Yashoda Shikshan Prasarak Mandal's

YASHODA TECHNICAL CAMPUS, SATARA

An Autonomous Institute

FACULTY OF PHARMACY

Department of Pharmacology

PHARMACOLOGY - II

UNIT-WISE QUESTION BANK (Q.1 – Q.62)

UNIT I – Cardiovascular System (Q.1 – Q.12)

Q. No.	Question Description
Q.1	Classify anti-hypertensive agents with examples and explain the mechanism of action of ACE inhibitors.
Q.2	Describe the pharmacology of Digitalis (Cardiac glycosides) including its mechanism of action, uses, and toxicity management.
Q.3	Classify anti-arrhythmic drugs with suitable examples (Vaughan-Williams classification).
Q.4	Explain the mechanism of action, adverse effects, and therapeutic uses of Calcium Channel Blockers (CCBs).
Q.5	Discuss the drug therapy for Angina Pectoris and detail the mechanism of action of Organic Nitrates.
Q.6	Write a note on Beta-blockers used in Congestive Heart Failure (CHF).
Q.7	Explain the pharmacological management of Hypovolemic and Cardiogenic Shock.
Q.8	Discuss the mechanism of action and side effects of Potassium Channel Openers in hypertension.
Q.9	Explain the role of Renin-Angiotensin-Aldosterone System (RAAS) inhibitors in cardiovascular disorders.
Q.10	Write short notes on: (a) Sodium Nitroprusside (b) Amiodarone.
Q.11	Classify Anti-hyperlipidemic agents and explain the mechanism of HMG-CoA reductase inhibitors (Statins).
Q.12	Discuss the management of Acute Myocardial Infarction.

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UNIT II – Cardiovascular & Urinary System (Q.13 – Q.24)

Q. No.	Question Description
Q.13	Classify Diuretics based on their site of action with examples.
Q.14	Detail the mechanism of action, therapeutic uses, and adverse effects of Loop Diuretics (Furosemide).
Q.15	Explain the mechanism and adverse effects of Thiazide diuretics.
Q.16	Classify Anti-coagulants. Explain the differences between Heparin and Warfarin.
Q.17	Discuss the mechanism of action and clinical uses of Anti-platelet drugs (Aspirin, Clopidogrel).
Q.18	Write a detailed note on Fibrinolytic and Anti-fibrinolytic agents.
Q.19	Explain the role of Potassium-sparing diuretics and Carbonic Anhydrase inhibitors.
Q.20	Classify Hematinics and explain the treatment of Iron Deficiency Anemia.
Q.21	Discuss the pharmacological actions of Plasma Volume Expanders.
Q.22	Explain the mechanism of action of Anti-diuretics (Vasopressin and its analogues).
Q.23	Write a short note on Coagulants and Hemostatics.
Q.24	Describe the drug therapy used in chronic kidney disease-induced anemia (Erythropoietin).

UNIT III – Autacoids and Related Drugs (Q.25 – Q.35)

Q. No.	Question Description
Q.25	Define Autacoids. Classify Histamine receptors (H1, H2, H3, H4) and their pharmacological actions.

Q.26	Classify H1-receptor antagonists. Differentiate between 1st generation and 2nd generation anti-histaminics.
Q.27	Explain the biosynthesis, physiological roles, and pathological involvement of Prostaglandins.
Q.28	Classify Non-Steroidal Anti-inflammatory Drugs (NSAIDs) with suitable examples.
Q.29	Detail the mechanism of action, adverse effects, and toxicity of Paracetamol (Acetaminophen).
Q.30	Explain the pharmacology of 5-HT (Serotonin) agonists and antagonists.
Q.31	Discuss the acute and chronic pharmacological management of Gout.
Q.32	Explain the treatment of Rheumatoid Arthritis (DMARDs - Disease Modifying Anti-Rheumatic Drugs).
Q.33	Write a short note on Leukotrienes and Thromboxanes.
Q.34	Explain the pharmacological management of Migraine.
Q.35	Discuss the role of Bradykinin and Substance P in pain and inflammation.

UNIT IV – Endocrine System (Q.36 – Q.46)

Q. No.	Question Description
Q.36	Classify Anterior Pituitary hormones and their physiological functions.
Q.37	Explain the synthesis, storage, release, and regulation of Thyroid hormones.
Q.38	Classify Anti-thyroid drugs. Explain the mechanism of action of Propylthiouracil and Methimazole.
Q.39	Classify Oral Hypoglycemic agents used in Diabetes Mellitus.
Q.40	Explain the mechanism of action, side effects, and preparation types of Insulin.
Q.41	Discuss the pharmacology of Biguanides (Metformin) and Sulfonylureas.
Q.42	Explain the physiological roles and pharmacological uses of Corticosteroids.

Q.43	Detail the side effects and contraindications of prolonged Glucocorticoid therapy.
Q.44	Write a note on Parathormone, Calcitonin, and Vitamin D in calcium homeostasis.
Q.45	Discuss the drug therapy for Hyperthyroidism and Thyroid Storm.
Q.46	Write a short note on DPP-4 inhibitors and SGLT-2 inhibitors.

UNIT V – Endocrine System & Bioassay (Q.47 – Q.62)

Q. No.	Question Description
Q.47	Explain the biosynthesis, pharmacological actions, and uses of Estrogens and Progesterone.
Q.48	Classify Oral Contraceptive Pills (OCPs) and explain their mechanism of action and adverse effects.
Q.49	Describe the pharmacology of Androgens, Anabolic Steroids, and Anti-androgens.
Q.50	Discuss Selective Estrogen Receptor Modulators (SERMs) like Tamoxifen and Raloxifene.
Q.51	Explain the mechanism and clinical uses of Uterine stimulants (Oxytocics) and Tocolytics.
Q.52	Define Bioassay. Explain the principles and applications of Bioassays.
Q.53	Differentiate between Quantal and Graded Bioassays with examples.
Q.54	Explain the methods of Bioassay: Matching assay, Interpolation method, and Multiple-point assay (2-point, 4-point).
Q.55	Describe the official Bioassay procedure for Oxytocin.
Q.56	Describe the Bioassay procedure for Insulin.
Q.57	Explain the Bioassay procedure for Digitalis.
Q.58	Describe the Bioassay procedure for d-Tubocurarine or Histamine.
Q.59	Write a short note on Emergency Contraception.
Q.60	Explain the role of Mineralocorticoids (Aldosterone) and their antagonists (Spironolactone).

Q.61 Discuss the bioassay of ACTH (Adrenocorticotropic hormone).

Q.62 Write a short note on Erectile Dysfunction drugs (PDE-5 inhibitors like Sildenafil).