

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER-5 EXAMINATION – WINTER -2023

Subject Code: BP502TP**Date: 05/12/2023****Subject Name: Pharmacology II****Time: 10.30 a.m. to 1.30 p.m.****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.

Q.1**Answer the following questions. (1 mark each)****16**

- I. Autacoids differ from hormones in that.
A. Autacoids are involved only in the causation of pathological states
B. Autacoids do not have a specific cell/tissue of origin
C. Autacoids generally act locally at the site of generation and release
D. Both 'B' and 'C' are correct
- II. Bone resorption is accelerated by.
A. Estrogens B. Parathormone C. Bisphosphonates D. Calcitonin
- III. Choose the action for which the dose of aspirin required is the lowest.
A. Analgesic B. Antipyretic
C. Antiinflammatory D. Antiplatelet aggregatory
- IV. The following is a pressor peptide that can be generated both in circulation as well as locally in certain tissues:
A. Bradykinin B. Angiotensin C. Kallidin D. Plasmin
- V. The following 5-HT receptor is not a G protein coupled receptor.
A. 5-HT₁ B. 5-HT₂ C. 5-HT₃ D. 5-HT₄
- VI. Which of the following is a selective H₂ receptor agonist.
A. 4-methyl histamine B. 2-methyl histamine
C. α -methyl histamine D. Imetit
- VII. Metformin is preferred over phenformin because:
A. It is more potent B. It is less liable to cause lactic acidosis
C. It does not interfere with vitamin B12 absorption
D. It is not contraindicated in patients with kidney disease
- VIII. Furosemide acts by inhibiting the following in the renal tubular cell.
A. Na⁺-K⁺-2Cl⁻ cotransporter B. Na⁺-Cl⁻ symporter
C. Na⁺-H⁺ antiporter D. Na⁺ K⁺ ATPase
- IX. The following factor(s) is/are required for the absorption of dietary vitamin B₁₂.
A. Gastric acid B. Gastric intrinsic factor
C. Transcobalamine D. Both 'A' and 'B'
- X. Sulfasalazine is used in the following disease.
A. Bacillary dysentery B. Ulcerative colitis
C. Rheumatoid arthritis D. Both 'B' and 'C' are correct
- XI. Losartan is a:
A. Selective AT₁ receptor antagonist B. Selective AT₂ receptor antagonist
C. Non selective AT₁ + AT₂ receptor antagonist D. AT₁ receptor partial agonist
- XII. Somatostatin inhibits the release of.
A. Growth hormone B. Insulin C. Thyrotropin D. All of the above

- XIII. Carbimazole acts by inhibiting.
 A. Iodide trapping
 B. Oxidation of iodide
 C. Proteolysis of thyroglobulin
 D. Synthesis of thyroglobulin protein
- XIV. The principal action common to all class I antiarrhythmic drugs is.
 A. Na⁺ channel blockade
 B. K⁺ channel opening
 C. Depression of impulse conduction
 D. Prolongation of effective refractory period
- XV. Megaloblastic anaemia occurs in.
 A. Vitamin B₁₂ but not folic acid deficiency
 B. Folic acid but not Vitamin B₁₂ deficiency
 C. Either Vitamin B₁₂ or folic acid deficiency
 D. Only combined Vitamin B₁₂ + folic acid deficiency
- XVI. The most important complication of streptokinase therapy is.
 A. Hypotension
 B. Bleeding
 C. Fever
 D. Anaphylaxis
- Q.2 (a) Classify Antihypertensive drugs. Explain the role of calcium channel blockers in the treatment of hypertension. 6
 (b) Write a note on H₁ – receptor antagonists. 5
 (c) Explain the pharmacology of Antianginal drug nitrates. 5
- Q.3 (a) Classify Diuretics. Give Mechanism of action and adverse effect of High ceiling (Loop) diuretics . 6
 (b) Write in detail about ACE inhibitors. 5
 (c) Discuss Drugs used in Gout. 5
- Q.4 (a) Classify NSAIDs . Write a note on Aspirin. 6
 (b) Discuss mechanism of action and uses of following. 5
 1. Sulfonylureas 2. Cardiac glycosides
 (c) Write a note on Haematinics. 5
- Q.5 (a) Classify Oral hypoglycaemic drugs. Give Mechanism of action and adverse effect of Biguanides. 6
 (b) Describe the pharmacology of thyroid hormones. 5
 (c) Explain Drug therapy of Migraine. 5
- Q.6 (a) Classify uterine stimulants. Write pharmacology of Oxytocin. 6
 (b) Write a short note on oral contraceptives. 5
 (c) Enlist various Fibrinolytics agent. Describe in brief pharmacology of Streptokinase. 5
- Q.7 (a) Write principle and types of Bio-assay. 6
 (b) Enlist the various methods for bioassay of insulin. Explain any one in detail. 5
 (c) Write a note on Class-I anti-arrhythmic drugs. 5
