

**PHB Education Sample Paper-1**  
**D. Pharm IInd Year,**  
**FIRST SESSIONAL EXAMINATION 2024-25**  
**(PHARMACOLOGY)**

**Time: 02Hrs**

**Maximum Marks: 40**

**Instructions:**

1. Write the Roll no. on your question paper.
2. Candidate should ensure that the question paper supplied to them is complete in all respects. Complain in this regards, if any, should be made to the invigilatory staff on the duty in the exam centre within 15 minutes of Commencement of the exam. No complaint shall be entertained thereafter.

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**Attempt all the questions:**

**(Section: A)**

**Multiple Choice Questions:**

**[5]**

**1.** First-pass metabolism occurs in the:

- |           |            |
|-----------|------------|
| a. Kidney | b. Liver   |
| c. Lungs  | d. Stomach |

**2.** Which of the following is an ACE inhibitor?

- |              |                |
|--------------|----------------|
| a. Losartan  | b. Amlodipine  |
| c. Enalapril | d. Propranolol |

**3.** Which of the following is a first-generation (typical) antipsychotic?

- |                |                 |
|----------------|-----------------|
| a. Clozapine   | b. Haloperidol  |
| c. Risperidone | d. Aripiprazole |

**4.** Which of the following is a selective serotonin reuptake inhibitor (SSRI)?

- |                  |               |
|------------------|---------------|
| a. Amitriptyline | b. Fluoxetine |
| c. Imipramine    | d. Phenelzine |

**5.** Which of the following is a non-selective COX inhibitor?

- |                  |               |
|------------------|---------------|
| a. Aspirin       | b. Celecoxib  |
| c. Acetaminophen | d. Etoricoxib |

**Fill in the blanks:**

**[5]**

**1.** The primary site of drug metabolism in the body is the \_\_\_\_\_.

**2.** \_\_\_\_\_ is a potassium-sparing diuretic used in the treatment of hypertension.

**3.** \_\_\_\_\_ is an atypical antipsychotic that requires regular monitoring of white blood cell count due to the risk of agranulocytosis.

**4.** Tricyclic antidepressants block the reuptake of \_\_\_\_\_ and \_\_\_\_\_ neurotransmitters.

**5.** The antidote for paracetamol poisoning is \_\_\_\_\_.

**(Section: B)**

**Short questions (Attempt any five)**

**[5x3=15]**

1. Define bioavailability and explain factors affecting it.
2. Classify antihypertensive drugs with examples.
3. Classify antidepressants with examples.
4. Difference between Narcotic and Non narcotic analgesics.
5. Write a short note on Adrenaline.
6. Classify antipsychotic drugs with examples.

**(Section: C)**

**Long questions (Attempt any three)**

**[3x5=15]**

1. Describe the classification of antihypertensive drugs with examples and their mechanisms of action.
2. Write the mechanisms of action and clinical uses of beta-blockers and alpha-blockers.
3. Describe the pharmacology of clozapine, including its mechanism of action, clinical uses, and adverse effects.
4. Write a brief note on the mechanism of action of NSAIDs.

**PHB Education Sample Paper-2**  
**D. Pharm IInd Year,**  
**FIRST SESSIONAL EXAMINATION 2024-25**  
**(PHARMACOLOGY)**

**Time: 02Hrs**

**Maximum Marks: 40**

**Instructions:**

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**Attempt all the questions:**

**(Section: A)**

**MultipleChoiceQuestions:**

**[5]**

1. The therapeutic index is a measure of:  
a. Efficacy  
b. Safety  
c. Potency  
d. Bioavailability
2. Which drug is a calcium channel blocker?  
a. Hydrochlorothiazide  
b. Verapamil  
c. Captopril  
d. Clonidine
3. Which neurotransmitter receptor is primarily targeted by antipsychotics?  
a. Serotonin (5-HT<sub>2</sub>)  
b. Dopamine (D<sub>2</sub>)  
c. Acetylcholine (M<sub>3</sub>)  
d. Glutamate (NMDA)
4. Tricyclic antidepressants (TCAs) exert their therapeutic effects by:  
a. Inhibiting monoamine oxidase  
b. Blocking serotonin and norepinephrine reuptake  
c. Enhancing dopamine release  
d. Activating GABA receptors
5. Opioids exert their analgesic effect primarily by acting on:  
a. Serotonin receptors  
b. NMDA receptors  
c. Mu-opioid receptors  
d. GABA receptors

**Fill in the blanks:**

**[5]**

1. \_\_\_\_\_ is the branch of pharmacology that deals with drug-receptor interactions.
2. \_\_\_\_\_ is a centrally acting antihypertensive that acts as an alpha-2 adrenergic agonist.

3. \_\_\_\_\_ is the first-line class of drugs used in the treatment of major depressive disorder
4. Respiratory depression is a major side effect of \_\_\_\_\_ analgesics.
5. \_\_\_\_\_ is a combined alpha and beta-blocker used in hypertensive emergencies.

**(Section: B)**

**Short questions (Attempt any five)**

**[5x3=15]**

1. What is the significance of the half-life of a drug?
2. Write a brief note on the mechanism of action of diuretics in controlling hypertension.
3. Discuss the mechanism of action of typical antipsychotics.
4. Write a short note on the mechanism of action of SSRIs.
5. Classify the NSAIDs with suitable example.
6. What is anxiety? Classify anti-anxiety with suitable examples.

**(Section: C)**

**Long questions (Attempt any three)**

**[3x5=15]**

1. Explain the pharmacokinetics of a drug, including the processes of absorption, distribution, metabolism, and excretion.
2. Discuss the pharmacology of beta-blockers, including their classification, clinical applications, and side effects.
3. Write an importance and benefits of Anticholinergic drugs.
4. What are the adrenergic drugs? Classify the adrenergic drugs with suitable exam.