

QUESTION BANK- CLINICAL TOXICOLOGY

IV PHARM.D

| CHAPTER 1 : General principles involved in the management of poisoning | | 3 hrs |
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| II | SHORT ESSAYS: | 5 Marks |
| | <ol style="list-style-type: none">1. Explain ABCD management of Poisons?2. Write the grading for the severity of CNS intoxication?3. Write briefly on Acid–base disorders and its causes?4. Explain in detail general principles involved in the management of poisoning?5. Explain in detail the stabilization and evaluation in the management of poisoning.6. Explain briefly Glasgow coma Scale.7. Explain the role of Sodium bicarbonate in the management of poisoning?8. Explain the electrolyte disturbance in poisoning?9. Mention the drugs associated with pulse rate and blood pressure?10. Add a note on toxic syndromes.11. Explain toxic ophthalmological manifestations?12. Discuss the dermal manifestation of poisoning.13. Mention the poison/ drug induced oral manifestations | |
| III | SHORT ANSWER: | 2 Marks |
| | <ol style="list-style-type: none">1. Define Fluminant, Acute, Subacute and Chronic poisoning.2. Mention the Toxicity rating of poisons.3. Mention the Poisoning severity score for acute poisoning.4. Define UFD and MLD.5. Discuss the methods of preventing absorption of poisons.6. Mention the Drug / toxin induced arrhythmias.7. List the drugs causing non-cardiogenic pulmonary oedema.8. Management of hyperthermia.9. Management of hypothermia.10. What is Coma cocktail?11. List the drugs that induces tremor.12. Management of tremor in poisoning.13. Mention the drugs that cause movement disorders.14. Give two examples for Drugs / poison which cause papillary changes (Miosis, Mydriasis and Nystagmus) for each.15. Mention two drugs which cause failure of respiratory centre and respiratory muscle. | |

16. Give examples of drugs / toxins that cause acute renal failure.
17. Write the examples of drugs / toxins that cause hepatic damage?
18. Explain role of emesis in acute poisoning.
19. Mention the importance of bowel irrigation in poisoning.
20. Explain the role of chelating agents in acute poisoning.

CHAPTER 2: Antidotes and the clinical applications

2 hrs

III SHORT ANSWER:

2 Marks

1. Define and classify antidotes.
2. Explain the role of antidote in poisoning.
3. Write a short note on antidotes and give examples with their clinical application?
4. Explain Accelerated detoxification and reduced toxic conversion antidote with examples.
5. Write the composition of Universal antidote?
6. Define Adjunctival antidotes with example.
7. Define and mention the composition of obsolete antidote.
8. Explain toxic effect bypass antidote action with example?
9. Explain receptor site competition antidote action with example?
10. Explain receptor blockade antidote action with example?
11. Add a note on inert complex formation antidote action with example.
12. Antidotes used in methanol poisoning.
13. List the modes of action of antidotes.
14. Name the specific antidotes for the following
 - a) Paracetamol
 - b) Organophosphorus compounds
 - c) Iron
 - d) Morphine

CHAPTER 3: Supportive care in clinical Toxicology

3 hrs

II SHORT ESSAYS:

5 Marks

1. Give a short note on role of supportive care measures in poisoning.
2. Describe the role of basic supportive care in the management of poisoning?
3. Discuss the supportive care for Airway correction.
4. Explain the supportive care for breathing correction.
5. Explain the supportive care for Circulation correction.
6. Write a note on supportive care in clinical toxicology?

7. Write the importance of electrolytes as a supportive care in poisoning?
8. Explain the importance of supportive care in clinical toxicology.
9. Explain the supportive care to treat Sedation.
10. Explain the supportive care to treat seizure.
11. Explain the supportive care for restoration of renal function.

