

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

M. Pharm. Semester – II<sup>ND</sup> Examination – June/July- 2011

Subject code: 920104

Subject Name: Modern Pharmaceutical Analysis

Date: 01/07/2011

Time: 10:30 am – 01:30 pm

Total Marks: 80

### **Instructions:**

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

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|------|---|----------|
| Q.1  | Explain in detail various physicochemical characterization techniques for the analysis of solid oral dosage form  | 16       |
| Q.2  | Explain the term “Solid state analysis” of drug substances.<br>What is the effect of impurities on drug stability and its therapeutic action.                                       | 16       |
| Q.3  | (a) Enlist the characteristics of parenteral dosage forms. Explain the properties to be evaluated during preformulation stage.<br>Discuss bioburden testing of parenteral products. | 16       |
| Q.4  | (a) Elaborate on “Amino acid sequence analysis” and “Isoelectric focussing” techniques.<br>(b) Enlist and discuss in brief ICH guidelines in Pharmaceutical analysis.               | 08<br>08 |
| Q.5  | (a) Define the term “cosmetic”. Explain in brief various methods of analysis of cosmetic formulations.<br>(b) Elaborate on analytical methods used in preformulation studies.       | 08<br>08 |
| Q. 6 | (a) Enlist various compendial parameters of standardization of herbal drugs and formulations and discuss any two of them in detail.<br>(b) Discuss compendial testing of API.       | 08<br>08 |
| Q. 7 | Write short note on <u>ANY TWO</u> of the following :<br>(a) Evaluation of hair products<br>(b) Quality control of radiopharmaceuticals<br>(c) Automated analysis                   | 16       |

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