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B. PHARM.
(SEM III) THEORY EXAMINATION 2018-19
PHARMACEUTICAL CHEMISTRY – III (ORGANIC CHEMISTRY -II)

Time: 3 Hours**Total Marks: 100****Note: 1. Attempt all Sections.****SECTION A****1. Attempt all questions in brief. 2 x 10 = 20**

- a. Write the structure of phenothiazine and benzimidazole.
- b. Define iodine value.
- c. Discuss the pharmaceutical importance of pyridine.
- d. Give the structure of dextro & levo form of glucose.
- e. Write about Diel's alder reaction.
- f. Define polysaccharide with example.
- g. Give the reaction of peptide bond formation.
- h. Define glycosidic linkages with structure.
- i. Write about structure of any one nucleotide.
- j. Give identification tests of protein.

SECTION B**2. Attempt any three of the following: 10 x 3 = 30**

- a. Discuss method of preparation and chemical reactions of Acetoacetic ester.
- b. Give the chemistry and pharmaceutical importance of indole.
- a. Define & Explain reaction mechanism of Mannich reaction.
- b. What is mutarotation? Give the reaction of osazone formation.
- c. What do you understand by polymerization? Write in detail free radical polymerization.

SECTION C**3. Attempt any one part of the following: 10 x 1 = 10**

- a. Write a note on cycloaddition reactions.
- b. Explain reaction mechanism of oppeneaur oxidation.

4. Attempt any one part of the following: 10 x 1 = 10

- a. Give method of preparation, chemistry and pharmaceutical importance of imidazole.
- b. Enumerate the structure of starch.

5. Attempt any one part of the following: 10 x 1 = 10

- a. Explain the chemistry and identification tests of oil and fat.
- b. Compare the cyclic structure of glucose and fructose.

6. Attempt any one part of the following: 10 x 1 = 10

- a. Discuss in detail end group analysis of amino acid with example
- b. Write a note on primary and secondary structure of protein.

7. Attempt any one part of the following: 10 x 1 = 10

- a. Give the chemistry and chemical reactions of Naphthalene.
- b. What is nucleic acid? Discuss its structure.