

POKHARA UNIVERSITY

Semester – Fall

Level: Bachelor  
 Programme: B. Pharm  
 Course: Pharmacology I

Year : 2014  
 Full Marks: 100  
 Pass Marks: 45  
 Time : 3hrs.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

**Attempt all the questions.**

- a. What are the basic types of drug action? Explain them with examples and differentiate between competitive and noncompetitive receptors. 7
- b. Write about glaucoma with its types. Name the drug used in glaucoma with its classification. How can you differentiate between myasthenia crisis and cholinergic crisis? 8
1. Give the classification of anticholinergic drugs. In which condition is atropine contraindicated? 5
2. Write the mechanism of action of succinylcholine. 5
2. What are cardioselective beta blockers and what are their advantages? 5
1. What are sedative and hypnotics. Why are benzodiazepine preferred to barbiturates? 5
2. Mention the effects that occur on blockade of post synaptic dopamine receptors through different pathways. 5
2. Classify antidepressants. Mention the side effects of neuroleptics. 5
1. Classify drugs used in Parkinsonism. Mention the precautions and contraindication of morphine. 8
2. What are approaches for treatment of asthma, give the mechanism of action of sympathomimetics? 7
1. Explain the importance of methotrexate in Rheumatoid Arthritis along with its MOA. 5
2. Give the mechanism of uricosuric drugs and its interaction with their drugs. 5
2. Mention different types of histamine antagonist along with their uses. 5
1. Classify oral antidiabetic drugs and mention the adverse effect of sulphonylureas? 5
2. What are anabolic steroids, write about its uses and misuses. 5
2. Mention the uses of progestin. Name two antiestrogens. 5
- Write short notes on any two: 5
1. Vitamin B 5
2. Photochemotherapy 5
1. Antifungal drugs 2×5

# POKHARA UNIVERSITY

Level: Bachelor  
 Programme: B.Pharm.  
 Course: Pharmacology I (Therapeutics)

Semester: Fall

Year : 2016  
 Full Marks: 100  
 Pass Marks: 45  
 Time : 3hrs.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

**Attempt all the questions:**

- |  |     |
|--|-----|
| a) Define the term agonist, antagonist, inverse agonist, partial agonist, clinical pharmacology, therapeutics and toxicology.  | 8   |
| b) Explain in detail about adrenergic transmission with well labeled diagram.  | 7   |
| a) Classify Sedative and hypnotic drugs. Mention the mechanism of action of Benzodiazepam.   | 5   |
| b) Give the mechanism of action of tubocurarine.   | 5   |
| c) Explain the mechanism of action of Organophosphate poisoning. What is the main reason for administering 2 ampules of atropine IV stat for diagnosis of Organophosphate poisoning? Why it is difficult to treat this case when the time increases. | 5   |
| a) What are local anesthetics, classify them with suitable example? Write about stages of anesthesia.  | 8   |
| b) Classify antidepressant. Mention the side effects of neuroleptics.  | 7   |
| a) Classify anticholinergic drugs. What are the mechanisms of action, pharmacokinetic, uses of atropine?   | 7   |
| b) What are the drugs used in the treatment of acute and chronic gout? Give the mechanism of actions and adverse effect of colchicines.  | 8   |
| a) Mention the interactions of uricosuric drugs with other drugs.  | 5   |
| b) Classify antihistamine drugs. How do you differentiate first generation antihistaminic drugs with second generation.  | 5   |
| c) Classify drugs for type-2 diabetes. Write mechanism of action and adverse effects of sulfonylureas.   | 5   |
| a) Give the pharmacological actions and adverse effect of glucocorticoids and mineralocorticoids.  | 5   |
| b) Mention the uses of progestin.  | 5   |
| c) Classify drugs for asthma. Write in detail about leukotriene antagonists.   | 5   |
| Write short notes on <b>any two</b> :  | 2×5 |
| a) Physiological role of Vit A   |     |
| b) Photochemotherapy.  |     |
| c) Antibiotics used for the dermatological treatment   |     |

**POKHARA UNIVERSITY**

Of Level: Bachelor  
 Program: B.Pharm.  
 Course: Pharmacology I (Therapeutics)

Semester: Fall

Year : 2017  
 Full Marks: 100  
 Pass Marks: 45  
 Time : 3hrs.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

**Attempt all the questions.**

- a) What is pharmacodynamics? Describe the mechanism of drug action. 7
  - b) Define hypersensitivity. Describe its types with mechanism. 8
  - c) Classify parasympathomimetics. Write down the details pharmacology of Acetylcholine. 8
  - d) Classify peripherally acting skeletal muscle relaxants. Write down the MoA, pharmacological activity, indication, adverse effects, contraindications and drug interaction of d-tubocurarine. 7
  - a) What are general anaesthetics, classify it. Mention the pharmacology of ketamine. 7
  - b) Classify major tranquilizers, give the MoA, adverse effects and uses of Amitriptyline. 8
  - a) Differentiate COX-1 and COX-2. 5
  - b) What are bradykinin? Write its biosynthesis and degradation. 5
  - c) Define asthma. Write its symptoms, etiology and pathophysiology with explanation. 5
  - a) Give the biosynthesis and mechanism of secretion of insulin from  $\beta$  cells, list out the various preparation of insulin. 8
  - b) What is diabetes mellitus? How to manage type -II DM, describe with classification and give the mechanism of action of Metformin. 7
  - a) Mention the advantage of cardioselective  $\beta$ - blockers. 5
  - b) What is RA? How can it be managed? 5
  - c) Classify antiparkinsonics drugs. 5
- Write short notes on any two:**
- a) Role of vitamin A in vision 5
  - b) Dermatological pharmacology 2×5
  - c) Serotonin syndrome and cheese reaction

# POKHARA UNIVERSITY

Level: Bachelor  
 Programme: B. Pharm.  
 Course: Pharmacology I (Therapeutics)

Semester: Fall

Year : 2018  
 Full Marks: 100  
 Pass Marks: 45  
 Time : 3hrs.

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

*Attempt all the questions.*

- a) Define the term Agonist, Antagonist and Therapeutic Index. Describe the mechanism of drug action in brief. 7
  - b) What are anticholinesterases? Write about pharmacology of Neostigmine. 8
  - a) Classify parasympatholytics. Write down the details pharmacology of Atropine. 8
  - b) Define general anaesthetics and local anaesthetics. Classify local anaesthetics, Give the details pharmacology of lidocaine 7
  - a) What do you understand by Hypnotics & Sedatives? Give reasons why Benzodiazepines are preferred over barbiturates as sedative and hypnotic. Explain in brief about mechanism of action of Benzodiazepine. 8
  - b) Classify antiparkinsonics. Why carbidopa is used with levodopa, Give the pharmacology of levodopa 7
  - a) Write down the classification, mechanism of action, adverse effects of drugs used for rheumatoid arthritis. 7
  - b) Classify oral hypoglycemic agents. Illustrate the regulation of Insulin when there is decrease and increase in blood glucose level in the body. 8
  - a) Classify Neuroleptics and mention the detail pharmacology of any one. 8
  - b) Define Asthma. What are the various approaches for Asthma treatment. Explain brief about Bronchodilators. 7
  - a) Describe the components of pharmacokinetics. 5
  - b) Describe the agents affecting Calcification 5
  - c) Classify  $\beta$ -blockers. Give the pharmacological action and uses of these drugs. 5
- 2×5
- Write short notes on (any two):
- a) Uses and side effects of Vitamin A
  - b) Antifungal agents.
  - c) Serotonin syndrome and cheese reaction