

Question Paper

Exam Date & Time: 03-May-2024 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

II Year Pharm D University Examination April 2024

Pharmacology-1 [PHA 2.4T-S2]

Marks: 70

Duration: 180 mins.

A: Long Answer Questions

Answer all the questions.

Draw diagrams wherever necessary

- 1) With suitable examples, classify antimuscarinic drugs. (5)
 - a)
 - b) Draw suitable diagrams and explain the autonomic control on pupil size and the site of action of drugs. (5)
- 2) With a suitable diagram, discuss the synthesis, storage, and release of thyroid hormones. (6)
 - a)
 - b) Explain the mechanism of action of anti-thyroid drugs. (4)
- 3) Discuss the stages of general anaesthesia. (4)
 - a)
 - b) Explain the mechanism of action of general anaesthetics. (6)

B: Short Answer Questions

Answer all the questions.

- 4) Draw the RAAS pathway and depict the site of action and examples of drugs modulating it. (5)
- 5) A 60-year-old male patient of moderately severe chronic obstructive pulmonary disease (COPD) with FEV1 45% of predicted, who has quit smoking for the last 5 years, and is maintained on- Ipratropium br. 20 µg/puff metered dose inhaler, 2 puffs 3 times a day, and Theophylline 400 mg SR tab. twice a day, developed a sore throat and fever. He was prescribed- (5)
 - i) Tab Erythromycin 250 mg, one tab 4 times a day for 5 days
 - ii) Tab Paracetamol 500 mg 3 times a day till fever persists.After 3 days he presented with pain in the epigastrium, restlessness, irritability, inability to sleep, palpitation, tremor in fingers and hand, and had vomited twice. His fever had subsided, and his throat was better.
 - (a) What could be the reason for his recent illness?
 - (b) Could this illness be prevented, if so, how?
- 6) With examples, classify the drugs to treat dyslipidaemia. (5)
- 7) Compare and contrast between oral and intravenous routes of drug administration. (5)
- 8) Explain the pharmacological actions of 5-hydroxytryptamine. (5)
- 9) Explain the molecular mechanism of action of morphine. (5)

C. Give Reasons for the Following

Answer all the questions.

- 10) Justify the clinical use of amlodipine. (2)
- 11) If a drug follows first-order kinetics and the drug $t_{1/2} = 3$ h, then after 6 and 9 hours of drug administration what would be the amount of drug present in the body to its original amount? (2)
- 12) Justify the occurrence of dyskinesia in patients after administration of haloperidol. (2)
- 13) What is the clinical relevance of prescribing raloxifene in postmenopausal women? (2)
- 14) Rationalised the therapeutic use of latanoprost. (2)

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