LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034 **M.Sc.** DEGREE EXAMINATION – **ZOOLOGY** FIRST SEMESTER – APRIL 2010 **ZO 1817 - HISTOCHEMISTRY & MICROTECHNIQUE** Date & Time: 03/05/2010 / 1:00 - 4:00 Dept. No. Max.: 100 Marks PART – A $(10 \times 2 = 20 \text{ Marks})$ Answer ALL the questions 1. What is fixative? 2. Comment on Cryo M Bed. 3. What is infiltration? 4. Comment on Collagen. 5. What is Mayer's albumen? 6. Comment on Diethylene oxide. 7. What is necropsy? 8. Comment on stoke shift. 9. What is lake? 10. Expand: DPX & PAS. PART – B $(4 \times 10 = 40 \text{ Marks})$ Answer any FOUR 11. Write notes on cold knife method and its advantages. 12. Classify lipids and give an account of Oil Red O method. 13. Describe the procedure involved in mounting of soil microarthropods. 14. Write notes on identification and extraction of DNA. 15. Describe the working principle of Fluorescent microscope. 16. Give an account on insect kill bottle and pinning of insects. PART – C $(2 \times 20 = 40 \text{ Marks})$ Answer any TWO

- 17. Describe the working principle of SEM and its sample preparation.
- 18. What is microtechnique? Explain the different steps involved in paraffin sectioning.
- 19. Describe the preparative steps of tissue processing for Ultramicrotomy.
- 20. Give an account on Autoradiography and its applications.
