

02/11/24

Seat Number

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DADU-13

MPH-101T

Modern Pharmaceutical Analytical Techniques

(181101)

Total Pages : 2]

Time : 3 Hours

Max. Marks : 75

Note : (1) Do not write anything on question paper except Seat No.

(2) Graph or diagram should be drawn with the black ink pen being used for writing paper or black HB pencil.

(3) Students should note, no supplement will be provided.

(4) Attempt any *five* questions.

(5) Each question carries equal marks.

1. Explain Electrophoresis principle with subtypes. Discuss zone and moving boundary electrophoresis. 15
2. Explain different vibrations observed in IR with detectors used. Write a note on FTIR. 15
3. Explain the instrumentation of UV with Beer-Lambert's law in detail. 15
4. Explain principle, instrumentation of NMR. Discuss factors affecting chemical shift. 15
5. Comment on differences between FES and AAS. Explain with all the preferential points. 15

P.T.O.

6. Describe Gas chromatography instrumentation with principle and advantages. 15
7. Describe the sample handling system and ionization techniques used in mass spectroscopy. 15
8. Discuss the principle, pumps used and detectors in HPLC. 15