



BRAINWARE UNIVERSITY

Library
Brainware University
398, Ramkrishnapur Road, Barasat
Kolkata, West Bengal-700125

Term End Examination 2025-2026

Programme – B.Pharm-2020/B.Pharm-2021/B.Pharm-2022/B.Pharm-2023

Course Name – Pharmacology II

Course Code - BP503T

(Semester V)

Full Marks : 75

Time : 3:0 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 20=20

1. Choose the correct alternative from the following :

- (i) Identify which of the following drugs is most likely to exacerbate a history of gout.
 - a) Colestipol
 - b) Gemfibrozil
 - c) Lovastatin
 - d) Niacin
- (ii) Select the drug lacking vasodilator properties that is useful in angina.
 - a) Isosorbidedinitrate
 - b) Metoprolol
 - c) Nifedipine
 - d) Nitroglycerin
- (iii) Identify correct option, all of the following are normally observed in the pathogenesis of heart failure EXCEPT:
 - a) A cardiac lesion that impairs cardiac output
 - b) An increase in peripheral vascular resistance
 - c) A decrease in preload
 - d) None of these
- (iv) Identify correct option, all of the following statements regarding cardiac glycosides are true EXCEPT:
 - a) They inhibit the Na^+/K^+ -ATPase and thereby increase intracellular Ca^{++} in myocardial cells
 - b) They cause a decrease in vagal tone
 - c) Children tolerate higher doses of digitalis than do adults
 - d) The most frequent cause of digitalis intoxication is concurrent administration of diuretics that deplete K^+
- (v) Identify which of the following is beneficial for CVS system.
 - a) LDL
 - b) HDL
 - c) VLDL
 - d) None of these
- (vi) Name the site of VLDL synthesis.
 - a) Liver
 - b) Intestine
 - c) Stomach
 - d) Pancreas
- (vii) Identify the diuretics that has anti-androgen effects.

- a) Metolazone
c) Spironolactone
- b) Furosemide
d) None of these
- (viii) Identify the primary target for thiazide diuretics.
- a) Proximal convoluted tubule
c) Distal convoluted tubule
- b) Ascending loop of Henle
d) Both Ascending loop of Henle and Distal convoluted tubule
- (ix) Identify the drug that has competitively blocking action in NaCl cotransporters in the distal tubule.
- a) Acetazolamide
c) Spironolactone
- b) Furosemide
d) Hydrochlorothiazide
- (x) Identify the drug that has increased plasma urate concentrations for sustained use.
- a) Furosemide
c) Both of these
- b) Acetazolamide
d) None of these
- (xi) Identify the drug for parenteral iron therapy.
- a) Ferrous sulfate
c) Ferrous lactate
- b) Fercoven
d) Ferrous fumarate
- (xii) Identify the drug which increases absorption of iron from intestine.
- a) Cyanocobalamin
c) Ascorbic acid
- b) Folic acid
d) None of these
- (xiii) Select the false statement about oral contraceptives.
- a) The combination pill contains both estrogen and progestin
c) The minipill contains progestin alone
- b) Ethinyl estradiol and mestranol are commonly used in oral contraceptives
d) The triphasic pill contains estrogen, progestin, and luteinizing hormone (LH)
- (xiv) Choose the non-glycoside positive inotropic drug.
- a) Digoxin
c) Digitoxin
- b) Strophantin K
d) Dobutamine
- (xv) Choose the correct example of salicylates from the following.
- a) ASA
c) Indomethacin
- b) Ibuprofen
d) None of these
- (xvi) Choose the correct option related to thyroid hormones.
- a) Thyroid secrete more T3 than T4
c) T3 is major circulating hormone
- b) Thyroid secrete more T4 than T3
d) None of these
- (xvii) Choose an endocrine drug that is a peptide derivative.
- a) Oxytocin
c) Nandrolone
- b) Prednisolone
d) Progesterone
- (xviii) Choose the statements which is true regarding second-generation antihistamines.
- a) They readily penetrate the blood-brain barrier, causing sedation.
c) They are less effective in managing allergic reactions.
- b) They have more anticholinergic side effects compared to first-generation antihistamines.
d) They are more selective for peripheral H1 receptors and cause less sedation.
- (xix) Choose the primary goal of migraine prophylaxis.
- a) Complete elimination of migraine attacks
c) Temporary relief of migraine symptoms
- b) Reduction in the frequency and severity of migraine attacks
d) Elimination of migraine triggers
- (xx) Recognize the method used in the bioassay of insulin.
- a) By contraction of the rat uterus
c) Rabbit method
- b) By measurement of milk ejection pressure in a lactating rat
d) None of these

(Short Answer Type Questions)

5 x 7=35

2. Describe the mechanism of action of cardiac glycoside. (5)
3. Describe COX and LOX pathway for eicosanoids synthesis. (5)
4. Describe NSAIDs and its mechanism associated with prostaglandin synthesis inhibition. (5)
5. Explain the gastrointestinal effect of Aspirin, including the role of ion trapping. (5)
6. Discuss briefly on the classification of different oral hypoglycemic drugs. (5)
7. Explain the quantal bioassay. (5)

OR

- Explain the dose response curve with example. (5)
8. Explain about oral contraceptives. (5)

OR

- Illustrate the mechanism of action of acetazolamide. (5)

Group-C

(Long Answer Type Questions)

10 x 2=20

9. Explain arrhythmia and classify antiarrhythmic drugs and explain mechanism action of class I drug. (10)
10. Illustrate the bioassay of histamine. (10)

OR

- Explain bioassay of insulin. (10)
