

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.Pharm - SEMESTER-V • EXAMINATION – WINTER -2022**

**Subject Code:BP502TP****Date: 23/12/2022****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.

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

- I. Which is cardioselective  $\beta$ -blocker drug?  
a. Atenolol                      b. propranolol                      c. Betaxolol                      d. carteolol
- II. Low concentration of nitrates cause dilation of \_\_\_\_\_.  
a. Large arteries                      b. Veins                      c. Precapillary sphincters                      d. Arterioles
- III. The specific antidote for Heparin is;  
a. Pralidoxime                      b. Protamine sulfate                      c. Vitamine K                      d. EDTA
- IV. Which of the following drugs provide significant relaxation of smooth muscles of both venules and arterioles?  
a. Nifedipine                      b. Sodium nitropruside                      c. Monoxidil                      d. Diazoxide
- V. Bromocriptine is \_\_\_\_\_.  
a. Alpha antagonist                      b. D2 antagonist                      c. D1 antagonist                      d. D2 agonist
- VI. The following 5-HT receptor is not a G-protein coupled receptor:  
a. 5-HT1                      b. 5-HT2                      c. 5-HT3                      d. 5-HT4
- VII. Which of following prostaglandin analogue used in pulmonary hypertension?  
a. Alprostadil                      b. Misoprostol                      c. Epoprostenol                      d. latanoprost
- VIII. Which of the following drugs only inhibits COX-2 enzyme?  
a. Aspirin                      b. Nimesulide                      c. Rofecoxib                      d. Naproxen
- IX. Pigeon method is used for the bioassay of \_\_\_\_\_.  
a. Insulin                      b. Acetylcholine                      c. Digitalis                      d. Oxytocin
- X. Which of the following drugs is not used for the management of congestive heart failure?  
a. Enalapril                      b. Nifedipine                      c. Propranolol                      d. Digoxin
- XI. This drug inhibits the digestion of sugars in the digestive tract.  
a. Metformin                      b. Voglibose  
c. Bile acid sequesterants                      d. Orlistat
- XII. Which of the following are useful in the therapy of hypercalcemia, except  
a. Calcitonin                      b. Glucocorticoids

	c. Vitamin D	d. Parenteral infusion of phosphate	
XIII.	Ocreotide is a long acting synthetic analogue of:		
	a. Prolactin	b. Growth hormone	
	c. Somatostatin	d. Gonadotropin releasing hormone	
XIV.	Plasma expanders are used in the following conditions except:		
	a. Extensive burns	b. Multilating injuries	
	c. Congestive cardiac failure	d. Endotoxin shock	
XV.	Which of the following drugs is a H1 receptor agonist?		
	a. 4-methyl histamine	b. Impromidine	
	c. 2-Thiazolyl ethylamine	d. Chlorpheniramine	
XVI.	The cellular mechanism action of digoxin is inhibition of _____.		
	a. cAMP synthesis	b. $\beta$ -Adrenergic stimulation	
	c. ATP degradation	d. Sodium pump	
<b>Q.2</b>	(a)	Classify antiarrhythmic drugs. Discuss the pharmacology of quinidine.	<b>06</b>
	(b)	Discuss the mechanism and pharmacological actions of digitoxin.	<b>05</b>
	(c)	Classify antihypertensive drugs. Explain mechanism and adverse effects of Captopril.	<b>05</b>
<b>Q.3</b>	(a)	Classify diuretics according to potency. Discuss the mechanism and uses of furosemide.	<b>06</b>
	(b)	Explain the electrophysiology of heart.	<b>05</b>
	(c)	Write a note on plasma expanders.	<b>05</b>
<b>Q.4</b>	(a)	Discuss the mechanism and uses of Amrinone, Spironolactone, Carbimazole.	<b>06</b>
	(b)	Write a note on 5-HT receptors.	<b>05</b>
	(c)	Discuss the pharmacological actions and uses of H1 blocker drugs.	<b>05</b>
<b>Q.5</b>	(a)	Discuss the mechanism and uses of Desmopressin, warfarin, Atorvastatin.	<b>06</b>
	(b)	Discuss the various types of DMARDs. Explain any one in details.	<b>05</b>
	(c)	Define bioassay. Explain various types of it.	<b>05</b>
<b>Q.6</b>	(a)	Classify oral hypoglycemic agents. Explain the mechanism, uses and adverse effects of metformin.	<b>06</b>
	(b)	Write a note on SERMs.	<b>05</b>
	(c)	Write a note on oral contraceptives.	<b>05</b>
<b>Q.7</b>	(a)	Classify NSAIDs. Discuss the complete pharmacology of aspirin.	<b>06</b>
	(b)	Enlist the various methods for bioassay of Insulin. Explain any one in detail.	<b>05</b>
	(c)	Discuss the mechanism and uses of Alteplase, allopurinol, nitroglycerine.	<b>05</b>

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