SHREE H.N SHUKLA INSTITUE OF PHARMACEUTICAL EDUCATION AND RESEARCH

Question Bank

B.PHARM

(SEMESTER –IV)

SUBJECT NAME: PHARMACOLOGY-I

SUBJECT CODE: BP404TP

UNIT-I & II. GENERAL PHARMACOLOGY

01. Define Pharmacology. Explain various branches of pharmacology.
02. Define Drug. Explain in detail about various drug sources.
03. Explain nomenclature of drug.
04. Write detail note: Essential Drug concept.
05. Write various routes of drug administration. Explain oral route in detail.
06. Write various routes of drug administration. Explain parenteral route in detail.
07. Explain following terms
    A) Agonists, B) Antagonists (competitive and noncompetitive), C) Spare receptors, D) Addiction, E) Tolerance, F) Dependence, G) Tachyphylaxis, H) idiosyncrasy,I) allergy.
08. Explain Drug absorption in detail.
09. Write detail note: Drug Distribution
10. Define drug metabolism. Explain Phase 1 and Phase 2 reactions in detail.
11. Write detail note on enzyme induction and inhibition.
12. Explain creatinine clearance. Write drug execration in detail.
13. Classify receptors and write detail note on GPCR.
14. Classify receptors and write detail note on Enzyme linked receptors.
15. Explain dose-response relationship in detail.
16. Explain various types of ADR in detail.
17. Define drug-drug interaction. Explain in detail the same with pharmacokinetic and pharmacodynamics interaction.
18. Explain drug discovery and various phases of clinical trial.
19. Define pharmacovigilance in detail.

UNIT-3. DRUG ACTING ON AUTONOMIC NERVOUS SYSTEM

1. Explain neurohumoral transmission.
2. Differentiate between the following: a) Autonomic and Somatic Nervous System b) Sympathetic and Parasympathetic nervous system.
3. Describe Co-transmission.
4. Write about organization of ANS along with the synthesis and transmission of its neurotransmitters.
5. Classify and explain cholinergic receptors emphasizing on subtypes.
6. Classify cholinergic drugs. Write a note on pharmacological actions constituting muscarinic and nicotinic action of acetylcholine.
7. Classify anticholinesterase agents, giving their mechanism of action and pharmacological actions.

8. Explain Organophosphorous poisoning & its treatment.
9. Explain pharmacological actions and clinical uses of atropine.
10. Write a note on ganglion blockers.
11. State whether the following statements are true or false, justify giving suitable explanation (a) Atropine is used as a pre-anaesthetic medication. (b) Edrophonium is used to differentiate cholinergic and myasthenic crisis. (c) Thymectomy helps in improvement of the condition of patients with myasthenia gravis. (d) Acetylcholine is not used therapeutically.
12. Discuss complete pharmacology of cholinergic blocking agents.
13. Classify parasympatholytics and write a short note on atropine.
14. Write the classifications of Muscarinic antagonists. Discuss the Mechanism of actions and Therapeutic uses of anti-muscarinics.
15. Discuss the pharmacological actions of Nicotine.
16. Write a note on atropine poisonings and its treatment
17. What is Myasthenia gravis? Discuss its drug therapy.
18. Classify parasympathomimetics. Discuss the mechanism of actions and therapeutic uses of cholinergic drugs.
19. Write a short note on sympathetic transmission.
20. Explain Dale's vasomotor reversal phenonmenon.
21. Enumerate pharmacological actions of adrenergic blocking drugs.
22. Enlist location and actions mediated by adrenergic receptor subtypes.
23. Write pharmacological note on β – blockers.
24. Classify sympathomimetic drugs. Write pharmacological actions, adverse effects and clinical uses of adrenaline or Ephedrine.
25. Classify beta blockers. Write a pharmacological action and uses of propranolol.
26. Classify alpha-adrenoreceptor antagonist. Describe pharmacology of prazosin.
27. Write short note on the following: a. Adrenergic Neuron Blockers b. Adrenaline
28. Classify Sympathomimetics with examples. Describe how the adrenaline is synthesized, released and are destroyed in the body.
29. Write the Mechanism of action and Therapeutic applications of adrenergic drugs.
30. Write the pharmacological effects and uses of α blockers.
31. Enlist and describe the drugs used in the treatment of glaucoma.
32. Classify sympathomimetic drugs according to their therapeutic uses. Add a note on amphetamine.
33. Classify sympathomimetic drugs. Write the mechanism of action and therapeutic applications of adrenergic drugs.
34. Describe pharmacology of prazosin.
35. Write the pharmacological effects and uses of β blockers.
36. Skeletal Muscle Relaxants:
37. Write a note on centrally acting muscle relaxants.
38. Classify Skeletal muscle relaxant and describe their toxicities.
39. Describe the mechanism of action, pharmacological actions and toxicity of nondepolarizing skeletal muscle relaxants.
40. Differentiate d-tubocurarine and succinylcholine.
41. Write a pharmacological note on d-tubocurarine.
42. Local Anaesthethics

43. Classify Local Anaesthetics and write a brief note on local anaesthetics.
44. Describe mode of action and therapeutic uses of local anaesthetics.
45. Local anaesthetics often fail to afford adequate pain control in inflamed tissue.
46. Describe mode of action and therapeutic uses of local anaesthetics.

UNIT-4 & 5. DRUG ACTING ON CENTRAL NERVOUS SYSTEM

1. Define ansesthesia, describe stages of General Anesthesia
2. Classify General anesthetics and write mechanism of the same.
3. Write note on preanesthetic medicines
4. Discuss pharmacological actions of Alcohol
5. Describe in detail pharmacology of benzodiazepines.
6. Describe etiology and management of Insomnia
7. Describe sign, symptoms and pathophysiology of Parkinson
8. Note on treatment and management of Parkinson.
9. Describe pharmacological actions and therapeutic uses of Morphine
10. Write note on Morphine poisoning.
11. Describe sign and symptoms of Mania and discuss Lithium in detail
12. Classify CNS Stimulants. Describe pharmacology of Caffeine
13. Classify and discuss treatment and management of Epilepsy
14. Discuss etiology, clinical manifestations and diagnosis of Psychosis
15. Enumerate affective disorders. Explain in brief about clinical manifestation, diagnosis and treatment of depression
16. Write a note on alcohol and tobacco Addiction
17. Discuss mechanism of tolerance development with examples
18. Write a short note on drug dependence and drug abuse
19. Enlist inhibitory neurotransmitters in CNS. Write detail note on GABA and dopamine.
20. Describe etiology, pathophysiology and treatment of Alzheimer's disease.
21. Note: Opioid antagonist.