

Tanta University
Faculty of Medicine
Department of
Anesthesia.



MD 1st Part
Pharmacology
No of questions:4
Time allowed: 3h
Total Marks: 45

Question 1- Neuromuscular blockade are used frequently in anesthesia. (10marks)

- Outline the mechanisms of spontaneous recovery from neuromuscular blockade following the administration of rocuronium. (2 marks)
- Which classes of drugs can be used to antagonise the action of rocuronium (2 marks) and how do they work? (3 marks)
- What are the advantages and disadvantages of these antagonist drugs? (3 marks)

Question 2- Classify anti-hypertensive drugs and discuss their mechanism of action? (10 marks)

Question 3- Diabetes mellitus is a common endocrinal disorder you are faced during anesthesia practice. (10marks)

- In a patient with diabetes mellitus, what clinical features may indicate autonomic involvement? (2 marks)
- What are the micro-vascular (2 marks) and macro-vascular (2 marks) complications of diabetes mellitus?
- List the classes of oral hypoglycemic agents. (2 marks) Describe their mechanisms of action. (2 marks)

Question 4 - A 44-years old man was referred to the pain clinic for evaluation and management of abdominal pain. He was recently diagnosed with adenocarcinoma of the pancreas. (15marks)

- What is mechanism of action of opioids? (3marks)
- Discuss the opioid-related side effects. (3marks)
- Discuss Difference between tolerance and physical dependence. (3marks)
- How would you treat opioid induced side effect? (3marks)
- In cancer pain management, what are adjuvant drugs you should considered to enhance pain relief? (3marks)

----- (Good Luck)