

End Semester Examination – Winter 2022

Date: 03/05/2023

Course :	B. Pharmacy	Sem:	II
Subject Name :	Human Anatomy and Physiology-II	Subject Code :	BP201T
Max Marks :	75	Duration :	3 Hr.

Instructions:

1. All questions are compulsory
2. Draw diagrams / figures wherever necessary
3. Figures to right indicate full marks

**Q. 1. Objective Type Questions (Answer all the questions) (10 x 2) = 20**

- i) Define the terms Synapse and Neuroglia.
- ii) Define Neurology and name the parts of CNS.
- iii) Define the terms Peristalsis and Achlorhydria.
- iv) Draw neat labeled diagram of Stomach.
- v) Define the terms Tidal Volume and Vital Capacity.
- vi) Define the terms glomerular filtration rate and Filtration fraction.
- vii) Define the terms hyperplasia and ectopic pregnancy.
- viii) Define the terms gynaecomastia and hypoglycaemia
- ix) What is cushing's syndrome.
- x) Enlist different phases of Menstruation Cycle.

**Q. 2. Long Answers (Answer 2 out of 3) (2 x 10) = 20**

- i) Describe in detail about glomerular filtration and tubular reabsorption process.
- ii) Describe the structure and functions of Liver and explain various disease associated with it.
- iii) Discuss in detail female reproductive system.

**Q. 3. Short Answers (Answer 7 out of 9) (7 x 5) = 35**

- i) Define action potential of neuron and explain in detail generation of nerve impulse.
- ii) Write a short note on hypothalamus.
- iii) Describe Functional Organization of Cerebral Cortex.
- iv) Draw the structure of testes and explain the spermatogenesis process.
- v) Discuss the mechanism of external respiration and factor affecting gaseous exchange.
- vi) Explain the process of absorption of food from small intestine.
- vii) Write a short note on Pituitary gland.
- viii) Describe the anatomy of thyroid gland and enlist name and functions of their hormones.
- ix) Discuss in detail the structure of neuron.

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Course: B. Pharmacy

Subject Name: Pharmaceutical Organic Chemistry-I

Max Marks: 75

Sem: II

Subject Code: BP202T

Duration: 3 Hr.

**Instructions:**

1. All questions are compulsory
2. Draw diagrams / figures wherever necessary
3. Figures to right indicate full marks

**Q. 1. Objective Type Questions (Answer all the questions)**

(10 x 2) = 20

- i) Give structure and uses of Ethanolamine and Benzoic acid.
- ii) Enlist any two qualitative tests for carboxylic acids.
- iii) What is Saytzeff's rule? Give its reaction.
- iv) Write in short stability of alkene.
- v) Define functional isomerism with example.
- vi) Give two examples for nucleophilic addition reaction to carbonyl compounds.
- vii) Draw the structure and write uses of Iodoform.
- viii) Draw structure and write uses of Propylene glycol.
- ix) Draw the structure and give IUPAC name of isobutanol.
- x) Enlist any four reactions of alkyl halide.

**Q. 2. Long Answers (Answer 2 out of 3)**

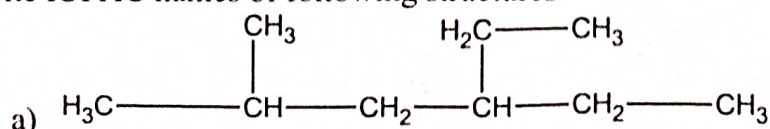
(2 x 10) = 20

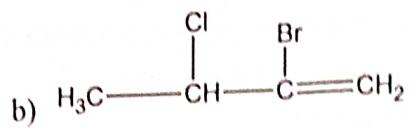
- i) Illustrate the mechanism of Markownikoff's and anti-Markownikoff's orientation of alkene with suitable examples.
- ii) Explain the reaction and mechanism of Perkin and Aldol condensation.
- iii) Explain  $sp^2$  hybridization in alkenes. Write a note on Ozonolysis and Diels-Alder reaction.

**Q. 3. Short Answers (Answer 7 out of 9)**

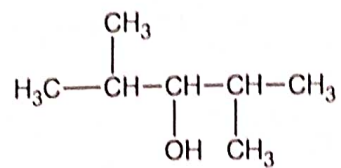
(7 x 5) = 35

- i) Explain the  $sp^3$  hybridization in alkanes with suitable example.
- ii) Classify organic compounds with example.
- iii) What is effect of substitution on acidity of carboxylic acid?
- iv) Explain the factors affecting  $E1$  reaction.
- v) Give an account on Cannizzaro and cross-cannizzaro reaction.
- vi) How you will identify alcohol and aliphatic amines by qualitative tests?
- vii) Discuss the free radical addition reactions of conjugated dienes.
- viii) How you will synthesize alkenes?
- ix) Write IUPAC names of following structures

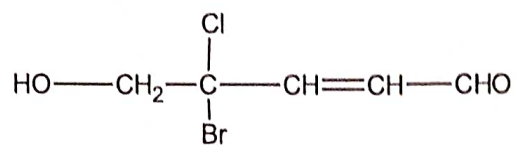




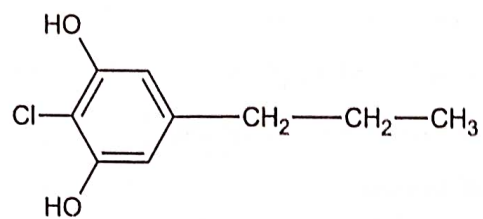
c)



d)



e)



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