

**Rajiv Gandhi University of Health Sciences**  
**First Year M.Pharm Degree Examination – May 2011**

[Time: 3 Hours]

[Max. Marks: 100]

**ADVANCED PHARMACEUTICAL ANALYSIS**

**PAPER IV**

**(RS 2 & RS 3)**

**Q.P. CODE: 9294**

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

**LONG ESSAY (Answer any TWO)**

**2 X 20 = 40 Marks**

1. What are pyrogen? Explain its properties and methods of testing as mentioned in pharmacopoeia
2. Explain two methods each for determination of heavy metal and pesticide residue in herbal preparations
3. Explain the methodology and interpretation of cup plate method of antibiotic assay

**SHORT ESSAY (Answer any FIVE)**

**5 X 10 = 50 Marks**

4. Explain the principle and procedure of diphtheria antitoxin assay
5. Write a note on test for endotoxin
6. How is HPLC method validated
7. Compare and contrast instrumental and volumetric methods of analysis
8. Explain the principle involved in differential thermal analysis of a compound with relevant equations and graphs
9. Classify chromatography. Explain qualitative application of planar chromatography

**SHORT NOTES**

**2 X 5 = 10 Marks**

10. Explain the principles of estimation of sulphanilamide by bratton – marshall reagent
11. What are the applications of Radio – immuno assay

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