Rajiv Gandhi University of Health Sciences

Second Semester M. Pharm Degree Examination - JAN-2019

[Time: 3 Hours] [Max. Marks: 75]

Advanced Spectral Analysis-II

Q.P. CODE: 5157

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

LONG ESSAY (Answer any Three) **3 X 10 = 30 Marks**

1. Explain the instrumentation and applications of ATR-IR.
2. Outline the theory and applications of 2D NMR.
3. Explain the fragmentation of important functional group.
4. Write the principle, instrumentation and applications of GC-AAS.

SHORT ESSAY (Answer any Nine) **9 X 5 = 45 Marks**

5. Explain Wood ward- Fieser rule for cyclic dienes.
6. How will you identify the following functional groups in an organic compound (-OH, N-H, C-H, C-O, C=C) by IR-spectroscopy.
7. Explain in detail Mc. Lafferty rearrangement.
8. Give brief account on INADEQUATE techniques.
9. Write the theory and applications of flash chromatography.
10. Write the principle and applications involved in DSC.
11. Give a brief account on Radio immuno assay of Insulin.
12. Explain in brief interfacing CE with MS.
13. Explain the principle and applications of Raman spectroscopy.
14. Explain in brief biological standardization.

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