Roll No. | | | | | | | | | | | | |

Total No. of Pages : 02

Total No. of Questions : 10

B.Pharmacy (Sem.–8)

PHARMACEUTICAL ANALYSIS/ PHARMACEUTICAL ANALYSIS-III

Subject Code : PHM-482

M.Code : 46241

Time : 3 Hrs. Max. Marks : 80

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of FIFTEEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains FOUR questions carrying TEN marks each and students have to attempt any THREE questions.**

SECTION-A

1. Write short notes on :

a) Chromophore

b) Red shift

c) Vibration mode in IR

d) Overtone

e) Molar absorption

f) Miller indices

g) Space lattice

h) Shielding

i) Upfield shift

j) Molecular ion peak

k) Nitrogen rule

l) Effect of concentration on fluorescence

m) Specific rotation

n) Optical electron

n) Limitations of flame photometry

SECTION-B

2. Discuss the construction and working of photomultiplier tube in UV spectroscopy.

3. Discuss the sample preparation in IR spectroscopy.

4. Explain theory of spin-spin coupling.

5. Describe principle of polarimetry.

6. Write a short note on burners used in flame photometry.

SECTION-C

7. Describe the theory and instrumentation of fluorimetry.

8. What are the factors affecting the chemical shift in NMR? Describe the instrumentation of NMR.

9. Explain the theory of x-ray crystallography. Describe its pharmaceutical applications.

10. Write short notes on :

    a) Applications of polarimetry.

    b) Beer-Lambert law

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.