

Enrollment No./Seat No.:

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Pharm - SEMESTER - V EXAMINATION - WINTER 2025

Subject Code: BP502TP

Date: 18-11-2025

Subject Name: Pharmacology II

Time: 10:30 AM TO 01:30 PM

Total Marks: 80

Instructions

- 1. Question -1 is compulsory to attempt.**
- 2. Attempt any 04 questions from Question 2 to 7.**
- 3. Make suitable assumptions wherever necessary.**
- 4. Figures to the right indicate full marks.**

	Marks
Q.1 Answer the following questions. (1 mark each)	16
(I) Empagliflozin inhibits: A.SGLT-1 B. SGLT-2 C. DDPP-IV D. PPAR-gamma	
(II) Methaemoglobinemia is reported with the use of -----antihypertensive drug. A. Sodium nitroprusside B. Diazoxide C. Clonidine D. Prazosin	
(III) Tolvaptan is a .A. ACE inhibitor B. Vasopressin V2 R antagonist C. Calcium channel blocker D. nitrates	
(IV) Identify drug used in diabetic patients that inhibits alpha-glucosidase enzyme A. Sitagliptin B. Metformin C. Pioglitazone D. Acarbose	
(V) Furosemide acts by A. Inhibition of Na ⁺ -K ⁺ -2Cl ⁻ symport B. Antagonizing action of aldosterone C. Inhibition of Na ⁺ -Cl ⁻ symport D. Blocking Na channels	
(VI) Milrinone, is a PDE type----- inhibitor	
(VII) Following drug belongs to class III anti-arrhythmics: A. Amiodarone B. Quinidine C. Lignocaine D. Procainamide	
(VIII) Co-administration of ACE Inhibitors with digoxin in CHF patients will ----- (increase/decrease) toxicity of Digoxin.	
(IX) Reye`s Syndrome is a side effect observed in children with the use of following drug. A. Alloxan B. Aspirin C. Colchicine D. Sotalol	
(X) Which of the following drug causes activation of PPAR alpha, enhances lipoprotein lipase synthesis and fatty acid oxidation A. Ezetimibe B. Nicotinic acid C. Simvastatin D. Gemfibrozil	
(XI) Triple response with histamine is- A. itch, pain, flush B. Flush, flare, dryness C. Flush, flare, wheal D. pain, flush, flare	
(XII) Which of the following preparations will be effective for postcoital contraception? A. Clomiphene B. Tamoxifen C. Diethyl Stilbesterol D. Mifepristone	

(XIII) Peripheral edema is a side effect of:

- A. Nifedipine B. Verapamil C. Clonidine D. Atenolol

(XIV) Which of the following is the method for bioassay of D-tubocurarine?

- A. Multipoint method B. Matching C. Interpolation D. Rabbit head drop method

(XV) Which of the following is a cardioselective antihypertensive agent?

- A. Nifedipine B. Verapamil C. Diltiazem D. Both B&C

(XVI) Which of the following is induced in inflammatory cells via inflammatory cytokines?

- A. COX-1 B. PGI₂ C. COX-2 D. TXA₂

- Q.2 (a)** Enlist ACEIs. Write M/A, and uses of AT1 receptor blockers giving suitable examples. **06**
- (b)** Discuss Pharmacological actions of digoxin. **05**
- (c)** Enlist drug treatments for Angina. Write M/A and uses of nitrates. **05**
- Q.3 (a)** Classify diuretics according to site of action. Discuss M/A and uses of thiazide diuretics giving suitable examples. **06**
- (b)** Detail on biosynthesis of eicosanoids. **05**
- (c)** Write a note on anticoagulants. **05**
- Q.4 (a)** Classify NSAIDs. Discuss M/A and adverse effects of aspirin. **06**
- (b)** Discuss use of the followings: **05**
1. Growth hormone 2. Oxytocin 3. Vit B12 4. Allopurinol 5. Vitamin K
- (c)** Write physiological/pharmacological actions of estrogen. **05**
- Q.5 (a)** Enlist antidiabetic drugs. Write M/A and uses of metformin. **06**
- (b)** Draw and label action potential of nodal tissues of heart and explain ionic movement during all phases. **05**
- (c)** Detail on types of oral contraceptives. **05**
- Q.6 (a)** Discuss mechanism, pharmacological actions and uses of quinidine. **06**
- (b)** Classify lipid lowering drugs. Write pharmacology of statins. **05**
- (c)** Enlist autocooids. Write a note on 5HT. **05**
- Q.7 (a)** Discuss insulin bioassay methods. **06**
- (b)** Discuss vasodilators used in the management of hypertension. **05**
- (c)** Justify use of glucocorticoids in organ transplantation. **05**
