BP 201 T

(Total No. of Questions: 14] [Total No. of Pages: 01)

I/IV B. PHARMACY (Regular) EXAMINATIONS, DECEMBER - 2022

Second Semester

HUMAN ANATOMY AND PHYSIOLOGY II - THEORY

Time : **Three Hours** Maximum : **75** Marks

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SECTION - A

Answer any FIVE Questions. 5x10 = 50 M

1. a) Explain Reticulo endothelial system.
   b) Write a short note on Thrombocytopenia and Iron deficiency anaemia.
2. Explain the anatomy and physiology of Heart with a neat labelled diagram. Add a note on importance of left ventricle in pumping blood.
3. a) Describe the anatomical features and physiological functions of small intestine.
   b) Mention various digestive enzymes and their role in digestion.
4. a) Discuss the physiology of urine formation.
   b) Write a brief note on Micturition reflex.
5. Name different parts of Male reproductive system and outline their anatomy and physiology.
6. a) Describe different stages of pregnancy.
   b) Write a brief note on parturition.
7. a) Explain the process of Regulation of respiration.
   b) Discuss Resuscitation methods.

SECTION - B

Answer any FIVE Questions. 5x5 = 25 M

8. Name the organs of Lymphatic system and enlist their functions.
9. Elaborate the process of formation of Haemoglobin and write the significance of Rh factor.
10. Define Heart rate and Pulse rate. Add a note on Cardiac arrhythmiasis.
11. Discuss the anatomy and physiology of Liver.
12. Describe the process of transport of respiratory gases.
13. Explain different phases of Oogenesis.
14. Elaborate the process of protein synthesis from mRNA.

BP 202 T

(Total No. of Questions:14] [Total No. of Pages :01)

I/IV B. PHARMACY (Regular) EXAMINATIONS, DECEMBER - 2022

Second Semester

PHARMACEUTICAL ORGANIC CHEMISTRY I - THEORY

Time : **Three Hours** Maximum : **75** Marks

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SECTION - A

Answer any FIVE Questions. 5x10 = 50 M

1. What is Isomerism ? Discuss various types of Structural isomerism with examples. Define Nomenclature of organic compounds with examples.
2. Describe in detail about E_1 and E_2 reactions.
3. What are SN_1 and SN_2 reactions ? Discuss the kinetics, mechanism and factors affecting the SN_1 and SN_2 reactions.
4. Write about Vanillin and Benz aldehyde in detail.
5. Give a short note on cannizzaro reaction and aldol condensation.
6. Write Qualitative test, structure and uses of ethanolamine and Amphetamine.
7. Discuss acidity of carboxylic acids. Give an account of qualitative test for ester.

SECTION - B

Answer any FIVE Questions. 5x5 = 25 M

8. Give an account of common and IUPAC systems of nomenclature of organic compounds with examples.
9. Explain Diel's alder reaction with mechanism.
10. Explain with examples Markowinkoff's rule.
11. Write about basicity of aliphatic amines and factors affecting it.
12. Explain the mechanism of Benzoin condensation.
13. Define hybridization ? Explain SP_3 hybridization in ethane.
14. Explain ionization of carboxylic acid and write the structure of carboxylate Anion.

BP 203 T

(Total No. of Questions: 14] [Total No. of Pages: 01)

I/IV B. PHARMACY (Regular) EXAMINATIONS, DECEMBER - 2022

Second Semester

BIOCHEMISTRY - THEORY

Time : **Three Hours** Maximum : **75** Marks

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SECTION - A

Answer any FIVE Questions. 5x10 = 50 M

1. Define and explain the reaction sequences of glycosis and its energetics.
2. Describe the ・-oxidation of palmitic acid along with the energetics.
3. Mention the types of RNA. Explain their role in protein synthesis.
4. Define gluconeogenesis and explain the reactions involved and its significance.
5. Describe the reactions involved in the denovo biosynthesis of fatty acids along with the enzyme system involved.
6. Explain the general reactions involved in the metabolism of amino acids.
7. Explain various reactions involved in the Kreb's cycle with energetics.

