JHARKHAND Rai University
RANCHI

End Semester/Reappear (Semester V) Examination Dec 2024

Programme: B. Pharm
Course: Pharmacology II **Full Marks: 75**
Course Code: BP503T **Time: 3 Hrs.**
Enrolment no. _____

Q.No.	Questions	CO	Bloom Taxonomy Category	Marks
	Section I			
1	**Objective Type Questions**			
	i. Parathyroid hormone (PTH) acts on the: a) Pancreas b) Bones, kidneys, and intestines c) Brain d) Thyroid gland ii. Growth hormone is secreted by the: a) Thyroid gland b) Anterior pituitary c) Adrenal cortex d) Pancreas iii. Which hormone stimulates milk production? a) Oxytocin b) Prolactin c) TSH d) ACTH iv. The thyroid gland secretes: a) T3 and T4 b) Cortisol c) Insulin d) PTH v. Fibrinolytics work by: a) Enhancing platelet aggregation b) Dissolving fibrin in blood clots c) Preventing blood clot formation d) Lowering blood pressure vi. The adrenal cortex secretes: a) ACTH b) Corticosteroids c) Oxytocin d) Insulin vii. Steroid hormones are derived from: a) Proteins b) Cholesterol c) Carbohydrates d) Fatty acids viii. Hypothyroidism is treated with: a) Methimazole b) Levothyroxine c) Propylthiouracil d) Octreotide ix. A symptom of hyperthyroidism is: a) Weight gain b) Cold intolerance c) Heat intolerance d) Dry skin x. Glucagon is primarily used to: a) Treat hyperglycemia b) Reverse severe hypoglycemia c) Inhibit insulin secretion d) Promote weight loss xi. Which hematinic is administered to treat pernicious anemia? a) Iron b) Folic acid c) Vitamin B12 d) Calcium xii. Which of the following is a coagulant agent? a) Aspirin b) Vitamin K c) Warfarin d) Clopidogrel xiii. Plasma volume expanders are used to treat: a) Hypertension b) Hypovolemic shock c) Anemia d) Platelet disorders xiv. Which of the following best describes the mechanism of action of steroid hormones? a) Bind to intracellular receptors and alter gene transcription b) Activate G-protein-coupled receptors c) Stimulate ion channel activity directly d) Inhibit protein synthesis xv. Which drug is a growth hormone analog used in growth hormone deficiency? a) Somatotropin b) Octreotide c) Bromocriptin d) Pegvisomant xvi. Which of the following is a fibrinolytic agent? a) Aspirin b) Streptokinase c) Clopidogrel d) Heparin xvii. Warfarin works as an anticoagulant by: a) Inhibiting thromboxane b) Blocking vitamin K-dependent clotting factors c) Breaking down fibrin d) Increasing platelet production xviii. Which of the following is a loop diuretic? a) Spironolactone b) Furosemide c) Hydrochlorothiazide d) Acetazolamide xix. Which hematinic is essential for the production of red blood cells? a) Vitamin C b) Iron c) Vitamin D d) Calcium xx. Folic acid is used in hematinic therapy to treat: a) Iron deficiency anemia b) Megaloblastic anemia c) Thalassemia d) Hemophilia	CO1	Remember	**1 x 20 = 20**
	Section II			
2. Short Answer type questions.				
a	Discuss the various types of congestive heart failure and their distinguishing features.	CO1	Understand	**7 x 5 = 35**
b	Explain types of Hematinics with examples.	CO2	Remember	
c	Write a brief note on biosynthesis of histamine and serotonin.	CO3	Understand	
d	What are the therapeutic uses of growth hormone analogues and their inhibitors?	CO4	Remember	
e	Describe the pharmacology of Estrogen along with its chemical structure.	CO5	Remember	
f	What are non-steroidal anti-inflammatory drugs (NSAIDs), and what is their mechanism of action in reducing inflammation?	CO3	Understand	
	or			

	How do angiotensin receptor blockers (ARBs) and ACE inhibitors modify the effects of angiotensin in hypertension treatment?	CO3	Understand	
g	Differentiate between testosterone and DHT. Explain the side effects of DHT.	CO5	Understand	
	or			
	Describe the pharmacology of Androgens along with its chemical structure.	CO5	Understand	
Section III				
Long Answer Type questions				**2 x 10 = 20**
3	What is the difference between Type I and Type II Diabetes. Write a detailed note on mechanism of action of oral hypoglycemic agents.	CO4	Analyze	
	or			
	What are the clinical applications of corticosteroids and how do glucocorticoids and mineralocorticoid differ in action?	CO4	Evaluate	
4	Write a detailed note on the transport of dietary lipids in body and also explain the different types of Hyperlipidemia.	CO1	Evaluate	
	or			
	Write mechanism of action of cardiac glycoside with a neat diagram. Describe the pharmacology of calcium channel blockers.	CO1	Analyze	

Course Outcomes (CO):

CO1: To explain the electrophysiology of the heart, various heart diseases, and pharmacological management.
CO2: To explain the hemostasis, coagulation cascade, and drugs used to treat blood disorder and fluid-electrolyte balance.
CO3: To understand the different autocoids and their physiological and pathological role.
CO4: To explain the role of endocrine system and different hormones along with hormonal disease associated with endocrine system.
CO5: To understand the properties of natural and synthetic sex hormones, application, and principle of bioassay.