CHAPTER 4: Gut Decontamination

3 hrs

SHORT ESSAYS:

5 marks

1. Describe the technique, contraindication, potential complication and adverse effect of emesis method of gut decontamination.
2. Explain the different methods of gut decontamination.
3. Explain the general principles of gut decontamination with advantages and disadvantages.
4. Write the techniques, indications, contraindications and complications involved in gastric lavage.
5. Discuss the technique, contraindication, potential complication and adverse effect of Activated charcoal method of gut decontamination.
6. Explain the role of gastric lavage and charcoal administration in Gut decontamination process.
7. Explain the technique, contraindication, potential complication and adverse effect of cathartics method of gut decontamination.
8. Explain the technique, contraindication, potential complication and adverse effect of whole-bowel irrigation method of gut decontamination.
9. Add a note on gastrointestinal decontamination risk-benefit analysis.
10. Explain the Oral binding agents in gut decontamination
11. List out the Gut decontamination methods.
12. Enumerate the contraindications in gastric lavage.
13. Write the gastrointestinal decontamination triangle?
14. Mention the complications of emesis in gut decontamination.
15. Disadvantages of Gut Decontamination
16. Multiple dose activated charcoal.
17. Uses of light kaolin and charcoal in poisoning.
18. Describe the mechanism and uses of EDTA in clinical toxicology.
19. List the complications of gastric lavage in gut decontamination.
20. Write the complications of Activated charcoal in gut decontamination?

21. Mention the complications of cathartics in gut decontamination.
22. Write the complications of whole-bowel irrigation in gut decontamination?

| CHAPTER 5: Elimination Enhancement. | | 2 hrs |
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| III | SHORT ANSWER: | 2 Marks |
| | <ol style="list-style-type: none"> 1. Write the elimination enhancement methods in treatments of acute poisoning. 2. Mention urinary alkalisation method of elimination enhancement of poisons. 3. Write the potential complication and indication of urinary alkalisation method of elimination enhancement of poisons. 4. Write the importance of multiple doses of activated charcoal in elimination enhancement technique 5. What is extracorporeal techniques in elimination of poisons 6. Write a the role of dialysis in elimination enhancement of poisons? 7. Explain the role of hemodialysis in the management of poisoning. 8. Define a) Hemoperfusion b) Haemodialysis c) Plasmapheresis d) Hemodiafiltration 9. Write the advantages and disadvantages of Hemoperfusion in elimination enhancement of poisons. 10. Write the significances of Haemodialysis in elimination enhancement of poisons? 11. What is Plasmapheresis? Mention its role in elimination enhancement of poisons? 12. Write the potential complications of multiple doses of activated charcoal technique for elimination of poisons? 13. Expand CAVHD, write its significance. | |

| CHAPTER 6 : Toxicokinetics | | 2 hrs |
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| III | SHORT ANSWER: | 2 Marks |
| | <ol style="list-style-type: none"> 1. Define and enlist the various parameters of toxicokinetics. 2. Define toxicokinetics and write its importance. 3. Write the clinical Applications of toxicokinetics? 4. Mention the toxicokinetic studies. | |

5. Write the toxicokinetics of paracetamol

CHAPTER 7 : Clinical symptoms and management of acute poisoning of:

a). Pesticide poisoning: Organophosphorous compounds, carbamates, organochlorines, pyrethroids,
b) Opiates overdose c) Antidepressants , d) Barbiturates and benzodiazepines, e) Alcohol: ethanol, methanol, f) Paracetamol and salicylates, g) Non-steroidal anti-inflammatory drugs, h)Hydrocarbons: Petroleum products and PEG. i) Caustics: inorganic acids and alkali, j). Radiation poisoning

16 hrs

I LONG ESSAYS:

10 Marks

1. What are the signs and symptoms of acute poisoning with organophosphorus compounds? Describe its clinical management.
2. Explain the signs and symptoms and management of organochlorine poisoning.
3. Enlist the various pesticides and explain the clinical symptoms and management of acute poisoning of any two.
4. Classify Pyrethroids. Explain the management of Pyrethroid poisoning.
5. What are signs and symptoms of opiates poisoning and its management?
6. Explain the clinical symptoms and management of acute poisoning with barbiturates and benzodiazepines.
7. Define and classify the antidepressants and explain the clinical symptoms and management of acute poisoning of tricyclic anti-depressants.
8. Explain in details about the management of acute poisoning with ethanol and methanol.
9. Explain signs and symptoms and management of Paracetamol, NSAID and salicylates.
10. Discuss the acute poisoning with hydrocarbons.
11. Define and classify caustics? Explain clinical features and management of acute poisoning with inorganic acids and alkali.
12. Describe the clinical symptoms and management of radiation poisoning.

