

Sr. No. of Question Paper: 4664
Unique Paper Code: 2176000003
Name of the Paper: (SEC) Lab Testing and Quality Assurance
Name of the Course: B.Sc. (Hons)/ B.Sc. (Prog) / All undergraduate courses
Semester : II/ IV
Duration: 1 Hour
Maximum Marks: 30

Instructions for candidates

- a) Write your Roll No. on the top immediately upon receipt of this question paper.
- b) Attempt any two questions.
- c) All questions carry equal marks

Q1.

- a. Define
 - i. Reference Material
 - ii. Performance Evaluation (PE) Samples
- b. Write a short note on Drug regulatory agencies.
- c. Define Primary standard. State any five characteristics of the primary standard.
(5,5,5)

Q2.

- a. Fill in the blanks
 - i. The less adsorbed components are found at the _____ of the column chromatograph.
 - ii. _____ chromatography is also called medium pressure column chromatography.
 - iii. _____ chromatography separates according to the different molecular weights.
 - iv. Compounds are adsorbed at different regions due to _____ differences.
 - v. Chromatography is derived from the greek word “ kroma” which means _____
- b. What is the retardation factor? How is it calculated? On what factors does the R_f value of a compound depend?
- c. Distinguish between absorption spectroscopy and emission spectroscopy. (5,5,5)

Q 3.

- a. Write a short note on
 - I. Working of Acid-base indicator
 - II. Potentiometric titration
- b. Discuss the Government regulations in cosmetics industries.
- c. Why are solutions of KMnO₄ and Na₂S₂O₃ generally stored in dark reagent bottles? Give an example of redox titration.
(5,5,5)

Q4.

- a. What is the Scope of the Pharmaceutical quality management system?
- b. Discuss the procedure of calibration of the volumetric flask.
- c. Write a short note on trouble shooting in quality control.
(5,5,5)