

Toxicology

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Toxicology
Final Exam 2014-2015

Al-Azhar university-Gaza-Palestine
College of Pharmacy
Dept. of pharmacology and applied sciences

Fifth year students
Date: 01/06/2015
Time: 120 minutes
Total marks: /50

Students Name:

Answer the following questions:

Part 1:

(20 marks)

1. Give the important differences between acute aspirin poisoning and chronic aspirin poisoning? (3 marks)

2. How would you differentiate mild benzodiazepines poisoning and severe benzodiazepine poisoning? (3 marks)

4. Explain the mechanism involved in the appearance and disappearance of symptoms. (3 marks)

3. Explain how the toxicokinetics of acetaminophen are well-correlated with its toxic effects in case of poisoning? (3 marks)

5. How does the amount of administration affect the toxicity of a drug? (3 marks)

6. Give the mechanism of toxicity of ecstasy? Give the statement of defenders of ecstasy regarding its poisoning potential and its value in psychotherapy?

(3 Marks)

4. Explain the mechanisms involved in pain suppression and dependence of opiates? (2 marks)

5. Explain how route of administration can affect the toxicity of cocaine?

(3 marks)

7. Give the mechanism of toxicity of marijuana? What is its toxic dose? Describe the subjective effects in case of marijuana poisoning? (4 Marks)

8. Give toxic dose of Cyanide? Discuss the role of hydroxocobalamin as antidote for cyanide poisoning? (4 Marks)

9. Give the chronic toxic effects of arsenic? Give the role of dimercaprol in the treatment of metal poisoning? (4 Marks)

10. "Antivenins are the mainstay for treatment of snakebite; however, it suffers some disadvantages". Comment on this statement? (2 Marks)

11. Give the mechanism of toxicity, toxic dose and clinical picture of 2,4-D poisoning? (3 Marks)

Part 2: Case Studies

(16 marks)

Case Study One:

A 5-year-old boy had a history of six previous admissions to the hospital over a period of 4 months. On each admission, he was found to be vomiting, in a state of semi-consciousness, hypoglycemic, and complaining of abdominal pain. A definitive diagnosis could not be made and he was thought to be epileptic on the basis of earlier convulsive episodes. He was given Phenobarbital for his seizures.

At the present admission, this child was fully comatose and was admitted to Intensive Care. He was noted to be bradycardic, temperature was 34°F, and pupils were constricted. The child was cyanotic and underwent a respiratory arrest from which he was resuscitated. Naloxone was administered with a very significant improvement in the patient's vital signs. Toxicological analysis of urine sample of the child showed the presence of 6-acetylmorphine.

What agent among the following is responsible for the poisoning in the child?

- A. Morphine.**
- B. Codeine.**
- C. Heroin.**

Case Study Two:

An automobile driver is stopped while driving erratically. She is tested for drugs and the laboratory report states that she is positive for cocaine metabolite in her urine. She claims that someone else must have added cocaine to her urine and that she is being framed.

Discuss the claim of the woman?

Good Luck!

Dr. Mohammed Shbair