

QP Code: 221006

Reg. No.....

**Second Semester B. Pharm Degree Regular/Supplementary
Examinations May 2021**

**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 physiology of urine formation. Add a note on structure of nephron.
2. Briefly explain the structure and functions of female reproductive system.

Short Notes

(7x5=35)

3. Gross Structure and functions of Spinal cord.
4. Anterior and Posterior view of Liver.
5. Creatinine phosphate.
6. Methods of Resuscitation.
7. Role of Kidney in acid base balance.
8. Functions of Posterior pituitary hormones.
9. Ovulation.

Answer Briefly

(10x2=20)

10. Meninges of brain.
11. Movements of GIT.
12. Define Tidal volume.
13. Gene mutation.
14. Types of diabetes mellitus.
15. Functions of Gall bladder.
16. Parathormone.
17. Role of villi in absorption.
18. Role of ATP.
19. Bronchial asthma

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**Second Semester B. Pharm Degree Regular/Supplementary
Examinations May 2021**

**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. Write the mechanism, kinetics, stereochemistry and reactivity of SN_2 reaction.
2. Classify organic compounds. Give the IUPAC nomenclature rules for alkanes and cycloalkenes.

Short Notes

(7x5=35)

3. Describe ozonolysis with suitable examples.
4. Trimethylamine is a stronger base than ammonia. Explain.
5. Aldol condensation.
6. Write the structure and uses of trichloroethylene, tetrachloromethane, chlorobutanol, propylene glycol and hexamine.
7. Write the general qualitative tests for amines and esters with reaction.
8. Explain the stability of alkenes.
9. Acidity of carboxylic acids. Give the structure and uses of succinic acid.

Answer Briefly

(10x2=20)

10. What is the order of stability of carbocations.
11. Write the uses of vanillin and paraldehyde.
12. Draw the structure of salicylic acid and lactic acid.
13. What is an inductive effect.
14. Construct the structure for 1, 2-dichlorocyclopentane and 1, 3-butadiene.
15. Write any two qualitative tests for ethyl alcohol.
16. Define SP_2 hybridization.
17. Write about E_1 Vs E_2 reaction
18. Diel's Alder reaction.
19. Benzoin condensation.

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**Biochemistry
(2017 Scheme)**

Time: 3 Hours

Max. Marks: 75

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- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw diagrams wherever necessary*

Essays

(2x10=20)

1. Define lipids. Explain the pathway of beta oxidation of palmitic acid and add a note on its energetics.
2. Explain in detail general reactions of amino acid metabolism.

Short Notes

(7x5=35)

3. Competitive enzyme inhibition
4. Biological significances of ATP
5. Catabolism of phenylalanine
6. Biosynthesis of pyrimidine nucleotides
7. Formation and utilization of Ketone bodies
8. Biological role of carbohydrates
9. Conversion of cholesterol into steroid hormone

Answer Briefly

(10x2=20)

10. Hyperbilirubinemia
11. Glucose – 6 – phosphate dehydrogenase deficiency
12. Alkeptonuria
13. Coenzymes
14. Glycolysis
15. Oxidative phosphorylation
16. Name the stages of RNA synthesis
17. Hyperuricemia
18. Classification of aminoacids
19. Obesity

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**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. Describe in detail about reversible and irreversible cell injury
2. Explain in detail about pathophysiology of asthma.

Short Notes

(7x5=35)

3. Clinical signs and mechanism of inflammation
4. Pathophysiology of hypertension
5. Causes of cellular injury
6. Pathophysiology and signs and symptoms of iron deficiency anemia
7. Complications of diabetes
8. Pathophysiology of hyperthyroidism
9. Etiology and pathophysiology of peptic ulcer

Answer Briefly

(10x2=20)

10. Causes of osteoporosis
11. Define and classify gout
12. Causes, mode of transmission of hepatitis B
13. Causative organism of syphilis and gonorrhoea
14. Classification of cancer
15. Hypertrophy
16. Signs and symptoms of AIDS
17. Define electrolyte imbalance
18. Signs and symptoms of diabetes
19. Classification of Angina Pectoris
