# BRAINWARE UNIVERSITY

## Term End Examination 2024-2025
### Programme – M.Pharm(Pharmaceutics)-2024
### Course Name – Modern Pharmaceutical Analytical Techniques
### Course Code - MPH101T
### ( Semester I )

**Full Marks : 75**                                         **Time : 3:0 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

### Group-A
(Short Answer Type Questions)                               5 x 5=25

1. Explain the criteria used for the selection of carrier gas in GLC                    (5)
2. State the principle of capillary electrophoresis.                                    (5)
3. State the working and functions of Flame in Flame photometry.                        (5)
4. Focus the adsorbants used in Thin layer chroatography.                               (5)
5. Define NMR spectroscopy and explain its principle and mention the points which differs it    (5)
   from other spectroscopic techniques.

**OR**

Illustrate on pharmaceutical importance of NMR.                                         (5)


### Group-B
(Long Answer Type Questions)                                10 x 5=50

6. Describe the instrumentation and working of paper electrophoresis.                   (10)
7. Explain briefly about solvent effect on detection of λmax .                          (10)

8. List out the various parts of gas liquid chromatographic Instruments with diagram.   (10)

9. Explain with diagram types of burner used in Flame photometry.                       (10)

**OR**

Brief schematically the instrumentation process on Atomic absorption spectroscopy.      (10)

10. Explain in detail the technique of Radioimmuno assay.                               (10)

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Explain in detail the technique of ELISA. (10)

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