Roll No.

Total No. of Pages: 02

Total No. of Questions: 18

Pharm. D (Sem.-3)

# PHARMACEUTICAL ANALYSIS

Subject Code: 3.2 M.Code: 71435

Time: 3 Hrs. Max. Marks: 70

#### **INSTRUCTION TO CANDIDATES:**

1. SECTION-A contain SEVEN questions. Attempt any FIVE questions. Each question will carry TWO marks. Attempt any SIX

- 2. SECTION-B contains EIGHT questions (Short Essay Type). questions. Each question will carry FIVE marks.
- 3. SECTION-C contains THREE questions (Long Essay Type). Attempt any TWO questions. Each question will carry FIFTEEN marks.

#### **SECTION-A**

Q1. What is the function of regulatory control in pharmaceutical analysis? Q2. Discuss Ilkovic's equation in polarigraphy. Q3. What types of electrodes used in Amperometric titration? Q4. Define bathochromic shift. Q5. Define X-ray diffraction. Q6. Explain fragmentation. Q7. Define DSC and DTA.

## SCECTION-B

- Q8. Discuss fundamental laws of photometry.
- Q9. What are the factors affecting fluorescence intensity?

1 | M-71435 (S15)-128

- Q10. What information can be obtained from IR spectroscopy for structure elucidation?
- Q11. Discuss concept of statistical quality control.
- Q12. What is the principle of UV spectroscopy? Discuss its applications.
- Q13. Explain significance of reference electrodes and indicator electrode in potentiometer.
- Q14. Explain various factors affecting column efficiency.
- Q15. Give an account on Gel filtration and affinity chromatography.

### SECTION-C

- Q16. Describe theory and instrumentation of gas chromatography. Explain typical gas chromatogram,
- Q17. Give an account on theory, instrumentation and applications of atomic absorption spectroscopy.
- Q18. Discuss theory, nebulization, flame and flame temperature, interferences in Flame photometry.

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.

2 | M-71435 (S15)-128