

Code No.

Symbol Number: \_\_\_\_\_ Invigilator's Sign: \_\_\_\_\_ Superintendent's Sign: \_\_\_\_\_

Symbol No. in Words: \_\_\_\_\_

**Faculty: Medicine and Allied Health Sciences**  
**Level: Bachelor**

**Year/Part: II/I**

**Program: Bachelor of Pharmacy**  
**Subject: BP302 Pharmacology I**

**Level: Bachelor**  
**Time: 3 Hours**

**F.M.: 50**  
**P.M.: 25**

- i* Answers should be given by filling the Objective Answer Sheet.
- ii* Rough can be done in the main answer sheet
- iii* Maximum time of 20 minutes within the total time is given for this group.

**Group A (Multiple Choice Questions)**

**[10×1=10]**

1. If drug have very small volume of distribution it is likely that the drug
  - a. Not bioavailable
  - b. Will not be effective
  - c. has short biological half life
  - d. does not accumulate in various tissue and organ
2. Which of the following statements is the closest description of Phase I metabolism?
  - a. Reactions which occur in the blood supply.
  - b. Reactions which add a polar functional group to a drug.
  - c. Reactions which add a polar molecule to a functional group already present on a drug or one of its metabolites
  - d. Reactions which occur in the gut wall
3. The absorption of drugs like (quaternary ammonium compounds, sulphonic acid) are explained by
  - a. Ion pair transport
  - b. active transport
  - c. convective transport
  - d. Facilitated diffusion
4. Affinity is measure of
  - a. The ability of an agonist that is bound to the receptor to produce cellular change
  - b. The tightness with which a drug binds to the receptor.
  - c. An agent which activates a receptor to produce an effect in the opposite direction
  - d. None of the above.
5. During an ophthalmic surgical procedure, the surgeon wanted to constrict the pupil using a miotic drug. However, he accidentally used another drug that caused dilation of the pupil (mydriasis). Which drug was most likely used?
  - a. Acetylcholine
  - b. Pilocarpine
  - c. Tropicamide
  - d. Bethanechol
6. Which of the following classes of adrenergic agents has utility in the management of hypertension?
  - a. α1 Agonist
  - b. α2 Agonist
  - c. β1 Agonist
  - d. β3 Agonist
7. Which of the following is correct regarding β-blockers?
  - a. Treatment with β-blockers should not be stopped abruptly.
  - b. Propranolol is a cardioselective β-blocker.
  - c. Cardioselective β-blockers worsen asthma.
  - d. β-Blockers decrease peripheral resistance by causing vasorelaxation.
8. Peripheral adverse effects of levodopa, including nausea, hypotension, and cardiac arrhythmias, can be diminished by including which drug in the therapy?
  - a. Amantadine
  - b. Ropinirole
  - c. Carbidopa
  - d. Entaca
9. Which antidepressant is the most sedating?
  - a. Bupropion
  - b. Duloxetine
  - c. Doxepin
  - d. Venlafaxine
10. An 18-year-old woman is admitted to the emergency room after an accidental overdose of alprazolam. She is unconscious and not considered a regular user of any medications or illicit drugs. Which treatment could be used to reverse the effect of the alprazolam overdose?
  - a. Diazepam
  - b. Ramelteon
  - c. Flumazenil
  - d. Naloxone

**Multiple Choice Questions' Answer Sheet**

Code No.

Marks Secured: \_\_\_\_\_

**Corrected Fill**

(A) ● (C) (D)

**Incorrected Fill**

⊗ (B) ● ⊕

In Words: \_\_\_\_\_

Examiner's Sign: \_\_\_\_\_ Date: \_\_\_\_\_

Scrutinizer's Marks: \_\_\_\_\_

In Words: \_\_\_\_\_

Scrutinizer's Sign: \_\_\_\_\_ Date: \_\_\_\_\_

1. (A) (B) (C) (D)	6. (A) (B) (C) (D)
2. (A) (B) (C) (D)	7. (A) (B) (C) (D)
3. (A) (B) (C) (D)	8. (A) (B) (C) (D)
4. (A) (B) (C) (D)	9. (A) (B) (C) (D)
5. (A) (B) (C) (D)	10. (A) (B) (C) (D)

# MANMOHAN TECHNICAL UNIVERSITY

## Office of the Controller of Examinations

Budiganga- 4, Morang, Koshi Province Nepal

Faculty: Medicine and Allied Health Sciences

Year/Part: II/I

Program: Bachelor of Pharmacy

Level: Bachelor

F.M.: 50

Subject: BP302 Pharmacology I

Time: 3 Hours

P.M.: 25

- ✓ *Group A contains Multiple Choice Questions of 5 marks.*
- ✓ *Candidates are required to give their answers in their own words as far as practicable.*
- ✓ *The figures in the margin indicate Full Marks.*
- ✓ *Assume suitable data if necessary.*

### Group B (Problem-Based Question)

[1×10=10]

1. Mr. AB , a 22-year-old, pharmacy student came to the local Pharmacy last week with a 7-day prescription for diazepam 10 mg tablets, one to be taken at night. The drug was prescribed to him by his Doctor because of insomnia that Mr AB was suffering five weeks ago. In fact, although he is typically supposed to wake up at 7.00 am to attend his lectures, at 4.00 am he is already fully awake and find it difficult to fall asleep. During the day, he feels very tired, anxious and tearful. It is now 3 days since you dispensed his prescription and the patient has returned to you because he claims he is still not able to sleep properly.
- i. How is insomnia defined? (1)
  - ii. What are the risk factors for its development? (1)
  - iii. What group of drugs does diazepam belongs to? What are other drugs that are associated with this group? (2)
  - iv. What is the mechanism of action of diazepam in the treatment of insomnia? (3)
  - v. What are the side-effects of diazepam? (1)
  - vi. What counseling could you give Mr. AB to help try and resolve the issue? (2)

### Group C (Long Answer Questions: Attempt Any Four)

[4×5=20]

1. What are the different mechanisms of Drug Transport? Explain
2. Define Metabolism. Explain different factors affecting drug metabolism
3. Write down Mechanism of Action, Side effect, contraindication and therapeutic use of Atropine.
4. Define Drug Interaction. Explain various types of Drug Interaction.
5. Define and classify Antiepileptic drug. Write down the Mechanism of action of Phenytoin.

### Group D (Write Short Notes: Any Five)

[5×2=10]

1. Define Bioavailability and its type
2. What do you mean by Tolerance and Dependence?
3. What do you understand by the term Efficacy and Potency?
4. Write down the mechanism of action of Morphine
5. Define Sedative and Hypnotic with examples
6. What is the significance of combining Levodopa with Carbidopa?

- The End -