

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted from the academic year 2011 – 2012 & thereafter)

SUBJECT CODE: 11ZL/UI/BM23

B.A/B. Sc.B.Com/B.S.W./B.V.A DEGREE EXAMINATION, NOVEMBER - 2014

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

SECTION – A

ANSWER ALL QUESTIONS: **(10 X 3 = 30)**

1. Give the principle of phase contrast microscope
2. Comment on Flow cytometry
3. Mention the types of chromatography
4. What is Cell fractionation?
5. Define probes and mention its applications
6. What is an Autoanalyzer?
7. Comment on Ultrasonic Imaging
8. Distinguish between PCG and VCG
9. What are pacemakers?
10. Mention the types of dialysis

SECTION – B

ANSWER ANY FIVE QUESTIONS : **(5 X 6 = 30)**

11. Describe the technique of Autoradiography.
12. Explain DNA fingerprinting.
13. Give the principle and working mechanism of Geiger Muller counter.
14. Outline the procedure for Immunoelectrophoresis.
15. Write notes on FISH technique.
16. Elaborate the use of Laser as a biomedical equipment.
17. Give an account of artificial heartvalves.

SECTION – C

ANSWER ANY TWO QUESTIONS **(2 x 20 = 40)**

18. Give the principle construction and working mechanism of Scanning Electron Microscope.
19. Outline the different types of Centrifugation with examples.
20. Give a detailed account of Computer Tomography and its applications.
21. With a neat labeled diagram, describe the working of Heart-Lung machine.
