QP Code: 221006 **Reg. No…….**

Second Semester B. Pharm Degree Regular/Supplementary Examinations January 2024

Human Anatomy and Physiology II

(Common for 2017 and 2022 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 labeled diagram explain the L.S of Stomach and its functions
2. Explain the structure and functions of pituitary gland.

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

3. Anatomy and function of salivary gland.
4. Structure of neuron.
5. Transport of Respiratory gases.
6. Spermatogenesis.
7. Micturition reflex.
8. Role of ATP.
9. Genetic pattern of inheritance.

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

10. Define action potential.
11. Functions of cerebrospinal fluid.
12. Role of liver in metabolism.
13. Inspiratory reserve volume.
14. List out the hormones of Pancreatic gland.
15. Phases of menstruation cycle.
16. Muscles involved in respiration.
17. Different phases of secretion of gastric juice.
18. Mention the disorders of kidney.
19. List out the methods of artificial respirations.

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QP Code: 222006 **Reg. No…….**

Second Semester B. Pharm Degree Regular/Supplementary Examinations January 2024
Pharmaceutical Organic Chemistry I
(Common for 2017 and 2022 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 classification of organic compounds with examples.
2. Explain the mechanism of free radical addition in butadiene.

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

3. Explain the mechanism of uni-molecular nucleophilic substitution reaction.
4. Aldol condensation.
5. With an example, explain the mechanism of Benzoin condensation.
6. Describe ozonolysis of alkenes.
7. Discuss the effect of polarity and solvent on the rate of SN_1 and SN_2 reaction.
8. Explain the structure of carboxylic group. Why are carboxylic compounds more acidic than phenols and alcohols.
9. Explain Diels-Alder reaction with suitable examples.

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

10. Enlist four important rules in IUPAC naming.
11. Explain the structure and uses of trichloroethylene.
12. Why are the first few members of carboxylic acids soluble and higher members insoluble in water.
13. Give the structure and uses of formaldehyde.
14. Explain the structure and uses of benzoic acid.
15. Qualitative test for esters.
16. Explain the different types of aliphatic amines with examples.
17. Give the structure and uses of propylene glycol.
18. Write an example of nucleophilic addition to a carbonyl compound.
19. How are monohydric alcohols classified. Give examples.

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QP Code: 223006 **Reg. No…….**

Second Semester B. Pharm Degree Regular/Supplementary Examinations January 2024
Biochemistry
(Common for 2017 and 2022 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 citric acid cycle. Give its energetics and significance.
2. Explain electron transport chain and its mechanism.

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

3. Oxidative deamination reaction of amino acid metabolism
4. Allosteric enzymes regulation.
5. Catabolism of heme
6. Hexose monophosphate shunt
7. Beta oxidation of palmitic acid
8. Semiconservative DNA replication model
9. Catabolism of purines

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

10. Concept of free energy
11. Glycosuria
12. Hypercholesterolemia
13. Apo-enzyme and holoenzyme
14. Classification of carbohydrates
15. Albinism
16. Significance of 5-HT
17. Functions of lipids
18. Ketoacidosis
19. Fatty liver

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QP Code: 224006 **Reg. No…….**

Second Semester B. Pharm Degree Regular/Supplementary Examinations January 2024

Pathophysiology

(Common for 2017 and 2022 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 about the mechanism of cell injury.
2. Discuss in detail about the mechanism of acute inflammation.

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

3. Rheumatoid arthritis
4. Disorders of sex hormone
5. Meningitis
6. Gonorrhea
7. Acute renal failure
8. Mediators of inflammation
9. Calcification

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

10. Hyperplasia
11. Schizophrenia
12. Gangrene
13. Atherosclerosis
14. Electrolytes imbalance
15. Typhoid
16. Sickle cell anemia
17. Hemophilia
18. Osteoporosis
19. Vitamin B_{12} deficiency

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