QP Code: 221006 Reg. No.....

Second Semester B. Pharm Degree Supplementary Examinations
January 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 structure and functions of human brain
2. Explain the anatomy of urinary tract and mention the disorders of kidney.

Short Notes (7x5=35)

3. Write the difference between sympathetic and parasympathetic nervous system.
4. Mention the pancreatic enzymes and write their functions
5. Artificial respiration
6. Adrenal gland and its hormones
7. Anatomy of lungs
8. Structure and function of testis
9. Protein synthesis

Answer Briefly (10x2=20)

10. Progesterone
11. DNA structure
12. Functions of parathyroid gland
13. Oxytocin
14. Tidal volume
15. Anatomy of larynx
16. Creatinine
17. Salivary glands
18. Resting potential
19. Astrocytes

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QP Code: 222006 Reg. No.....

Second Semester B. Pharm Degree Supplementary Examinations
January 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. Discuss SN_1 and SN_2 reactions with the help of suitable examples and discuss its mechanism.
2. Explain any four methods of preparation of alkenes. Add a note on E_1 reactions.

Short Notes (7x5=35)

3. Explain the mechanism of electrophilic addition reactions of alkenes with any two examples.
4. Summarize the qualitative analysis of primary secondary and tertiary amines.
5. Describe the mechanism of Diel-Alder reaction.
6. What are carbocations. Explain the stability of carbocations with suitable examples.
7. Explain the following: Cannizzaro reaction, Saytzeffs rule
8. Explain the structural isomerism. Draw the structural isomers for $C_4H_8O_2$ containing the group

9. Outline any four methods for the preparation of aldehydes.

Answer Briefly (10x2=20)

10. Electromeric effect
11. SP^3 hybridization
12. Ozonolysis
13. Perkin condensation
14. Tollens' reagent and its importance.
15. Structure and uses of methyl salicylate and cetosteryl alcohol.
16. Mention any one qualitative test for amide and carboxylic acid.
17. Alkenes are more reactive than alkanes. Justify
18. Medicinal uses of iodoform and amphetamine
19. Complete the reaction: $CH_3CH_2NH_2 + CHCl_3 + 3KOH \longrightarrow$

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QP Code: 223006 Reg. No.....

Second Semester B. Pharm Degree Supplementary Examinations
January 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. Briefly discuss about the citric acid cycle with its energetics and significance.
2. Discuss about the de-novo synthesis of fatty acids.

Short Notes (7x5=35)

3. Mechanism of Electron Transport Chain (ETC)
4. Hormonal regulation of blood glucose level and diabetes mellitus.
5. Explain briefly the structure of DNA. Enumerate its functions.
6. Synthesis and significance of 5-HT.
7. Diagnostic applications of enzymes.
8. Biological significance of ATP and cyclic AMP.
9. Explain briefly transamination reaction of amino acid metabolism.

Answer Briefly (10x2=20)

10. Enzyme induction.
11. Genetic code
12. Translation
13. Inhibitors of electron transport chain
14. Significance of glycolysis
15. Biological significances of dopamine.
16. Ketoacidosis
17. Glucose-6-Phosphate dehydrogenase deficiency.
18. Concept of free energy
19. Hyperuricemia

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Second Semester B. Pharm Degree Supplementary Examinations
January 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 the pathogenesis, classification, complications and management of diabetes
2. Explain in detail about pathophysiology, etiology, mode of transmission, prevention and control of tuberculosis

Short Notes (7x5=35)

3. Basic principles of wound healing in skin
4. Differentiate between depression and schizophrenia
5. Pathophysiology of alcoholic liver disease
6. Signs, symptoms and pathophysiology of hypothyroidism
7. Etiology and pathophysiology of ulcerative colitis
8. Mention the causes, mode of transmission of various Hepatitis
9. Differentiate between rheumatoid arthritis and gouty arthritis

Answer Briefly (10x2=20)

10. Mention the types of feedback system
11. Acidosis
12. Define calcification
13. Arteriosclerosis
14. Sickle cell anemia
15. Osteoporosis
16. Microalbuminuria
17. Gout
18. Tumor necrosis factor
19. Benign and metastatic carcinoma

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