

VTM NSS COLLEGE, DHANUVACHAPURAM
DEPARTMENT OF ZOOLOGY
QUESTION BANK

Semester 3 Methodology and Perspectives in Zoology

1 mark questions

1. Define Rf value
2. What is vital stain
3. What is partition coefficient
4. Define Svedberg unit
5. Metachromasia
6. Objectives of fixative
7. What gives information on samples surface topography
8. Resolution
9. Magnification
10. What are the difference between simple and compound microscope
11. Give the full form of TEM and SEM
12. What is RCF
13. What is ph
14. Name two mounting mediums
15. Uses of chromatography
16. Principle of flurosent microscope
17. What do you mean by taxidermy
18. What is sedimentation coefficient
19. What is darkfeild microscope
20. What are the disadvantages of phase contrast microscope
21. Distinguish between diffential and density gradient centrifugation
22. Write down the principle of colorimeter

2 mark questions

1. Describe the principle and uses of phase contrast microscopy
2. Explain the different principles involved in chromatography
3. What are the special devices used in phase contrast microscopy? Comment on its function
4. Write notes on the application of autoradiography
5. A student needs to identify aminoacids present in the haemolymph of termite ,which technique you may suggest
6. What are the optical parts of light microscope
7. Briefly explain Beer- Lamberts law
8. What are the importance of microtome in tissue preparation
9. Mention th importance of spectrophotometry in research
10. A student collected a rare butterfly and preserved in formaldehyde ,what is your opinion in this regard

VTM NSS COLLEGE, DHANUVACHAPURAM
DEPARTMENT OF ZOOLOGY
QUESTION BANK

11. Write note on the different type of chromatography
12. Mention important component of TEM
13. How phase change is attained in phase contrast microscope
14. Describe the different types of microtomes

4 mark questions

1. Describe the principle and applications of chromatography
2. Discuss the major steps involved in taxidermy
3. Describe darkfield microscopes
4. What is fixation? Comment on any two common fixatives
5. What is spectrophotometry? List out its applications
6. Differentiate light microscopy and electron microscopy

Essay questions

1. Give the principle and procedure of
2. Describe the different steps involved in the histological preparation of tissues
3. Give an account on the different parts of compound microscope
4. Write an essay on phase contrast microscopy. Give its advantages
5. Advancement in instrumentation technology results in the progress in science. Elaborate
6. What are the principles of chromatography. Briefly describe the different types of biological studies
7. Write an account on types of centrifuge and centrifugation
8. What is the principle of TEM? Elaborate tissue preparation for light microscopy
9. Write the difference between TEM and SEM