

Code No: B134101

**R13**
**SET - 1**
**IV B. Pharmacy I Semester Supplementary Examinations, Oct/Nov- 2019**
**PHARMACEUTICAL ANALYSIS-II**

Time: 3 hours

Max. Marks: 70

 Note: 1. Question paper consists of two parts (**Part-A** and **Part-B**)

 2. Answering the question in **Part-A** is Compulsory

 3. Answer any **THREE** Questions from **Part-B**
**PART -A**

1. a) What is an auxochrome? Write its significance in UV spectroscopy. (4M)
- b) Write in brief on Electron Impact ionization method. (3M)
- c) What is the principle involved in ORD? Write its applications. (4M)
- d) With a neat diagram describe experimental set-up for TLC. (4M)
- e) Write short notes on McLafferty rearrangement. (3M)
- f) What is SDS-PAGE? Write its applications. (4M)

**PART -B**

2. a) With a neat sketch explain the instrumentation and applications of double beam UV spectroscopy. (10M)
- b) Write a note on derivative UV spectroscopy. (6M)
3. a) Write the principle involved in NMR spectroscopy. (6M)
- b) Write in detail on analyzers used in Mass spectrometry. (10M)
4. Write in detail on (16M)
  - (a) XRD
  - (b) DSC graphs
5. a) Write in detail on stationary phases used in gel chromatography. (8M)
- b) How do you analyze a TLC plate? Write in brief on R<sub>f</sub> value. (8M)
6. a) Write in detail on detectors used in HPLC. (8M)
- b) Write a note on mobile phases used in GC. (8M)
7. Give reasons for the following.
  - a) -COOH and -OH groups can be identified by using Mass spectrometry. (4M)
  - b) Deuterated solvents are used in preparing samples for NMR analysis. (4M)
  - c) Circular dichroism spectroscopy helps differentiate optical isomers. (4M)
  - d) TLC is better than paper chromatography for compound analysis. (4M)