



SUPPLEMENTARY EXAMINATION-2024

2nd Semester B.Pharm

HUMAN ANATOMY & PHYSIOLOGY-II

BP 201

(For 2023 Admitted Batch)

Time: 3 Hours

Full Marks: 75

*Answer Question No.1 (Part-A) is compulsory,
any SEVEN from Part-B and any TWO from Part-C.*

The figures in the margin indicate full marks.

All parts of a question should be answered at one place only.

PART-A

1. Objective Answer Type Questions (Answer All) [2 × 10]
- (a) What are the different types of Neuroglial cells.
 - (b) Define resting membrane potential.
 - (c) Name the components of reflex arc.
 - (d) Define tidal volume and residual volume.
 - (e) Write the functions of calcitonin and calcitriol.
 - (f) What is Addison's disease?
 - (g) Name the four disorders of kidney.
 - (h) Define nonsense mutation with examples.
 - (i) Name the bacteria that is responsible for peptic ulcer.
 - (j) Write the different parts of small intestine.

PART-B

2. Focused-Short Answer Type Questions-(Answer Any Seven) [5 × 7]
- (a) Explain micturition reflex.
 - (b) Write the function of hypothalamus.

- (c) Define glomerular filtration rate (GFR). Write the different factors that regulate GFR.
- (d) Define neurotransmitter. Briefly explain the steps involved in neurotransmission.
- (e) Write the function of glucocorticoids.
- (f) Write short note on Master Gland.
- (g) Write the functions of liver.
- (h) How hormonal regulation control spermatogenesis.
- (i) What is genetic pattern of inheritance? Explain schematically the dominant type of inheritance.

PART-C

Long Answer Type Questions (Answer Any Two)

- 3. Describe the mechanism of respiration and explain how it is regulated. [10]
- 4. Define hormones. Classify the hormones according to their chemical structure. Explain the mechanism of water soluble hormones. [10]
- 5. Explain the physical and chemical method of digestion in small intestine. [10]



SUPPLEMENTARY EXAMINATION-2024
2nd Semester B.Pharm
PHARMACEUTICAL ORGANIC CHEMISTRY I
BP 202

(For 2023 Admitted Batch)

Time: 3 Hours

Full Marks: 75

*Answer Question No.1 (Part-A) is compulsory,
any SEVEN from Part-B and any TWO from Part-C.*

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PART-A

1. Objective Answer Type Questions (Answer All) [2 × 10]
- (a) What are isomerism exhibited by alcohol?
 - (b) Draw the structure of propan-1, 2-diol and write its common name.
 - (c) Why carboxylic acid boiling point is more than water?
 - (d) What is conjugated diene, give an example?
 - (e) Write the structure and uses of iodoform.
 - (f) Classify the aliphatic amines.
 - (g) Write the structure and uses of methanol.
 - (h) What is Lucas reagent? Write its use.
 - (i) Write the structure and uses of acetic acid.
 - (j) Why formaldehyde does not undergo aldol condensation?

PART-B

2. Focused-Short Answer Type Questions-(Answer Any Seven) [5 × 7]
- (a) Write the qualitative test for aldehydes with suitable reaction example.
 - (b) Differentiate SN_1 and SN_2 reactions of alkyl halides.
 - (c) Write the Anti-Markownikoff's orientation for alkenes and Diel Alder reaction for conjugated dienes.
 - (d) Classify and describe the organic compounds.
 - (e) Describe Canizarro reaction with example. Differentiate it from crossed cannizaro reaction.
 - (f) Write the structure and uses of acetone and acetaldehyde.
 - (g) Write the qualitative test for amides with example.
 - (h) Write the structure and uses of salicylic acid and benzoic acid.
 - (i) Write the effects of substituents on acidity of carboxylic acids.

