



**PHARMACEUTICAL AND COSMETIC ANALYSIS**

**(RS2 & RS3)**

**Q.P. CODE : 9222**

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

**LONG ESSAY (Answer any TWO)**

**2 X 20 = 40 Marks**

1. a) Write a neat diagram and explain working of dropping mercury electrode.  
b) Explain the principle, construction and working of a glass membrane electrode.
2. a) Explain the principle, types and application of complexometric titrations.  
b) Discuss quality control of secondary packing materials, like paper and board for pharmaceuticals.
3. a) Explain the assay of any one compound in IP 1996 done by Potassium bromate and ceric ammonium sulphate titrations.  
b) Explain the various steps in quantitative analysis by gravimetric method.

**SHORT ESSAY (Answer any FIVE)**

**5 X 10 = 50 Marks**

4. Explain the principle, procedure and application of differential thermal analysis.
5. Discuss about neutralization curve obtained when weak acid is titrated against strong base.
6. Discuss the quality control tests for ointments and suppositories.
7. Explain the detection and quantitative determination of preservatives and colouring materials.
8. Write a note on safety of cosmetic products.
9. Discuss the quality control of dental products.

**SHORT NOTES**

**2 X 5 = 10 Marks**

10. Explain the assay of two compounds in IP1996 done by non-aqueous titrations.
11. Importance of extraction value in quality control of crude drugs

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