

QP Code: 221006

Reg. No.....

**Second Semester B. Pharm Degree Supplementary Examinations  
August 2023**

**Human Anatomy and Physiology II  
(2017 Scheme)**

**Time: 3 Hours**

**Max. Marks: 75**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

**Essays**

**(2x10=20)**

1. Explain the various neurohormonal mechanisms involved in the regulation of stomach acid secretion
2. Explain the anatomy of respiratory system and write a note on regulation of respiration

**Short Notes**

**(7x5=35)**

3. Meninges
4. Explain the functions of kidney
5. Spermatogenesis
6. Explain the physiological functions of estrogen
7. Mention the hormones of thyroid gland and write their functions
8. GI disorders
9. Explain the various parts of a neuron

**Answer Briefly**

**(10x2=20)**

10. Hyperpolarization
11. Microglia
12. Functions of large intestine
13. Functions of salivary glands
14. Vital capacity
15. Functions of thymus
16. Parturition
17. Fertilization
18. Genetic inheritance
19. Testosterone

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**Second Semester B. Pharm Degree Supplementary Examinations  
August 2023**

**Pharmaceutical Organic Chemistry I  
(2017 Scheme)**

Time: 3 Hours

Max. Marks: 75

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

**Essays**

**(2x10=20)**

1. Explain the mechanism of electrophilic addition reactions of alkenes.
2. Discuss SN<sub>2</sub> reaction mechanism of substitution in alkyl halides.

**Short Notes**

**(7x5=35)**

3. Write the general qualitative tests for carboxylic acids.
4. Discuss E1 mechanism of dehydrohalogenation in alkenes.
5. Rearrangement of carbocation.
6. What is structural isomerism. Define with examples of any four types.
7. Factors effecting SN<sub>1</sub> an SN<sub>2</sub> reactions.
8. Allylic rearrangement.
9. Explain the effect of substituents on the basicity of aliphatic amines.

**Answer Briefly**

**(10x2=20)**

10. Explain the structure and use of Iodoform.
11. Compare E<sub>1</sub> and E<sub>2</sub> reactions.
12. Explain the structure and uses of Amphetamine.
13. State any four rules of naming aromatic compounds.
14. Explain anti Markownikoff's orientation. Give examples.
15. Write qualitative tests for alcohols.
16. Briefly explain free radical addition reactions of conjugated dienes.
17. Give the structure and uses of Acetyl salicylic acid.
18. Explain the reaction involved in Perkin condensation.
19. Write the structure of 1,4-pentadiene and Hex-5-ene-3-ol.

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**Second Semester B. Pharm Degree Supplementary Examinations  
August 2023  
Biochemistry  
(2017 Scheme)**

Time: 3 Hours

Max. Marks: 75

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

**Essays**

**(2x10=20)**

1. Describe gluconeogenesis – pathway with its significance.
2. Discuss in detail about the Beta oxidation of fatty acid.

**Short Notes**

**(7x5=35)**

3. Oxidative phosphorylation.
4. Catabolism of purine nucleotides.
5. Explain briefly the semi conservative replication of DNA.
6. Synthesis and functions of RNA.
7. Allosteric enzymes regulation.
8. Summarize the synthesis and utilization of Ketone Bodies.
9. Explain briefly the biological significance of Cholesterol.

**Answer Briefly**

**(10x2=20)**

10. Transamination reaction of amino acid metabolism.
11. Inhibitors of protein synthesis.
12. Enzyme induction.
13. Biological significance of ATP.
14. Gout disease.
15. Substrate level phosphorylation.
16. Significance of HMP shunt.
17. Pyruvate dehydrogenase complex.
18. Disorders of urea cycle.
19. Biological significance of noradrenaline.

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August 2023**

**Pathophysiology  
(2017 Scheme)**

**Time: 3 Hours**

**Max. Marks: 75**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

**Essays**

**(2x10=20)**

1. Discuss the pathogenesis and morphology of cell injury.
2. Enumerate the difference between Benign and Malignant tumours, explain in detail the etiology and pathogenesis of cancer.

**Short Notes**

**(7x5=35)**

3. Tuberculosis
4. Pathophysiology of rheumatoid arthritis
5. Asthma
6. Chronic Obstructive Pulmonary Disease (COPD)
7. Hyperthyroidism.
8. Sexually transmitted diseases
9. Thalassemia

**Answer Briefly**

**(10x2=20)**

10. Metaplasia
11. Unstable angina
12. Wound healing
13. Alcoholic liver disease
14. Grandmal epilepsy
15. Leprosy
16. Megaloblastic anemia
17. Stroke
18. Necrosis
19. Cretinism

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