



RR-0825

Third Year B. Sc. Examination
March / April – 2010
Pharmaceuticals : Paper - VIII
(Industrial Chemistry) (Vocational)

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="T. Y. B. Sc."/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="Pharmaceuticals - 8"/>	<input type="text"/>
Subject Code No. : <input type="text" value="0"/> <input type="text" value="8"/> <input type="text" value="2"/> <input type="text" value="5"/>	<input type="text"/>
Section No. (1, 2,.....) : <input type="text" value="Nil"/>	<input type="text"/>
	<input type="text" value="Student's Signature"/>

- (2) All sub questions of question No. 1 are **compulsory**.
- (3) Give reactions, flow diagrams and neat sketches wherever necessary.
- (4) Figures to the right indicate full marks of the question.
- 1 Answer the following questions in short and to the point. 15
- Explain the term bulk density of powder.
 - Define crude drug.
 - Classify glass as per USP/NF.
 - Define analgesic and germicide.
 - What is stomatal index and stomatal number?
 - Give characteristics of materials selected for packing.
 - What is meant by fermentation?
 - Classify pharmacodynamic agents.
 - Give the synthesis of progesterone.
 - Define phytochemicals.
 - Give names of Gram positive and Gram negative bacterial cells.
 - What are excipients?

- (xiii) Give adverse effects of PAS.
- (xiv) Give the structure of Isoniazide.
- (xv) Give the structure of Nitrofurazone.
- 2** (a) Discuss the process of manufacturing, quality specification, chemistry and uses of stearate. **4**
- OR**
- (a) Give a brief account of packaging materials used in pharmacy.
- (b) Classify surgical dressings. Describe any **one** in brief. **4**
- OR**
- (b) Give an account of pharmaceutical colorant erythrosine. **4**
- (c) Classify methods of sterilization. **3**
- 3** (a) Discuss qualitative evaluation of leaf and starch illustrating examples. **4**
- OR**
- (a) Give detailed account of proteins and steroids. **4**
- (b) Enumerate different chemical groups present in plants with suitable examples. **4**
- OR**
- (b) Define chromatography. Explain basic principles of TLC. **4**
- (c) Differentiate between organised and unorganised drugs. **3**
- 4** (a) Discuss regarding packaging machineries and package evaluation as quality control. **4**
- OR**
- (a) Discuss reaction mechanism and procedure of LAL test. **4**
- (b) What are pyrogens? Discuss in detail "Test for pyrogens". **4**
- OR**
- (b) Discuss porosity with reference to quality control powders. **4**
- (c) Discuss any type of glass testing method. **3**

5 (a) Give the synthesis and uses of phenobarbital. 4

OR

(a) Give the synthesis and uses of chlorpheniramine. 4

(b) What are vitamins? How Vit-A is manufactured? 4

OR

(b) What are sulfonamides? Classify them with examples. 4

(c) Discuss the classification of Antimicrobials. 3

6 (a) Discuss the production of streptomycin by fermentation process. 4

OR

(a) Discuss the production of Vit-B₁₂ by fermentation process. 4

(b) Explain light, osmotic pressure, air and temperature effect on growth of bacteria. 4

OR

(b) Discuss the usefulness of enzyme systems. 4

(c) Discuss the application of microorganism. 3
