

**MANIPAL ACADEMY OF HIGHER EDUCATION**BPharm Semester IV - End Semester Examination MAY 2019
Exam Date: 02-05-2019**Medicinal Chemistry-I [PCH-BP402T]**

Marks: 75

Duration: 180 mins.

II Long Answers

Answer all the questions.

- 1) 1A Classify beta adrenergic receptor antagonist. Write the structure of one non selective and one selective beta adrenergic receptor antagonist. Explain the biosynthesis of catecholamines. 2+1+2=5 Marks (10)
- 1B Outline the method of synthesis of propranolol and salbutamol 5 Marks
- 2) 2A Discuss the SAR, MOA and use of barbiturates 5 Marks (10)
- 2B. Write the structure and uses of 5 Marks
- a) Triflupromazine
b) Trimethadone
c) Ethosuximide
d) Chlorpromazine

III Short Answers

Answer all the questions.

- 1) 3A Enumerate the factors effecting drug metabolism (5)
- 3B List out the various physicochemical properties in drug action and explain any two of them. 1+4=5 Marks
- 2) Explain the mechanism of action of general anesthetics. Enumerate the characteristics of an ideal general anesthetic. Outline the synthesis of Halothane. (5)
- 3) Discuss how aryl carbamates act as reversible cholinesterase inhibitors. Outline the synthesis of neostigmine. (5)
- 4) 6A. What is organophosphorus poisoning? How pralidoxime act as an antidote? (5)
- 6B. Outline the synthesis of dicyclomine 3+2= 5 Marks
- 5) Outline the method of synthesis of diazepam and phenytoin. (5)
- 6) Explain the chemistry of Narcotic antagonists giving examples. What are 4-phenylpiperidine derivatives of Morphine? Give the structural feature and give the synthesis of any one drug. (5)
- 7) Write the synthesis of any one drug belonging to the class of Anthranilic acid derivatives. What is the mechanism of action of NSAIDs. (5)

End



MANIPAL ACADEMY OF HIGHER EDUCATION

BPharm Semester **IV** End Semester Examination May 2019
Exam Date:04-05-2019

Physical Pharmaceutics-II [PCE-BP403T]

Marks: 75

Duration: 180 mins.

II Long Answers

Answer all the questions.

- 1) Write about salient features of lyophilic colloids. (10)
- 2) Explain the factors affecting rate of reaction. (10)

III Short Answers

Answer all the questions.

- 1) Discuss on 'Flocculation' in emulsion. (5)
- 2) Explain the flow behaviour of plastic system with rheogram. (5)
- 3) Discuss the principle of 'Falling sphere viscometer' in the determination of viscosity of Newtonian liquid. (5)
- 4) Define electric double layer and show a labelled electric double layer at the surface of solid-liquid interface. (5)
- 5) Write the pharmaceutical applications of micromeritics. (5)
- 6) Explain factors affecting flowability of powder. (5)
- 7) Discuss physical degradation of dosage forms with their preventive methods. (5)

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MANIPAL ACADEMY OF HIGHER EDUCATION

BPharm Semester IV End Semester Examination May 2019

Exam Date: 07-05-2019

Pharmacology-I [PHA-BP404T]

Marks: 75

II Long Answers

Duration: 180 mins.

Answer all the questions.

- 1) Describe the mechanism of action of drugs through receptors giving suitable examples for each class of receptors. (10)
- 2) Discuss the pharmacology of any one class of antiepileptic drugs with suitable example, its specific therapeutic use, adverse drug reactions. (10)

III Short Answers

Answer all the questions.

- 1) Describe ADME processing of drugs with suitable example. (5)
- 2) Discuss any five types of factors modifying the drug actions with suitable example. (5)
- 3) Explain any five therapeutic uses of sympathomimetics with one drug example each. (5)
- 4) Discuss the therapeutic uses of skeletal muscle relaxants with one example. (5)
- 5) Explain the diagnosis and pharmacological treatment of Myasthenia Gravis. (5)
- 6) Discuss the drugs used and their mechanism in the treatment of glaucoma. (5)
- 7) How do the drugs alleviate the symptoms of Parkinson's disease? Discuss with one example. (5)

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**MANIPAL ACADEMY OF HIGHER EDUCATION**

BPharm - Semester -IV
End Semester Examination, MAY- 2019
Exam Date:09-05-2019

Pharmaceutical Organic Chemistry-III [PCH-BP401T]

Marks: 75

Duration: 180 mins.

II Long Answers

Answer all the questions.

- 1) Explain RS system of nomenclature of optical isomers. What are enantiomers and diastereomers? Explain. (10)
- 2) Write one method of synthesis of pyrrole and discuss the electrophilic reactions of pyrrole with an example. Give the structure and uses of Metronidazole and Carbamazepine. (10)

III Short Answers

Answer all the questions.

- 1) Explain Skraup synthesis of quinoline with mechanism. (5)
- 2) Explain Gabriels method of synthesis of pyrimidine. Give the structure and uses of chloroquine. (5)
- 3) What is Clemmensen reduction? Explain (5)
- 1) Explain partial asymmetric synthesis and absolute asymmetric synthesis with example. (5)
-) Discuss the basicity of pyridine. (5)
- What is a stereoselective reaction discuss with an example. (5)
- Explain the conformational isomers of ethane and cyclohexane. (5)

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Question Paper

Exam Date & Time: 11-May-2019 (02:00 PM - 05:00 PM)

11/5/2019



MANIPAL ACADEMY OF HIGHER EDUCATION

BPharm Semester IV - End Semester Examination-2019
Exam Date:11-05-2019

Pharmacognosy and Phytochemistry-I [PCO-BP405T]

Marks: 75

Duration: 180 mins.

II Long Answers

Answer all the questions.

- 1) Define and discuss the various methods of adulteration of crude drugs. Add a note on reasons for adulteration. (10)
- 2) Give a detailed account of plant growth regulators. (10)

III Short Answers

Answer all the questions.

- 1) 1. a. Define Pharmacognosy and crude drugs. (2 Marks)
1. b. Hybridization and its applications. (3 Marks) (5)
- 2) Applications of plant tissue culture in Pharmacognosy. (5)
- 3) Discuss briefly the edible vaccines. (5)
- 4) Give the principles of Ayurveda. (5)
- 5) Define and give the classification, properties, identification tests and uses of Alkaloids. (5)
- 6) Give the source, preparation, chemical constituents and uses of Agar and Honey. (5)
- 7) Write the source, method of preparation and uses of Absorbent cotton. (5)

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