Question Number : 38 Question Id : 4410091567668 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Tibolone is specifically developed for hormone replacement therapy because its metabolites exert which combination of actions?

**Options :**

1.  Only Estrogenic
2.  Only androgenic
3.  Estrogenic, progestational and weak androgenic actions
4.  Progestational and anti-thyroid

**Question Number : 39 Question Id : 4410091537437 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following conditions generally doesn't belong to category of OTC medication?

**Options :**

1. ✘ Pain
2. ✘ Itches
3. ✓ Depression
4. ✘ Spasms

**Question Number : 40 Question Id : 4410091537424 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following is not a part of strategic planning to improve medication adherence?

**Options :**

1. ✘ Level of prescribing
2. ✓ No follow-ups
3. ✘ Communication
4. ✘ Behavioural support

**Question Number : 41 Question Id : 4410091570627 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

What should a pharmacist check when reading a prescription?

**Options :**

1. ✘ Patient's facial expression
2. ✓ Signature of the prescriber
3. ✘ Pharmacy license
4. ✘ Drug expiry date

**Question Number : 42 Question Id : 4410091570775 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which details are commonly found in patient information leaflets to support patient counselling in a community pharmacy?

**Options :**

1.  Information about medical conditions, doses, side effects of medicine packed
2.  Doses and pharmacy opening hours
3.  Prescriber's information
4.  Manufacturer's address and expiry date only

**Question Number : 43 Question Id : 4410091535666 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which part of prescription contains information about drug's composition and dose?

**Options :**

1.  Superscription
2.  Inscription
3.  Subscription
4.  Signatura

**Question Number : 44 Question Id : 4410091570728 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of the following is considered as a technique used in non-verbal communication within community pharmacy practice?

**Options :**

1.  Active listening
2.  Body language
3.  Verbal questioning
4.  Written prescription

**Question Number : 45 Question Id : 4410091535675 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

The Hazard Communication Standard (HCS) requires \_\_\_\_\_ on labels.

**Options :**

1.  Pictogram
2.  ✗ Auxiliary label
3.  ✗ Product color
4.  ✗ Ancillary label

**Question Number : 46 Question Id : 4410091535722 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following is 'not' the best way of communication with a patient?

**Options :**

1.  ✗ Active listening
2.  Excessive use of technical terms
3.  ✗ Respect dignity
4.  ✗ Use of open-ended questions

**Question Number : 47 Question Id : 4410091535710 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Which of following should not be included as a part of verbal communication by a Pharmacist?

**Options :**

1.  ✗ Active listening
2.  Facial expressions
3.  ✗ Speaking
4.  ✗ Questioning

**Question Number : 48 Question Id : 4410091537452 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

A pharmacist needs to ask a patient the following, except \_\_\_\_\_, while dispensing OTC medication.

**Options :**

1.  Name of doctor
2.  Past allergic reaction
3.  Directions for use
4.  Previous medication

**Question Number : 49 Question Id : 4410091569516 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

What is the primary focus of pharmacotherapeutics?

**Options :**

1.  Drug synthesis
2.  Drug use in disease management
3.  Drug marketing
4.  Drug patenting

**Question Number : 50 Question Id : 4410091537490 Question Type : MCQ Option Shuffling : Yes**

**Correct Marks : 2 Wrong Marks : 0.5**

Pharmacotherapeutics help in preparing the treatment plan for a/an:

**Options :**

1.  Family
2.  Individual
3.  Community
4.  Institute