QP Code: 221006 **Reg. No……**

Second Semester B. Pharm Degree Supplementary Examinations February 2025

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. With a neat labelled diagram, explain the anatomy of female reproductive system. What are the functions of oestrogen, progesterone, inhibin and relaxin.
2. Describe the anatomy of the small intestine. Explain the processes of mechanical and chemical digestion in the small intestine.

Short Notes **(7x5=35)**

3. Describe the mechanism of hormonal action.
4. Explain the anatomy and physiology of cerebellum.
5. What are the three major salivary glands. Explain the composition and functions of saliva.
6. Explain the mechanism of inhalation (inspiration).
7. Explain the physiology of urine formation.
8. Explain the role of RAS in maintenance of blood pressure.
9. What is Spermatogenesis.

Answer Briefly **(10x2=20)**

10. What is the function of vagus nerve.
11. List out the functions of CSF.
12. Name any two carbohydrate digesting enzymes in the small intestine.
13. What type of epithelial tissue is present in the inner lining of the mouth.
14. Define BMR and mention its significance.
15. What is pleural membrane.
16. What is cretinism and myxedema.
17. Define micturition.
18. Name the hormones released by adrenal medulla.
19. Define transcription and translation.

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QP Code: 222006 **Reg. No……**

Second Semester B. Pharm Degree Supplementary Examinations
February 2025
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 stereochemistry of SN_1, SN_2 reactions and add a note on rearrangements of carbocation.
2. Discuss the reaction, mechanism and applications of Aldol condensation and Crossed Cannizzaro reaction.

Short Notes **(7x5=35)**

3. Write the structure and uses of iodoform, propylene glycol, paraldehyde, lactic acid and salicylic acid.
4. Explain the basicity of amines and the effect of substituents on it.
5. Explain the qualitative tests for alcohols.
6. Describe the general IUPAC rules for naming of carboxylic compounds.
7. Define isomerism. Classify isomerism with suitable examples.
8. What is electrometric effect. Explain with examples.
9. Explain Saytzeff's orientation with suitable examples.

Answer Briefly **(10x2=20)**

10. Any two reactions of aliphatic amines.
11. Mention the uses of paraffin.
12. Any two qualitative tests for amides.
13. Give the chemical structure and uses of amphetamine and ethanolamine.
14. Mention four carbonyl compounds with chemical structures.
15. Define Diel Alder reaction.
16. Write the factors affecting E_2 reactions.
17. Define benzoin condensation.
18. Any one method of preparation of alkene.
19. State Markownikoff's rule.

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QP Code: 223006 **Reg. No……**

Second Semester B. Pharm Degree Supplementary Examinations
February 2025
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. Explain Urea cycle and its disorders
2. Discuss about mechanism of electron transport chain and its inhibitors

Short Notes **(7x5=35)**

3. Energy rich compounds
4. Citric acid cycle
5. Formation and utilization of ketone bodies
6. Michaelis plot in enzyme kinetics
7. Protein synthesis and its inhibitors
8. Biosynthesis of Purine nucleotides
9. Coenzymes

Answer Briefly **(10x2=20)**

10. Significance of Melatonin
11. Functions of DNA
12. Biological role of lipids
13. Glucose-6-phosphate dehydrogenase (G6PD) deficiency
14. IUB classification of enzymes
15. Significance of Glycolysis
16. Phenylketonuria
17. Structure of DNA
18. Enzyme induction
19. Relationship between free energy, enthalpy and entropy

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QP Code: 224006 **Reg. No……**

Second Semester B. Pharm Degree Supplementary Examinations February 2025

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 the pathophysiology of cell injury and cell death
2. Explain the etiology and pathogenesis of bronchial asthma

Short Notes **(7x5=35)**

3. Explain in detail about the mechanisms of cellular adaptation
4. Write the etiology, symptoms and pathophysiology of acute renal failure
5. Discuss clinical presentations and pathophysiology of congestive cardiac failure
6. Explain the etiology and pathophysiology of iron deficiency anemia
7. Explain pathophysiology of thyroid disorders
8. Discuss pathophysiology of peptic ulcer disease
9. Explain the etiology, clinical presentations and pathophysiology of tuberculosis

Answer Briefly **(10x2=20)**

10. Pathogenesis of AIDS
11. Write the signs and symptoms of Parkinsonism
12. Discuss the symptoms and pathophysiology of depression
13. Write the pathophysiology of myocardial infarction
14. Discuss the etiology, symptoms of gout
15. Explain the etiology, clinical presentations of gonorrhoea
16. What are the categories of neoplasms
17. Enumerate the important events involved in chronic inflammation
18. Write the pathophysiology of osteoporosis
19. Discuss pathophysiology of ulcerative colitis

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