

[This question paper contains 2 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 3846

J

Unique Paper Code : 2176000003

Name of the Paper : SEC : LAB TESTING AND
QUALITY ASSURANCE

Name of the Course : **All Undergraduate Courses**

Semester . : II/IV/VI

Duration : 1 Hours

Maximum Marks : 30

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any **Two** questions.

1. (a) Explain the role of drug regulatory agencies like the FDA and the CDSCO in the life sciences industry.

(b) Describe the responsibilities of a Quality Control Chemist in pharmaceutical manufacturing.

(c) What are Quality Management Systems? Discuss their importance in the life sciences industry.

(5,5,5)

P.T.O.

2. (a) Differentiate between gravimetric and volumetric methods with suitable examples.

(b) Describe any two chromatographic techniques and their application in qualitative analysis.

(c) Name any three sub-sectors of the life-sciences industry. (5,5,5)
3. (a) What are the key steps in sample preparation for lab analysis?

(b) Discuss good storage practices and how they affect sample integrity.

(c) Outline the requirements for obtaining quality certifications in the pharmaceutical or cosmetic industries. (5,5,5)
4. (a) What is calibration? Explain its importance in laboratory measurements.

(b) Describe the process of statistical analysis of laboratory data for quality control.

(c) Explain the guidelines for sample preservation and the importance of following standard protocols. (5,5,5)