SAMPE PAPER

Paper DSE: Instrumentation and Biotechniques

Short answer type question

1. Define the following term

a). Resolving power f) Partition coefficient in chromatography

b). Numerical aperture

c). Magnification

d)Fluorescent

e) limit of resolution

1. Discus the principle and application of paper chromatography
2. How dark field microscopy different from other optical microscopy?
3. What are the difference between TEM and SEM?
4. What is special about affinity chromatography
5. Discus the process of gel electrophoresis
6. Justify paper chromatography is a 2D chromatography
7. Discuss zymogram technique
8. What are the difference between Dark Field and Phase Contrast microscopy
9. Explain confocal microscopy
10. Write a note on Chromatography
11. What are the principle of isoelectric focusing
12. Write the application of Agarose gel electrophoresis
13. What is micrometry
14. What is column chromatography and its different types
15. What are the principle and application of native polyacrylamide gel electrophoresis
16. Discuss 2D gel electrophoresis
17. Discuss of role of ninhydrin in separation of amino acid by paper chromatography
18. What is the use of immersion oil in microscopy?
19. What is column packing and fraction collection

Long answer questions

1. Discuss the process of SDS PAGE.
2. Explain Ion-Exchange Chromatography
3. Explain Fluorescence Microscopy with diagram
4. Write in detail about HPLC
5. With diagram explain affinity chromatography
6. Discuss Thin Layer Chromatography
7. Explain electron microscopy
8. Write about bright filed microscopy
9. How do protein separate in SDS Page
10. Discuss gel chromatography.