

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (NEW) - EXAMINATION – SUMMER 2018

Subject Code: 2163605

Date: 08/05/2018

Subject Name: Technology of Solid Dosage forms & Medicinal Natural 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) What is Comminution? Describe briefly the types involved? **03**
 (b) Discuss the advantages and disadvantages of tablet dosage form? **04**
 (c) List the problems associated with coated tablets? Briefly explain any seven of them? **07**
- Q.2** (a) Write a note on Preformulation? **03**
 (b) Name two alkaloids present in *PapaverSomniferum*? Write short notes on them? **04**
 (c) What are the major types of Tannins? Which tests are done to identify Tannins? **07**
- OR**
- Q.3** (c) Describe the isolation & synthesis of Caffeine or Nicotine? **07**
 (a) Briefly describe the different methods of tablet coating. **03**
 (b) Describe the steps involved in tableting method using wet granulation? **04**
 (c) Illustrate the different types of Pharmaceutical factory layouts? **07**
- OR**
- Q.3** (a) What is roller compaction & slugging? **03**
 (b) What are the tests done for detection of cardiac glycosides? **04**
 (c) Explain counter current extraction? Discuss any two counter current extractors? **07**
- Q.4** (a) How is Morphine converted to Codeine? **03**
 (b) What are the main tests for identification of Alkaloids? **04**
 (c) Describe how Phenylalanine and Tyrosine are made from Shikimic acid pathway biosynthetically? **07**
- OR**
- Q.4** (a) Describe Shikimate pathway or Mevalonate pathway? **03**
 (b) How are drugs classified? Briefly explain each classification. **04**
 (c) What is a 'genetic marker'? Describe its role in Herbal Drug Technology? **07**
- Q.5** (a) What are organized and unorganized drugs? **03**
 (b) Describe "Simultaneous distillation and extraction" with the help of a neat diagram? **04**
 (c) What is a glycoside? How are Glycosides classified? List the main groups of glycosides? **07**
- OR**
- Q.5** (a) What are the different types of capsules? Briefly describe each of them? **03**
 (b) Discuss two drugs isolated from natural resources used in the treatment of Malaria? **04**
 (c) Discuss structure, source, isolation and synthesis of Menthol? **07**
