

Rajiv Gandhiw Iniversity of Health Sciences First Year M. Pharm Degree Examination – Nov 2011

[Time: 3 Hours] [Max. Marks: 100]

PHARMACEUTICAL AND COSMETIC ANALYSIS

(RS 2 & RS 3)

Q.P. CODE: 9222

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY (Answer any <u>TWO</u>)

2 X 20 = 40 Marks

- 1. a) Explain Volhard's and modified Volhard's method for the estimation of Halide with suitable examples.
 - b) Explain the quality control of tablets.
- 2. a) Briefly discuss the determination of water by titration with Karl Fishcer Reagent (KFR).
 - b) What are pM indicators? Explain in detail the principles and applications of pM indicators in complexometric titrations
- 3. a) Discuss briefly various pharmaceutical applications of electro-analytical methods like potentiometry, polarography and amperometry.
 - b) Write in detail the various qualitative and in quantitative determination of emulsifiers and stabilizers in pharmaceutical formulations.

SHORT ESSAY (Answer any FIVE)

5 X 10 = 50 Marks

- 4. State the pharmaceutical applications of redox titrations with suitable examples from official drugs in I.P. 1996.
- 5. Write in detail the principles and procedures of non-aqueous titrations involving halogenated salt of bases.
- 6. Briefly describe the theory, and applications of acid base indicators
- 7. Discuss principles and applications of titration involving the displacement of one complex by another.
- 8. Write a note on safety for cosmetic products.
- 9. Give a detail account of principles and applications of high frequency titration.

SHORT NOTES 2 X 5 = 10 Marks

- 10. Write a brief note on diazotization titration.
- 11. Write a note on thermo-gravimetric analysis with examples.

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