

Topic Wise Question Bank For Unit-II

I. Drugs Acting on Cardiovascular System

A. Drugs Used in Therapy of Shock

10 Marks (3 questions)

1. Discuss the pharmacological management of hypovolemic and cardiogenic shock, including mechanism of action, indications, and adverse effects of the drugs used.
2. Explain the role of vasopressors and inotropes in the management of septic shock with examples.
3. Describe the pharmacology of dopamine and norepinephrine in shock therapy, highlighting receptor selectivity and clinical applications.

5 Marks (5 questions)

1. Classify drugs used in shock based on their mechanism of action.
2. Write a note on epinephrine in anaphylactic shock.
3. Discuss the adverse effects of vasopressors.
4. Explain the role of dobutamine in cardiogenic shock.
5. Briefly describe fluid therapy in hypovolemic shock.

2 Marks (10 questions)

1. Define shock.
2. Name two inotropic agents used in shock.
3. What is the main drug used in anaphylactic shock?
4. Give an example of a vasopressor.
5. What is the role of fluids in shock management?
6. Which receptor does norepinephrine act on?
7. Name one adverse effect of dopamine.
8. Give one indication for phenylephrine in shock.
9. Differentiate between hypovolemic and cardiogenic shock in one line.
10. Mention one contraindication of epinephrine.

B. Hematinics, Coagulants, and Anticoagulants

10 Marks (3 questions)

1. Discuss the pharmacology of iron and folic acid in the treatment of anemia.

2. Explain the mechanism of action, indications, and monitoring of warfarin therapy.
3. Describe different types of anticoagulants and their pharmacological properties.

5 Marks (5 questions)

1. Write a note on vitamin K and its clinical significance.
2. Explain the mechanism of heparin and low molecular weight heparins.
3. List adverse effects of anticoagulants.
4. Describe the difference between coagulants and anticoagulants.
5. Mention the role of erythropoietin in anemia therapy.

2 Marks (10 questions)

1. Define hematinic.
 2. Name one oral anticoagulant.
 3. Give one parenteral anticoagulant.
 4. Mention one adverse effect of warfarin.
 5. Give one example of a coagulant drug.
 6. What is the antidote for heparin?
 7. Name a drug used to treat iron deficiency anemia.
 8. Define anemia in one line.
 9. Mention one function of vitamin K.
 10. Give one example of a low molecular weight heparin.
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C. Fibrinolytics and Anti-Platelet Drugs

10 Marks (3 questions)

1. Explain the pharmacology of fibrinolytic agents, including mechanism, therapeutic uses, and adverse effects.
2. Discuss antiplatelet drugs used in the prevention of myocardial infarction and stroke.
3. Compare and contrast the mechanisms and clinical uses of fibrinolytics versus antiplatelet drugs.

5 Marks (5 questions)

1. Write a note on aspirin as an antiplatelet agent.
2. Explain the role of clopidogrel in cardiovascular disease.
3. List adverse effects of fibrinolytic therapy.
4. Describe the use of GP IIb/IIIa inhibitors.
5. Explain contraindications of thrombolytic therapy.

2 Marks (10 questions)

1. Define fibrinolytic drugs.
 2. Give an example of a fibrinolytic agent.
 3. Name an antiplatelet drug.
 4. Mention one clinical use of aspirin.
 5. Give one adverse effect of streptokinase.
 6. Define antiplatelet drugs.
 7. Give one contraindication for fibrinolytic therapy.
 8. Name a P2Y₁₂ inhibitor.
 9. Mention one difference between anticoagulants and antiplatelets.
 10. Give one example of GP IIb/IIIa inhibitor.
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D. Plasma Volume Expanders

10 Marks (3 questions)

1. Describe the pharmacology and clinical applications of colloids and crystalloids in hypovolemic conditions.
2. Discuss the differences between synthetic and natural plasma volume expanders.
3. Explain the adverse effects and monitoring parameters for plasma expanders in shock therapy.

5 Marks (5 questions)

1. Write a note on albumin as a plasma expander.
2. Explain the role of dextran in hypovolemia.
3. List indications of plasma volume expanders.
4. Differentiate between crystalloids and colloids.
5. Mention adverse effects of hydroxyethyl starch.

2 Marks (10 questions)

1. Define plasma volume expander.
2. Give one example of a colloid.
3. Give one example of a crystalloid.
4. Mention one clinical use of albumin.
5. Name one adverse effect of dextran.
6. Define hypovolemia.
7. Give one advantage of colloids over crystalloids.
8. Mention one contraindication for plasma expanders.
9. Name a synthetic plasma expander.

10. Define oncotic pressure in one line.

II. Drugs Acting on Urinary System

A. Diuretics

10 Marks (3 questions)

1. Explain the pharmacology, classification, and clinical uses of diuretics.
2. Discuss the mechanism of action, therapeutic uses, and adverse effects of loop diuretics.
3. Compare thiazide, loop, and potassium-sparing diuretics in terms of mechanism and indications.

5 Marks (5 questions)

1. Write a note on spironolactone as a potassium-sparing diuretic.
2. Explain indications of thiazide diuretics.
3. List adverse effects of loop diuretics.
4. Differentiate between osmotic and carbonic anhydrase inhibitors.
5. Mention monitoring parameters for diuretic therapy.

2 Marks (10 questions)

1. Define diuretics.
 2. Name one loop diuretic.
 3. Name one thiazide diuretic.
 4. Name one potassium-sparing diuretic.
 5. Mention one clinical use of furosemide.
 6. Define natriuresis.
 7. Give one adverse effect of thiazides.
 8. Name a carbonic anhydrase inhibitor.
 9. Mention one indication of mannitol.
 10. Define osmotic diuretic in one line.
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B. Anti-Diuretics

10 Marks (3 questions)

1. Explain the pharmacology and mechanism of action of vasopressin and its analogues.

2. Discuss the clinical applications of anti-diuretics in diabetes insipidus and other disorders.
3. Compare vasopressin receptor agonists and antagonists, including indications and adverse effects.

5 Marks (5 questions)

1. Write a note on desmopressin.
2. Explain the mechanism of V1 and V2 receptors.
3. List indications of vasopressin therapy.
4. Mention adverse effects of anti-diuretics.
5. Differentiate between central and nephrogenic diabetes insipidus.

2 Marks (10 questions)

1. Define anti-diuretic drugs.
2. Name one ADH analogue.
3. Give one clinical use of desmopressin.
4. Mention one adverse effect of vasopressin.
5. Name a vasopressin receptor antagonist.
6. Define diabetes insipidus.
7. Give one example of V2 receptor agonist.
8. Mention one contraindication for vasopressin therapy.
9. Define aquaporins in one line.
10. Give one therapeutic effect of ADH on kidneys.

