

[This question paper contains 2 printed pages.]

**Your Roll No.....**

**Sr. No. of Question Paper : 3882** **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 Hour

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) What is the importance of sample preparation in laboratory testing?  
  
(b) Give an example of a common lab instrument and describe how it is calibrated.  
  
(c) Write a short note on subsectors of life sciences industry. (5,5,5)

P.T.O.

2. (a) What is chromatography? Also, explain how to calculate Retention factor.
- (b) What is quality management system?
- (c) What are the key principles of Quality Assurance?  
(5,5,5)
3. (a) Define Good Storage Practices (GSP) and its relevance in a lab. What is the ideal storage condition for light-sensitive chemicals?
- (b) What are the characteristics of a good quality control program?
- (c) What is the purpose of standard operating procedure (SOP).  
(5,5,5)
4. Write short notes on **ANY THREE** :
- (a) Troubleshooting in quality control
- (b) Accuracy and precision
- (c) Electroanalytical method
- (d) Drug regulatory agency  
(5,5,5)