2012 scheme

QP CODE: 412006 **Reg. No: ……..**

Final Year B.Pharm Degree Supplementary Examinations
September 2023
Pharmaceutical Analysis – II

Time: 3 Hours **Total Marks: 100**

- ***Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space***
- ***Answer all parts of a single question together • Leave sufficient space between answers***
- ***Draw Diagrams wherever necessary.***

Essays **(3x10=30)**

1. a) List the ideal characteristics of GC detectors
   b) List the factors affecting Rf value in Thin Layer Chromatography (5+5)
2. Explain the solid and liquid sample handling in IR Spectroscopy. Write a note on problems of sample handling. (3+5+2)
3. a) What is quenching of fluorescence. Explain the types of quenching in brief.
   b) 20 tablets of a drug (wt. of 20 tablets- 12.3g & labelled claim of the drug is 500 mg) were ground to a powder. Tablet powder equivalent to 0.075g of drug was transferred to a 100ml volumetric flask and the powder was shaken with 25 ml of 0.1M sodium hydroxide and finally made up to 100 ml with water (solution-A). 10 ml of solution-A was diluted to 100 ml with water (solution –B). 10 ml of solution-B was diluted to 100 ml with water and the resulting solution gave an absorbance of 0.5016 at 257 nm. Calculate the amount in mg and percentage purity of drug taking 715 as the value of E (1%,1cm) (5+5)

Short notes **(14x5=70)**

4. Explain the methods of detection of equivalent point in potentiometric titrations.
5. Explain the conductometric titration of weak acid Vs strong base
6. Explain the thermogram with an example.
7. Why dissolved oxygen is removed before polarographic analysis. Explain the methods used to remove the same.
8. Explain amperometric titration curve.
9. Classify the paper electrophoretic methods with brief explanation for each.
10. Explain the principle and procedure of turbidimetric estimation of chloride ions.
11. Write a note on GLP and ISO 9000 series.
12. Discuss the purpose of ICH.
13. Electron Impact ionisation is a good ionisation source for identifying compound than quantifying it. Do you agree with statement. Justify your answer.
14. a) Derive an expression for Bragg's law
    b) List the applications of X-ray crystallographic studies (3+2)
15. Explain the construction and working of Photometric detectors.
16. What are the types of protons and neighboring protons for each type identified in PNMR spectra.
17. Calculate HETP of the column using following data.
    tR = 21.4 mm, Wh = 1.00 mm and length of the column = 150 mm

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