

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharmacy Sem-III Examination May 2011

Subject code: 230004

Subject Name: Pharmaceutical Analysis-I

Date: 27/05/2011

Time: 10:30am to 1:30pm

Total Marks: 80

Instructions:

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

- Q.1** (a) Explain Terms : (1) Quality control (2) Quality Assurance **06**
(3) Validation (4) Calibration
- (b) Write note on Sampling techniques. **05**
- (c) Discuss how to minimize sampling errors. **05**
- Q.2** (a) Explain : (1) Henderson Hesselbergh equation, (2) Common ion effect **06**
- (b) Write note on theory of acid base indicators. **05**
- (c) Describe Law of mass action in detail. **05**
- Q.3** (a) Explain Terms : (1) Iodometry (2) Iodimetry **06**
(3) Differentiating solvents (4) Leveling solvents
- (b) Describe diazotization nitrite titration. **05**
- (c) Write note on Non aqueous titration. **05**
- Q.4** (a) Write detail note on Volhard method of argentometric titration. **06**
- (b) Discuss replacement type complexometric titration. **05**
- (c) Explain gasometric method. **05**
- Q.5** (a) Describe Karlfisher titration. **06**
- (b) Write note on titration curve in detail. **05**
- (c) Write note on Kjeldahl method. **05**
- Q. 6** (a) Discuss different types of precipitation in gravimetric analysis. **06**
- (b) Detail note on oxygen flask combustion method. **05**
- (c) 20 ml of aqueous solution containing 50 mg Aspirin where $K=2$, if it is **05**
extracted with 30ml of ether. Calculate fraction getting extracted in ether.
Calculate percentage of Aspirin extracted.

- Q.7**
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|-----|---|-----------|
| (a) | Comments on “Multiple extraction is more efficient than single extraction.” | 06 |
| (b) | Discuss factors affecting on partition coefficient in extraction. | 05 |
| (c) | Write note on continuous extraction | 05 |