PART-C

Long Answer Type Questions (Answer Any Two)

- 3. Write a detail notes on qualitative test of alcohols with suitable examples. [10]
- 4. Write a detail note on various types of structural isomerism with examples. [10]
- 5. Write the detail note on qualitative tests for carboxylic acids with examples. [10]



SUPPLEMENTARY EXAMINATION-2024

2nd Semester B.Pharm

BIOCHEMISTRY

BP 203

(For 2023 Admitted Batch)

Time: 3 Hours

Full Marks: 75

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any SEVEN from Part-B and any TWO from Part-C.*

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PART-A

1. Objective Answer Type Questions (Answer All) [2 × 10]

- (a) The Glycosaminoglycan that serve as Anti-coagulant.
- (b) Name the essential Fatty acids.
- (c) Name the amino acid found in protein structure.
- (d) Name the fundamental unit of genetic information.
- (e) Name an Iso-enzyme.
- (f) Name a co-enzyme containing Vitamin B6.
- (g) The red color of hemoglobin is due to.
- (h) Name the disaccharide present in milk.
- (i) Which amino acid involves in transmethylation?
- (j) Male sex hormones are known as.

PART-B

2. Focused-Short Answer Type Questions-(Answer Any Seven) [5 × 7]

- (a) Write short note on Serotonin.
- (b) Write short note on glycolysis.

- (c) Write short note on β -oxidation.
- (d) Write short note on electron transport chain (ETC).
- (e) Write short note on melatonin.
- (f) Write short note on jaundice.
- (g) Classify the enzymes with example.
- (h) Write short note on ketone bodies.
- (i) Write short note on phenyl ketourea.

PART-C

Long Answer Type Questions (Answer Any Two)

- 3. Write an account of various factors affecting enzymatic activity. [10]
- 4. Describe TCA Cycle with energetics. [10]
- 5. Write briefly on Urea cycle with its inborn error. [10]



SUPPLEMENTARY EXAMINATION-2024

2nd Semester B.Pharm

PATHOPHYSIOLOGY

BP 204

(For 2023 Admitted Batch)

Time: 3 Hours

Full Marks: 75

*Answer Question No.1 (Part-A) is compulsory,
any SEVEN from Part-B and any TWO from Part-C.*

The figures in the margin indicate full marks.

All parts of a question should be answered at one place only.

PART-A

1. Objective Answer Type Questions (Answer All) [2 × 10]
- (a) Define hypoxia and ischemia.
 - (b) Write the basic difference between type I and type II diabetes.
 - (c) Write two specific characteristics of cancer cells.
 - (d) Megaloblastic anemia is due to deficiency of _____ & _____.
 - (e) Name the two causative microorganisms that are responsible for sexually transmitted diseases.
 - (f) What is arrhythmia?
 - (g) Write the etiology of endemic goiter.
 - (h) Give two examples of neuro degenerative disorders.
 - (i) Give two examples of arachidonic acid metabolites
 - (j) What does COPD stand for?

PART-B

2. Focused-Short Answer Type Questions-(Answer Any Seven) [5× 7]
- (a) Explain the different factors that affect wound healing.
 - (b) Write the etiology and pathogenesis of goiter.
 - (c) Write the pathogenesis of type I diabetes mellitus.
 - (d) Define angina. Briefly discuss about various types of angina.
 - (e) Write the causative organism of tuberculosis. Describe the mode of transmission and pathogenesis of tuberculosis.
 - (f) Define gout. Briefly describe the pathogenesis of gout with schematic representation.
 - (g) Define myocardial infraction (MI). Write the pathogenesis of MI.
 - (h) Explain the clinical features and etiology of depression.
 - (i) Define cell injury. Explain about the different agents involved in cell injury.

PART-C

Long Answer Type Questions (Answer Any Two)

- 3. Define inflammation. Write the pathogenesis of cellular events of acute inflammation with labelled diagram. [10]
- 4. Classify anemia. Write the pathogenesis of iron deficiency anemia. [10]
- 5. Explain about the different type of respiratory diseases. Write the etiology and pathogenesis of asthma. [10]
