Seat No.:	Enrolment No
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Subject code: 910107

GUJARAT TECHNOLOGICAL UNIVERSITY M. PHARM. - SEMESTER - I • EXAMINATION - WINTER 2012

Date: 09/01/2013

Subject Name: Pharmaceutical Analysis - I 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. 0.1 What is analytical method validation? Enlist different parameters and discuss **06** any two in detail. How will you validate and calibrate Spectrofluorimeter instruments used for 05 analysis of drugs. Discuss briefly about incremental method used in ISE. (c) 05 **Q.2** (a) Discuss about validation of HPLC instrument. **06** Discuss about the methods used for the quantitative determination of 05 hydroxyl groups. Discuss one method used specifically for the phenolic hydroxyl group. Define Alkaloids? Discuss method used for determination the total alkaloid of (c) 05 ergot. 06 0.3 Describe methods useful for estimation of ester. Write a note on the methods for the estimation of Vitamin E. 05 (b) (c) Write a note on the principle involved in the elemental analysis of sulphur 05 and chlorine. **Q.4** Enumerate the principle involved in the analysis of Progesterone in 06 pharmaceutical drug formulations. How will you estimate Xanthine derivatives in pharmaceutical dosage forms? 05 (b) Enumerate the use of 1, 2 -Naphtho quinone 4 – sulphonate in pharmaceutical 05 analysis with appropriate examples. **Q.5** How will you estimation Erythromycin in pharmaceutical dosage forms? **06** (a) How can you estimate the drugs using 3-methyl-2-benzothiazoline hydrazone (b) 05 and Folin Ciocalteau reagent. Enlist various parameters necessary for validation and calibration of GC. 05 (c) **O.** 6 Write a note on analysis of excipients in solid state emphasizing on particle 06 (a) size analysis and X ray diffraction technique. Discuss the principle and procedure involved in various 05 Physicochemical method of analysis of various dosage forms of sulpha drug. Discuss basic principle involved in estimation of Vitamin B12. 05 (c) **Q.7** Discuss about the use of N, 1-naphthyl ethylene diamine and p-06 dimethylaminobenzaldehyde in pharmaceutical analysis. Explain in brief the methods and its principle involved in elemental analysis (b) 05 of sodium. 05 Discuss about the problems associated with ISE measurements. ******