Sub Code:PH233

Paper Id: 150328 Roll No:

B. PHARM

(SEM-III) THEORY EXAMINATION 2019-20

PHARMACEUTICAL CHEMISTRY – III (ORGANIC CHEMISTRY – II**)**

Time: 3 Hours ***Total Marks: 100***

Note: Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 2 x 10 = 20

a.	Write any one example of Cyclo-addition reaction.
b.	Write the utility of Anthracene.
c.	Write the structure of Indole and mention any one drug constituting the indole entity with its uses.
d.	Write the structure of Phenothiazine and its applications.
e.	Write the synthetic utility of Mannich reaction.
f.	Highlight the synthetic application of Michael addition.
g.	Write any one identification test of Maltose.
h.	Write any one test to identify Starch.
i.	Write any two structures of Nucleic acids and their physiological role.
j.	Define Polymerization.

SECTION B

2. Attempt any *three* of the following: 10x3=30

a.	Write briefly on reaction involving α, β-unsaturated carbonyl compounds.
b.	Write briefly on the pharmaceutical importance of the Imidazole and Benzimidazole nucleus.
c.	Write a note on Diel-Alder's reaction.
d.	Write briefly on the reactions of maltose and lactose.
e.	Write briefly on identification tests of Oils and Waxes.

SECTION C

3. Attempt any *one* part of the following: 10x1=10

a.	Write a note on the compounds containing active methylene compounds. Add a note on synthetic utility of malonic ester and acetoacetic ester.
b.	Give a comprehensive review on chemistry of polynuclear aromatic compounds.

4. Attempt any *one* part of the following: 10x1=10

a.	Give a comprehensive review on the nomenclature and chemistry of Heterocyclic compounds. Add a note on the pharmaceutical importance of furan.
b.	Highlight the preparation and therapeutic significance of Nitrogen containing heterocyclic compounds.

5. Attempt any *one* part of the following: 10x1=10

a.	Write a detailed note on reaction and mechanism of Knoevenagel reaction.
b.	Discuss the synthetic application of Benzoin condensation and Merwin-Pondroff Verley reduction.

6. Attempt any *one* part of the following: 10x1=10

a.	Classify carbohydrates with examples. Elucidate the structure of Fructose.
b.	Discuss the structural elucidation, reactions and identification tests of maltose.

7. Attempt any *one* part of the following: 10x1=10

a.	Elaborate on reactions and identification tests of amino acids.
b.	Discuss the chemistry and identification tests of Oils, Fats and Waxes.

www.aktuonline.com

http://www.aktuonline.com