

5. Explain the mechanism of action of insulin with diagram? Write the preparation of insulin.
6. What is the therapeutic utility and side effects of testosterone and anabolic steroids?
7. What are antithrombic agents? Classify them with example.
8. Write the therapeutic utility of serotonin receptor agonists and antagonists.
9. Classify diuretics with example and mention their therapeutic utility.

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2023/SEM/ODD/BP-503T/006

UG Odd Semester (CBCS) Examination, March 2023

**PHARMACEUTICAL SCIENCES**

**(5<sup>th</sup> Semester)**

**Course No: BP 503T**

**(Pharmacology II-Theory)**

Full Marks: 75

Time: 3 Hours

*The figures in the margin indicate full marks for the questions*

**I (A). Multiple choice questions** **1x10=10**

1. Serotonin produce prokinetic effect by acting in which receptor
 

i) 5HT1	ii) 5HT2
iii) 5HT3	iv) 5HT4
2. Choice of drug for ventricular tachycardia is
 

i) Quinidine	ii) Lidocaine
iii) Verapamil	iv) Propranolol
3. Which one of the following is antithrombin independent anticoagulant?
 

i) Enoxaparin	ii) Dalteparin
iii) Fondaparinux	iv) Lepirudin-
4. Which one of the following antirheumatoids interfere with complement activation?
 

i) Gold salt	ii) Diclofenac
iii) Chloroquine	iv) Penicillamine

*(Turn Over)*

5. Which one of the following is inhibitor of calcineurin?
  - i) Infliximab            ii) Chlorambucil
  - iii) Cyclosporiniv    iv) Anakinara
6. Turners' Syndrome is due to deficiency of which hormone?
  - i) Testosterone        ii) Progesterone
  - iii) Oestradiol        iv) Prolactine
7. Which prostaglandin is responsible to raise temperature set point at hypothalamus
  - i) PGE2                ii) PGF2 $\infty$
  - iii) PGD2              iv) PGI2.
8. Which autocoid stimulate nerve ending of fibre C to produce burning and pain sensation
  - i) Angiotensin        ii) Bradykinin
  - iii) Prostacycline    iv) Leoukotrienes
9. Which adverse reaction of nimesulide caused to ban the drug in several country
  - i) Cardiotoxicity    ii) Hepatotoxicity
  - iii) Nephrotoxicity    iv) Gastric irritation
10. Give the choice of diuretic drug in Conn's Syndrome?
  - i) Chlorthiazide      ii) Spironolactone
  - iii) Acetazolamide    iv) Furosemide

**I (B). Objective type (Answer the following in brief)**

2x5=10

1. Triple response of histamine

2. Mechanism involved for hematinic property of Viamin B12and folic acid.
3. Mechanism of organic nitrates.
4. Significance of vitamin K
5. Cardiac condition that indicate use of propranolol.

**II. Long answers (Answer two out of three questions)**

10x2=20

1. Write the indication and general principle of bioassay. Describe bioassay of insulin. 5+5=10
2. Classify antihypertensive agents with example. Discuss the mechanism, uses and side effects of methyldopa 5+5=10
3. Write the distribution and mechanism of endogenous release and action of histamine in our body. 4+6 = 10

**III. Short answers (Answer seven out of nine questions)**

5x7=35

1. Classify anti-arrhythmic drugs with example. Write the indication for use of propranolol.
2. Give an account of drugs used in congestive heart failure and the mechanism of action of digitalis.
3. What areantihistaminic? Discuss their therapeutic utility with example.
4. Write mechanism of action and uses of heparin