SECTION - B

Answer any FIVE Questions. 5x5 = 25 M

8. What is substrate level phosphorylation and oxidative phosphorylation ?
9. Give the Amphibolic nature and energetics of TCA cycle.
10. Write the formation of ketone bodies in the body.
11. Describe the structure and functions of tRNA.
12. Define enzyme inhibition and discuss any one type of enzyme inhibition.
13. Give the structure and biological significance of ATP and cyclic AMP.
14. Define Enthalpy and entropy ? Explain the relation between them.

BP 204 T

(Total No. of Questions: 14] [Total No. of Pages: 01)

I/IV B. PHARMACY (Regular) EXAMINATIONS, DECEMBER - 2022

Second Semester

PATHOPHYSIOLOGY - THEORY

Time: **Three Hours** Maximum : **75** Marks

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SECTION - A

Answer any FIVE Questions. 5x10 = 50 M

1. What is cellular adaptation ? Explain the principle cellular adaptations in detail.
2. Discuss the etiology, clinical signs and symptoms and pathophysiology of COPD and Asthma.
3. What is Hepatitis? Write about different types of Hepatitis and add a note on pathogenesis of Hepatitis - B.
4. Describe the etiological factors, clinical presentations and pathogenesis of peptic ulcer disease.
5. Explain the causes, symptoms and pathogenesis of
   a) Leprosy.
   b) Typhoid.
6. Enlist the types and etiological factors of Cancer. Outline the pathophysiology of Cancer.
7. Write in detail the basic principles of wound healing in skin.

SECTION - B

Answer any FIVE Questions. 5x5 = 25 M

8. Explain the mechanism of migration of leukocytes as systemic response to Acute Inflammation.
9. What is Angina Pectoris? Write the types, etiology and cardinal signs of Angina.
10. Write the etiology, types and pathophysiology of Epilepsy.
11. Discuss Goitre.
12. What is Chron's disease? Describe its etiology and pathogenesis.
13. Name the causative agent, mode of transmission, signs and symptoms of syphilis.
14. Describe the etiology and pathophysiology of Acute renal failure.

BP 205 T

(Total No. of Questions:11) (Total No. of Pages: 01)

I/IV B.PHARMACY (Regular & Supply) DEGREE EXAMINATIONS, DECEMBER-2022

Second Semester (Non-University)

B. Pharmacy

COMPUTER APPLICATIONS IN PHARMACY-(Theory)

Time: Two Hours **Maximum Marks:50**

SECTION – A

Answer any <u>TWO</u> Questions **2 X 10 = 20**

1. Differentiate between HTML and XML.
2. Briefly describe hospital and clinical pharmacy. Also discuss applications of computers in hospital and clinical pharmacy.
3. Discuss CDS and TIMS in detail.

SECTION – B

Answer any <u>SIX</u> Questions **6 X 5 = 30**

4. Briefly explain process life cycle.
5. Write a short note on One's complement and Two's complement method.
6. What are the advantages and disadvantages of using high level languages.
7. Write down the functions and applications of DBMS.
8. What are the benefits of pharma information systems.
9. Discuss pharmacokinetics in brief.
10. What are the features of biological databases?
11. Discuss the role of computers in preclinical development.

BP 206 T

(Total No. of Questions:11) (Total No. of Pages: 01)

I/IV B.PHARMACY (Regular & Supply) DEGREE EXAMINATIONS, DECEMBER-2022

Second Semester (Non-University)

B. Pharmacy

ENVIRONMENTAL SCIENCES-(Theory)

Time: Two Hours **Maximum Marks:50**

SECTION – A

Answer any TWO Questions **2 X 10 = 20**

1. Explain in detail the types of aquatic ecosystem.
2. What are energy resources. Discuss the renewable energy resources.
3. What is environmental Pollution. Write down the sources, effects and control of air pollution.

SECTION – B

Answer any SIX Questions **6 X 5 = 30**

4. Give brief account on non renewable energy resources.
5. Write the causes, effects and control measures of deforestation.
6. Define ecosystem and explain about food chain and ecological pyramids.
7. Discuss the multidisciplinary nature as well as scope of environmental studies.
8. Give brief account on desert ecosystem and its types
9. Discuss the causes, effects and control measures of soil pollution
10. Discuss the biotic and abiotic components of grass land ecosystem
11. What is ecological succession? Explain the types and stages of ecological succession.