

Question Paper

MANIPAL ACADEMY OF HIGHER EDUCATION

B Pharm Semester II- End-Semester Examination May 2019

Exam Date: 02-05-2019

Pathophysiology [PPR-BP204T]

Marks: 75

Duration: 180 mins.

I Multiple Choice Questions (MCQs)
ii Long Answers

Answer all the questions.

- 1) Explain Apoptosis with a neat diagram. (10)
- 2) Describe the pathophysiology of acute renal failure and complications of chronic renal failure. (10)

III Short Answers

Answer all the questions.

- 1) Explain the characteristic of a cancer cell. (5)
- 2) Explain pathophysiology of atherosclerosis. (5)
- 3) Explain type 1 diabetes with neat diagram. (5)
- 4) Explain pathophysiology of anaemia. (5)
- 5) Describe the pathophysiology of tuberculosis. (5)
- 6) Discuss the pathophysiology of COPD. (5)
- 7) Describe the pathophysiology of Parkinsons disease. (5)

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Question Paper

Exam Date: 04-05-2019 Time: 09:30 AM - 12:30 PM

MANIPAL ACADEMY OF HIGHER EDUCATION

BPharm Semester II - End-Semester Examination MAY-2019

Date: 04-05-2019

Biochemistry [PBT-BP203T]

Marks: 75

Duration: 180 mins.

I Multiple Choice Questions (MCQs)

II Long Answers

Answer all the questions.

1) Define gluconeogenesis. Explain how pyruvate and lactate act as substrates for gluconeogenesis. (10)

With respect to nucleic acid metabolism, explain the following: (10)

- RNA polymerase
- Transcription unit
- Transcription termination
- Post transcriptional modification

III Short Answers

Answer all the questions.

1) Write short notes on the chemical classification and functions of amino acids. (5)

2) Write short notes on the following: (5)

- Catabolism of IMP
- Components of electron transport chain

3) A patient was diagnosed with Ochronosis. Identify the disorder associated indicating the enzyme involved, biochemical manifestations, diagnosis and treatment for the same. (5)

Sketch the Krebs-Henseleit cycle. (5)

Define β -oxidation. Write about the oxidation reactions occurring in the mitochondria during β -oxidation proper. Add a note on the number of ATPs generated when Palmitic acid undergoes last cycle of β -oxidation proper. (5)

Define enzymes. Enlist any four properties of enzymes and write briefly on their nomenclature. (5)

Define the terms K_m and Enzyme kinetics. Draw the Lineweaver Burk plot. (5)

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Question Paper

Exam Date & Time: 06-May-2019 (09:30 AM - 12:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

BPharm Semester II - End Semester Examination May 2019
Exam Date: 06-05-2019

Human Anatomy and Physiology-II [PHA-BP201T]

Marks: 75

Duration: 180 mins.

I Multiple Choice Questions (MCQs)

II Long Answers

Answer all the questions.

- 1) Draw a neat diagram of nephron. Explain the process of tubular reabsorption. Imagine the discovery of a new toxin that blocks renal tubular reabsorption but does not affect the filtration. Predict the short-term effects of the toxin. [4+4+2] (10)
- 2) Describe various secretions and physiological functions of adrenal gland. (10)

III Short Answers

Answer all the questions.

- 1) Explain the following clinical terms: epidural block, meningitis and lumbar puncture. (5)
- 2) Explain the process of image formation in eye with suitable diagrams. (5)
- 3) Discuss the functions of different types of neuroglia. (5)
- 4) While playing cricket, Mr. Gupta was hit by a bouncer, right on the nose. His X-ray reports revealed break of both the nasal bones. Describe the structure of external nose and depict the location of the break. (5)
- 1) Describe the functions of parasympathetic system. (5)
- 1) Write short note on resuscitation methods for respiration. (5)
- 1) Describe how progesterone helps prepare the female body for pregnancy and helps maintain pregnancy. (5)

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8/5/2019

Question Paper

Exam Date & Time: 08 May 2019 (09:30 AM - 12:30 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

BPharm Second Semester- End Semester Examination May 2019

Exam Date: 08-05-2019

Pharmaceutical Organic Chemistry-I [PCH-BP202T]

Marks: 75

Duration: 180 mins.

I Multiple Choice Questions (MCQs)

Answer all the questions.

Section Duration: 30 mins

II Long Answers

Answer all the questions.

- 1) 1a) Discuss with an example, along with mechanism, the electrophilic (10)
addition of conjugated dienes. 5 Marks
1b) Explain the mechanism of E1 reaction with proper evidences.
2+3=5marks
- 2) 2a) Why acetic acid is weaker than formic acid whereas strongly (10)
acidic than benzoic acid? 3 Marks
2b) Explain with mechanism Cannizzaro mechanism. 5 Marks
2c) What are the effects of substituents on acidity of carboxylic
acids? Give an example. 2 Marks

III Short Answers

Answer all the questions.

Draw the structures for the following IUPAC names. 1Mark x 5 = 5 (5)
Marks

- a) 2,4,4-Trimethylheptane
b) 5-Bromo-2-Methyl-4-isopropylnonane
c) Allyl alcohol
d) But-2-ene
e) 1-Bromo-3-ethyl-5-methylcyclohexane

2a) What is hybridization? Discuss the hybridisation in alkanes. 2 (5)
Marks

2b) Write the mechanism of ozonolysis. 3
Marks

(PTO)

10/05/2019

Question Paper

Exam Date & Time: 10-May-2019 (09:30 AM - 11:30 AM)



MANIPAL ACADEMY OF HIGHER EDUCATION

BPharm Semester II- End Semester Examination May 2019

Exam Date: 10-05-2019

ENVIRONMENTAL SCIENCES [PMA-BP206T]

Marks: 50

Duration: 120 mins.

I Long Answers

Answer all the questions.

- 1) Discuss causes and effects of water pollution. Add a note on control measures to be taken to prevent water pollution. (10)
- 2) Explain renewable and nonrenewable resources with examples. Add note on afforestation and deforestation. (5+5=10 marks) (10)

II Short Answers

Answer all the questions.

- 1) Explain values of nature. (5)
- 2) Discuss in brief environmental ethics issues and possible solutions. (5)
- 3) Discuss in brief the impacts of wastes. (5)
- 4) Explain ecological niches with suitable examples. (5)
- 5) What are the different types of ecological studies? Explain with examples. (5)
- 6) Explain the structure and component of ecosystem. (5)

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