Printed Pages: 02 **Sub Code: BOP231**

Paper ID: | 5 | 0 | 4 | 2 | **Roll No.** | | | | | | | | | | |

B. PHARM.
(SEMESTER III) THEORY EXAMINATION 2017-18
PHARMACEUTICAL CHEMISTRY – III
(HETEROCYCLIC & BIOORGANIC CHEMISTRY)

Time: 3Hours ***Max. Marks: 100***

Note: Attempt all Sections. Assume missing data if necessary.

SECTION A

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

a) Why imidazole is basic in nature?
b) Define S_N reaction.
c) Define hetero cyclic compounds.
d) What is invert sugar?
e) What is zwitter ion?
f) What is hemiketal form?
g) Who has given double helix model of DNA?
h) Give the reaction of synthesis of Triglyceride.
i) Classify Vitamins.
j) Draw the structure of polyethylene.

SECTION B

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

a) Write about the preparation of Indole.
b) Write a note on Hawarth representation of glucose.
c) Write in detail about Isoelectric point.
d) Write in detail about rancidity.
e) Write a note on Ascorbic acid.

SECTION C

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

a) Write in detail about preparation, properties and pharmaceutical importance of Benzimidazole.
b) Give reason:
   i) Imidazole has more boiling point than Pyrazole.
   ii) Pyrazole is more basic than Pyrrol.

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

a) Write in detail about open structure and cyclic structure of Glucose.
b) How will you convert-
   i) Glucose to Mannose ii) Glucose to Fructose

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

a) Write about the solid phase peptide synthesis.
b) Write about the end group analysis.

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

a) Write in detail about Genetic codon system.
b) What do you understand by the term saponification value, iodine value and acid value?

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

a) Write in detail about the structure elucidation of Retinol.
b) What do you understand by polymers and polymerization?