II SHORT ESSAYS:

5 Marks

1. Write a note on management of organophosphorus poisoning?
2. Mention the clinical features and management of carbamate poisoning.
3. Explain the management of opiate poisoning.
4. Write the clinical symptoms and management of TCA?
5. Discuss on barbiturate overdose and its management.
6. Discuss the clinical symptoms and treatment of acute poisoning with Barbiturates.

7. Explain the clinical symptoms and treatment of acute poisoning with BZD.
8. Explain briefly clinical features and management of acute poisoning with ethanol.
9. Briefly explain clinical features and management of acute poisoning with methanol.
10. Write the manifestation of alcohol withdrawal syndrome?
11. Explain the clinical symptoms and management of acute poisoning with paracetamol overdose.
12. Explain the clinical symptoms and management of acute poisoning with aspirin.
13. Explain the clinical symptoms and management of acute poisoning with salicylates.
14. Discuss the nephrotoxicity of NSAIDs.
15. Explain briefly clinical features and management of acute poisoning with inorganic acids and alkali.
16. Explain the clinical symptoms and management of acute poisoning with hydrocarbons.
17. Enumerate the clinical symptoms and management of acute poisoning with radiation poisoning.
18. Explain the clinical symptoms and complications of radiation poisoning.
19. Explain the hepatotoxicity of paracetamol.

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| III | SHORT ANSWER: | 2 Marks |
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1. Clinical effects of organophosphorous poisoning.
2. Write the role of atropine in OP poisoning?
3. Classify OP Compounds.
4. Classify pyrethroid pesticides with examples.
5. Mention the importance of PAM(Pralidoxime) in OP poisoning
6. Write the usual fatal dose of Morphine?
7. Mention the signs and symptoms of Opiates overdose.
8. Write the signs and symptoms of MAOI acute poisoning?
9. List out the Opioid antagonists
10. Toxicity of petroleum products.
11. Management of NSAIDS poisoning.
12. Explain management of salicylates poisoning.
13. Explain signs and symptoms of organochlorine poisoning.
14. Management of benzodiazepines poisoning.
15. signs and symptoms of Inorganic acid poisoning.
16. Clinical effect of methanol poisoning.
17. What are the clinical symptoms of hydrocarbon poisoning?
18. Clinical symptoms of radiation poisoning.
19. Management of acute poisoning with inorganic acids.

20. Signs and symptoms of paracetamol poisoning.
21. Treatment for acute methanol poisoning.
22. Alcohol withdrawal syndrome.
23. Clinical symptoms of barbiturate poisoning.
24. Signs and symptoms of poisoning with PEG.
25. Clinical symptoms of salicylism.
26. Signs and symptoms of acid injury.
27. Clinical effects of poisoning with inorganic acids.
28. Clinical symptoms of radiation poisoning.
29. Clinical symptoms of antidepressant poisoning.
30. Paracetamol toxicity.
31. Write the Treatment for Reye's syndrome.
32. What is Rumack matthew nomogram?
33. Stages of Acute Radiation Syndrome
34. Biological effects of ultraviolet radiation
35. Sources of non ionizing radiation
36. Mode of action of alkali poisoning
37. Treatment of alkali poisoning
38. Treatment of sulfuric acid poisoning

CHAPTER 8: Clinical symptoms and management of chronic poisoning with the following agents- Heavy metals: Arsenic, lead, mercury, iron, copper

6 hrs

I LONG ESSAYS:

10 Marks

1. Describe the clinical symptoms and management of chronic poisoning with the heavy metals.
2. Discuss the clinical symptoms and management of chronic poisoning with arsenic and lead.
3. Describe the clinical symptoms and management of chronic poisoning with iron, mercury and copper.
4. Discuss various heavy metal poisoning emphasizing the clinical symptoms and its management.
5. Enumerate the clinical symptoms, laboratory tests and management of chronic poisoning with Lead.
6. Write a note on the general principles in the management of heavy metals poisoning?

III SHORT ANSWER:

2 Marks

1. Mention the application of deferoxamine.
2. Enlist the application of chelating agents in heavy metal poisoning.
3. Write the laboratory test used for diagnosing lead poisoning?

4. Expand the BAL and DMSA.
5. Explain the clinical features of copper sulphate poisoning.
6. Discuss the various laboratory test used for diagnosing lead poisoning.
7. Write the signs and symptoms of arsenic poisoning?
8. Write the clinical effect of poisoning with mercury?
9. Explain the management of iron poisoning.
10. Write the Antidote for mercury poisoning?
11. Enlist the treatment options for mercury poisoning.

