Rajiv Gandhi University of Health Sciences, Karnataka

III Year Pharm-D Degree Examination – June/July 2014

Time: Three Hours   **Max. Marks: 70 Marks**

PHARMACEUTICAL ANALYSIS

Q.P. CODE: 2862

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

LONG ESSAYS (Answer any Two)   **2 x 10 = 20 Marks**

1. Explain the construction, working, advantages and disadvantages of hydrogen electrode.

2. Write the principle, development technique, examining parameters and application of paper chromatography.

3. Explain a) The theory of I.R spectroscopy
   b) Different sampling techniques involved in IR spectroscopy.
   c) Applications of IR spectroscopy

SHORT ESSAYS (Answer any Six)   **6 x 5 = 30 Marks**

4. Explain the factors affecting fluorescence with examples.

5. What is validation? What are the requirements of analytical instrument validation?

6. Explain the working of various HPLC detectors.

7. What is the effect of pH and solvent in UV spectroscopy?

8. Write a note on derivatization techniques involved in GC.

9. What is quenching? Explain various types of quenching with suitable examples.

10. Write a note on spectrophotometric titrations.

11. Compare between Nephelometry and turbidimetry.

SHORT ANSWERS   **10 x 2 = 20 Marks**

12. Define Electrical potential and electrochemical cell.
13. Application of atomic emission spectroscopy.
14. Expand and explain HETP.
15. List out detectors used in GC.
16. Define and classify gratings.
17. Define chromophore and auxochrome with examples.
18. What is null point potentiometry?
19. Examples of anionic and cationic ion exchangers.
20. How are primary and secondary filters selected in fluorimetric assay?
21. Types of conductometric titrations.

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