

**GUJARAT TECHNOLOGICAL UNIVERSITY**
BE - SEMESTER-VII (OLD) • EXAMINATION – WINTER 2017**Subject Code:173606****Date: 07/11/17****Subject Name: Medicinal Chemistry-II & Technology of Sterile Products****Time:10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Classify ophthalmic products with examples **07**
(b) Write one synthetic method of preparation of Riboflavin **07**
- Q.2** (a) Enlist and explain in detail formulation components of parenterals **07**
(b) How is Pantothenic acid prepared synthetically? Discuss its deficiency and uses **07**
- OR**
- (b) Write short notes on Vit-K, Vit-E and Vit-D **07**
- Q.3** (a) Draw a neat labeled diagram of the parenteral manufacturing facility. **07**
(b) Describe Pyrethroids? List their uses and draw the structures of three commercial pyrethroids. **07**
- OR**
- Q.3** (a) Write a brief note on preformulation of the parenterals **07**
(b) Discuss various kinds of Pheromones in detail. **07**
- Q.4** (a) Describe four reactions catalyzed by the two enzymes in which Riboflavin is the central component. **07**
(b) Illustrate the synthesis of Dipyrrylmethane intermediates of Chlorophyll A **07**
- OR**
- Q.4** (a) What are Eicosonoids? Illustrate the biosynthetic pathway for their synthesis? **07**
(b) (1). Give three examples of pheromones showing the relationship between stereochemistry and activity. **04**
(2) How do Haemoglobin and Chlorophyll compare with each other? Bring out the major differences. **03**
- Q.5** (a) Define pharmaceutical product stability and write a note on stability. **07**
(b) Define ophthalmic products and explain in detail its formulation composition **07**
- OR**
- Q.5** (a) What are parenterals? Give the advantages and disadvantages. **07**
(b) Explain in detail quality control tests of parenterals **07**