CHAPTER 9: Venomous snake bites: Clinical effects of venoms, general management as first aid, early manifestations, complications and snake bite injuries **4 hrs**

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| II | SHORT ESSAYS: | 5 Marks |
| | <ol style="list-style-type: none"> 1. Describe the signs and symptoms of venomous snake bite and its management. 2. Describe the Clinical effects of Venom, general first aid management for snake bite injuries? 3. Write a short note clinical effect of snake venoms? 4. Write the early manifestations, complications and management of snake bite injuries? 5. Enlist the signs, symptoms and treatment of snakebite poisoning. 6. Write the general first aid management for snake bite? 7. Classify the venomous snakes with examples. | |
| III | SHORT ANSWER: | 2 Marks |
| | <ol style="list-style-type: none"> 1. Write the differences between venomous and non- venomous snakes? 2. What is ASV? 3. Classify different type of venomous snakes. 4. Signs and symptoms of snake poisoning. 5. First aid measures for snake bite. 6. Distinguish between venomous and non-venomous snake bite. | |

CHAPTER 10: Plants poisoning- Clinical symptoms and management of Mushrooms, Mycotoxins

2 hrs

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| III | SHORT ANSWER: | 2 Marks |
| | <ol style="list-style-type: none"> 1. Add a note on Mycotoxins poisoning. 2. Write the management of Mycotoxins poisoning 3. Write the clinical symptoms of Mycotoxins poisoning 4. What is the role of atropine in mushroom poisoning? | |

5. Discuss the clinical features of mushroom poisoning.
6. Write the management of poisoning with mushrooms.
7. Short note on aflatoxin.
8. Name toxic mushroom.
9. Classify the mushrooms with examples.
10. Name the poisonous mushrooms.

CHAPTER 11: Food Poisonings- Clinical symptoms and management of Food Poisonings **2 hrs**

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| III | SHORT ANSWER: | 2 Marks |
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1. Give the complications of food poisoning.
2. Give the sources of food poisoning.
3. Write about shell fish poisoning
4. Management of microbial food poisoning.
5. Write on etiology of food poisoning
6. Mention the importance of ORT in food poisoning
7. Write the general treatment measures for food poisoning
8. Write the significance of IV rehydration therapy in food poisoning.
9. Write nonspecific anti diarrhoeal agents used in food poisoning.

CHAPTER 12: Envenomations- Clinical symptoms and management of Arthropod bites and stings

2hrs

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| III | SHORT ANSWER: | 2 Marks |
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1. What are the Clinical effects of arthropod bites and stings?
2. Write the management for Arthropods bite.
3. Discuss the management of scorpion bite.
4. Write the signs and symptoms and first aid for scorpion bite?
5. First aid of arthropod bites.
6. Write the signs and symptoms of wasp bite
7. Write the treatment of Bee bite

CHAPTER 13: Substance abuse- Signs and symptoms of substance abuse and treatment of dependence a) CNS stimulants: Amphetamine, b) Opioids, c) CNS depressants, d) Hallucinogens: LSD, e) Cannabis group, f) Tobacco

3 hrs

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| II | SHORT ESSAYS: | 5 Marks |
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1. Enumerate the signs and symptoms of substance abuse and treatment of dependence with amphetamine
2. What are the signs and symptoms and treatment of opioid dependence?
3. Write the clinical features and management of substance abuse of CNS depressants?
4. Explain the clinical symptoms and management of cannabis dependence?
5. Discuss the clinical symptoms and management of hallucinogens and tobacco abuse.
6. Diazepam substance abuse.
7. Describe the Abuse potential of amphetamine.
8. Discuss the DSM-IV criteria for substance abuse.
9. Explain the management of cocaine detoxification.
10. Mention the role of nicotine therapy in smoking cessation.
11. Short note on tobacco dependence.
12. Explain the hallucinogenic drug abuse.
13. List down the symptoms of cannabis abuse and its treatment.
14. Explain the signs and symptoms of substance abuse and treatment of opioid dependence.
15. Explain the signs and symptoms of substance abuse and management of dependence with amphetamine.