

QP Code: 221006

Reg. No.....

**Second Semester B. Pharm Degree Supplementary Examinations  
September 2022**

**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 menstruation
2. Explain the various parts of digestive system and mention their digestive functions

**Short Notes**

**(7x5=35)**

3. Neuroglia
4. Explain the digestive functions of liver
5. Explain how ATP is formed and mention its importance
6. Explain the structure and functions of small intestine
7. Explain the mechanism of breathing
8. Pituitary hormones
9. Explain the events that characterize transmission of nerve impulse

**Answer Briefly**

**(10x2=20)**

10. Hormones of pancreas
11. Residual volume
12. Total lung capacity
13. Peristalsis
14. Synapses
15. Depolarization
16. Threshold potential
17. Chromosomes
18. Oogenesis
19. Oxygen transport

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**Second Semester B. Pharm Degree Supplementary Examinations  
September 2022**

**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. Describe the reaction and mechanism in • Cannizaro reaction • benzoin condensation.
2. Explain the kinetics, mechanism, orientation and reactivity of E<sub>1</sub> reaction.

**Short Notes**

**(7x5=35)**

3. Describe the stability of conjugated dienes.
4. Write any two preparation of amines. Write the structure and uses of ethylenediamine.
5. Write the IUPAC rules for naming cycloalkanes.
6. Write the structure and uses of chloral hydrate, cinnamaldehyde, dimethyl phthalate, cetostearyl alcohol and vanillin.
7. Explain about nucleophilic addition reactions of carbonyl compounds.
8. Why alkenes are more reactive than alkanes. Explain.
9. Write the IUPAC rules for naming alkyl halides.

**Answer Briefly**

**(10x2=20)**

10. Effect of substituents on the acidity of carboxylic acids.
11. Explain any two preparations of ketones.
12. Define peroxide effect.
13. Why methane is insoluble in water.
14. What are carbocation.
15. Explain any two qualitative tests for oxalic acid and benzoic acid.
16. Classify amines with examples.
17. Ozonolysis
18. Diel's Alder reaction.
19. Crossed Aldol condensation.

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September 2022**

**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. Enumerate gluconeogenesis with its significance.
2. Discuss in detail about  $\beta$ -oxidation of saturated fatty acid

**Short Notes**

**(7x5=35)**

3. Add a note on oxidative phosphorylation and its inhibitors.
4. Atherosclerosis.
5. Genetic code.
6. Catabolism of tyrosine and its metabolic disorders.
7. Michaelis plot.
8. Adenosine tri phosphate
9. Biosynthesis of pyrimidine nucleotides

**Answer Briefly**

**(10x2=20)**

10. Essential amino acids.
11. Glycolysis.
12. Fatty liver.
13. Classification of enzymes
14. Hyperuricemia.
15. Translation.
16. Redox potential.
17. Biological significance of cholesterol.
18. Give examples for enzyme inhibitors.
19. Transamination

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September 2022**

**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. Write briefly on: • Apoptosis and cell response. • Cellular changes during ischemic injury. (5+5)
2. Write short notes on: • Atrophy and its mechanism. • Hyperplasia. (5+5)

**Short Notes**

**(7x5=35)**

3. Schizophrenia
4. Parkinsonism
5. Hypertension
6. Pathophysiology of tuberculosis
7. Artherosclerosis
8. Type I diabetes mellitus
9. Peptic ulcer

**Answer Briefly**

**(10x2=20)**

10. Angiogenesis
11. Carcinogens and promoters
12. Tumor suppressor gene
13. Hepatitis
14. Anemia
15. GOUT
16. Signs and symptoms of typhoid
17. Etiology of AIDS
18. Hypoxia
19. Osteoporosis

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