Printed Page-01 **Subject Code: RPH 301**

Paper Id- 150311 **Roll No-** | | | | | | | | | | |

B. PHARM.
(SEM- III) THEORY EXAMINATION 2018-19
PHARMACEUTICAL CHEMISTRY-IV
(HETEROCYCLIC & BIOORGANIC CHEMISTRY)

Time: 3 Hours ***Total Marks: 70***

Note: 1. Attempt all Sections.

SECTION A

1. Attempt *all* questions in brief. **2 x 7 = 14**

a. Define and classify Heterocyclic compounds with example.
b. What are Monosaccharides? Write their identification tests.
c. Differentiate between Essential and Non-essential Amino acids.
d. What is Ruff Degradation?
e. Define saponification value.
f. What is Mutarotaion?
g. Write the different functions of DNA.

SECTION B

2. Attempt any *three* of the following: **7 x 3 = 21**

a. Write the note on Killiani-fischer synthesis.
b. Write the chemical properties of Glucose.
c. What are Nucleic acids? Classify it.
d. Write a note on end group analysis.
e. Write the physiological functions of vitamins in our body.

SECTION C

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

a) Give the evidences for the Open Chain structure of Glucose.
b) Write a note on analysis of Fat and oils.

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

a) Describe the preparation, properties and pharmaceutical importance of Benzimidazole, Indole & Pyrazole.
b) Define & classify vitamins. Discuss the structure of Vit-C.

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

a) Write a brief note on structure elucidation of Vit-A.
b) Explain solid phase peptide synthesis.

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

a) Write a note on-
(1) Pyrrole (2) Furon (3) Thiophene
b) What is Polymerization? Write the reactions and pharmaceutical applications of polymers.

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

a) Explain the structure elucidation of Sucrose.
b) Write the method of preparation of Indole and Imidazole.