

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For Candidates admitted during the academic year 2008 – 09 & thereafter)

SUBJECT CODE: ZL/ME/BM54

B.Sc. DEGREE EXAMINATION NOVEMBER 2011
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. Write the uses of light microscope.
2. What is the principle of Flow cytometry?
3. Mention the different types of Biomedical Recorders.
4. What is Homogenization?
5. Define Electromyography.
6. What is Thermo luminescence dosimeter.(TLD)?
7. Mention the uses of Radiotherapy.
8. What is MRI?
9. Comment on Pacemaker.
10. Name the different types of artificial heart valves.

SECTION- B

ANSWER ANY FIVE QUESTIONS

(5x6=30)

11. Describe the Phase contrast microscope.
12. Explain the different types of centrifugation techniques
13. Give an account on Gas chromatography.
14. Briefly discuss the importance of Heart-Lung Machine
15. Explain Scintillation Counter and its significance.
16. Write the importance of Laser in medicine.
17. Enumerate the uses of Positron Emission Tomography. (PET)

SECTION-C

ANSWER ANY TWO QUESTIONS

(2x20=40)

18. Give a detailed account on molecular marker.
19. Define Electrophoresis. Explain any three types of electrophoretic techniques.
20. Explain in detail about Radiation safety instrumentation
21. Give a detailed account of DNA fingerprinting technique.
