

**S.Y.B.PHARM. SEMESTER-IV (2011 COURSE) : WINTER -
2017**

SUBJECT : PHARMACEUTICAL CHEMISTRY – VI (ORGANIC)

Day : **Thursday**
Date : **09/11/2017**

Time : **02.00 PM TO 05.00 PM**
Max. Marks : **80**

W-2017-3824

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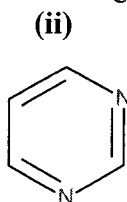
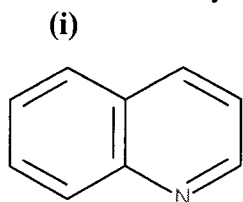
- 1) **Q. No. 1 and Q. No. 5 are COMPULSORY.** Out of remaining solve **ANY TWO** questions from each Section.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer books.

SECTION - I

- Q. 1** Solve **ANY FIVE** of the following: **(10)**
- a) Differentiate between reducing and non-reducing sugars.
 - b) Ruff degradation of carbohydrates.
 - c) Why Iodine is not used in free radical reactions?
 - d) Explain in short reaction of carbohydrates with nitric acid.
 - e) Write structure and properties for cellobiose.
 - f) Write structure and properties for maltose.
- Q. 2** Explain the chemistry of Glucose in detail. **(15)**
- Q. 3**
- a) Free radical chain reaction, explain with mechanism in detail. **(08)**
 - b) Generation of free radicals, explain the methods with examples. **(07)**
- Q. 4** Write a note on **ANY THREE** of the following: **(15)**
- a) Polybromination
 - b) Anomeric effect
 - c) Formation of sugar acetals from carbohydrates
 - d) Non-reducing sugars

SECTION - II

- Q. 5** Solve **ANY FIVE** of the following: **(10)**
- a) Draw structure and give numbering to following heterocyclic
(i) Pyrrole (ii) Pyridine
 - b) Name the heterocyclic and give the numbering:



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- c) Name the corresponding drugs for following heterocyclic
(i) Hydantoin (ii) Quinoline
- d) Why pyrrole undergoes electrophilic substitution at 2-position.
e) Give importance of "Amide Linkage" in bioactive peptide.
f) How will you synthesize Glycine by phthalimide synthesis?

Q. 6 Give any three methods of preparation and three chemical reactions of furan and imidazole. **(15)**

Q. 7 a) Explain any two methods of preparation of amino acids, with examples **(08)**

b) Give structure, numbering, corresponding drugs and any two methods of preparation of Indole. **(07)**

Q. 8 Write a note on **ANY THREE** of the following: **(15)**

- a) Fischer Indole synthesis
b) Iso-electric point of amino acids
c) Strecker synthesis
d) Biologically important peptide

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