Rajiv Gandhi University of Health Sciences, Karnataka

First Year M. Pharm Degree Examination – May 2016

Time: Three Hours **Max. Marks: 100 Marks**

INSTRUMENTAL METHOD OF ANALYSIS

(Revised Scheme 4)

Q.P. CODE: 9359

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) **2 x 20 = 40 Marks**

1. a) Describe various methods employed in the particle size analysis.
   b) Discuss the principle and applications of Raman spectroscopy. (10+10)
2. Discuss the principle involved in the analysis of two barbiturates and two anti-tubercular drug. (20)
3. a) Principle involved in the assay of Vitamin A and Vitamin B_2.
   b) Principle involved in quantitative estimation of drugs containing Carbonyl functional group and their applications. (10+10)

SHORT ESSAYS (Answer any FIVE) **5 x 10 = 50 Marks**

4. Describe the principle and procedure involved in analysis of any three alkaloids.
5. Write briefly about different methods for the estimation of primary, secondary and tertiary amines.
6. Mention the principle involved and applications of MBTH reagent and Bratton Marshall reagent.
7. Describe the meaning of the following as per Pharmacopoeia.
   i) Expression of concentration
   ii) Excipients
   iii) Crude drug
   iv) Storage
8. Describe the analytical importance of 2,6-dichloroquinonechlorimide and Ninhydrin reagent.
9. Write a brief note on instrumental methods for product characterization with examples.

SHORT NOTES **2 x 5 = 10 Marks**

10. Validation of analytical methods.
11. Principle involved in the analysis of radiopharmaceuticals.

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