

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For Candidates admitted during the academic year 2010 – 11)

SUBJECT CODE: ZL/ME/BM54

B.Sc. DEGREE EXAMINATION NOVEMBER 2012
BRANCH VI A – ADVANCED ZOOLOGY & BIOTECHNOLOGY
FIFTH SEMESTER

COURSE : MAJOR ELECTIVE
PAPER : BIOMEDICAL INSTRUMENTATION AND TECHNIQUES
TIME : 3 HOURS **MAX. MARKS: 100**

SECTION- A

ANSWER ALL QUESTIONS

(10x3=30)

1. What is a resolving power of a microscope?
2. Mention the differences between light compound and electron microscope.
3. What is isoelectric point?
4. Mention the applications of HPLC.
5. Define homogenization.
6. Write a note on southern blotting.
7. What is CT scan?
8. Differentiate external radiotherapy from internal radiotherapy.
9. What is a pacemaker?
10. Mention the importance of Heart lung machine.

SECTION- B

ANSWER ANY FIVE QUESTIONS

(5x6=30)

11. Write a note on the principle and applications of phase contrast microscope.
12. Mention the principle involved in autoradiography and add a note on its applications in biology.
13. Write an account on the types of centrifugation.
14. Briefly mention the procedure for TLC.
15. What is CFA? Mention its importance in autoanalyser.
16. Write a note on the medical applications of laser.
17. Mention the advantages and disadvantages of PET scan.

SECTION-C

ANSWER ANY TWO QUESTIONS

(2x20=40)

18. Describe immunoelectrophoresis in detail.
19. Give a detailed account on DNA fingerprinting, RAPD and RFLP.
20. Write an essay on physiological Assist Devices.
21. Explain in detail the biomedical recorders.
