
First question

(٦.٥ marks)

١. **Write a short note on:** (٢ marks, ١ for each)
 - a. Counteracting the absorbed poison.
 - b. Role of exposure mode in toxicity.
٢. **Tabulate the difference between:** (٢ marks, ١ for each)
 - a. DMSA and CaNa₂EDTA.
 - b. Haemolysin and hemorrhagens as components of snake venom.
٣. **Fill in the following spaces** (٢.٥ marks)
 - a. The causes of death from black spider are...(١).....and(٢)...while from scorpion sting are ...(٣).....,.....(٤).....and(٥).....
 - b. Excretion of the poison from the bowel can be accelerated by...(٦)....., while from the kidney by.....(٧).....and, from the lung by(٨).....and.....(٩).....
 - c. It is better to use adsorbent when poison is excreted into the bile because of...(١٠).....

Second question

(٧ marks)

١. A history of cattle stock licked paint from old tins for several weeks; the signs were anemia, gastrointestinal symptoms, nephropathy and neuropathy. A veterinarian was treating the cases symptomatically. ٢٤-٤٨ h post treatment, another signs were appeared in the form of hematemesis, bowel perforation, metabolic acidosis and respiratory distress.
If you know that the previous signs were due to poisoning with two heavy metals
 - a. What are the suspected metals and how can you confirm your suspicion in the laboratory? (١ mark)
 - b. Explain the cause of neuropathy in the first signs and metabolic acidosis in the second one? (١ mark)
٢. Pentavalent arsenic toxicity leads to inhibition of ATP production. Why? (١ mark)
٣. Discuss the role of polystyrene resins, neostigmine and spironolactone in the treatment of methyl mercury poisoning. (١ mark)
٤. What do you know about metallothionein? (١ mark)
٥. Write short notes on mercuria lentis and acrodynia? (١ mark)
٦. Differentiate between the effects of chronic cadmium and selenium toxicities on limbs? (١ mark)



Third question

(٤.٥ marks)

١. **Write on the following**

(٣ marks, ١ for each)

- Causes of death in kerosene toxicity.
- Effect of aflatoxins on lysosomes and mitochondria.
- Treatment of tincture iodine toxicity.

٢. **Give reasons**

(١.٥ marks, ٠.٥ for each)

- Zeralenone mimics the effect of female estrogen.
- Massive marine mortality at Helena bay in South Africa, ١٩٩٤.
- Ochratoxin reduces protein synthesis.

Fourth question

(٧ marks)

١. A cat admitted to your clinic showing signs of rhinitis, bronchial asthma, lacrimation, vomiting, tremors and coordination. Finally it died due to anaphylactic shock; the owner said that the signs appeared after topical treatment of dogs with anti-dog flea product that living side by side with that cat.

- What do you suspect about the cause of toxicity? (٠.٥ mark)
- Briefly, discuss its mode of action. (١ mark)

٢. Usually, pesticides exert their mode of action on a target organ. Mention at least two pesticides affecting the lung and compare between their mode of actions. (١ mark)

٣. Complete the following spaces with the correct words (١.٥ mark)

- The more susceptible species for Rotenone, SMFA and pyrethroid toxicity are١.....,٢..... and.....٣....., respectively
- The stool of phosphorus poisoned case is characterized by٤.....,.....٥.....and.....٦.....

٤. Point out only with a diagram the aging of OP. (١ mark)

٥. Give reason: (١ mark, ٠.٥ for each)

- Carbachol is contraindicated in the treatment of OP toxicity case.
- Oral doses of copper sulfate is an effective treatment for phosphorus toxicity.

٦. Prescribe the line of treatment of a case poisoned with SMFA. (١ mark)

Good luck
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