STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086. (For candidates admitted during the academic year 2011-2012)

SUBJECT CODE : 11PH/ME/BM53

B.Sc. DEGREE EXAMINATION NOVEMBER 2013 BRANCH III - PHYSICS FIFTH SEMESTER

COURSE	:	MAJOR – ELECTIVE	
PAPER	:	BIO-MEDICAL PHYSICS	
TIME	:	3 HOURS	MAX. MARKS : 100

SECTION - A

ANSWER ALL QUESTIONS:

(10x3=30)

- 1. What are X rays?
- 2. Define the term Angiography.
- 3. What is ultrasound?
- 4. Mention two uses of ultrasound.
- 5. Define Cardiac Cycle.
- 6. What is ECG?
- 7. Define Magneto Biology.
- 8. What is Lorentz Force?
- 9. Define half life of a radioactive substance.
- 10. What is PET?

SECTION – B

ANSWER ANY FIVE QUESTIONS:

- 11. Write a note on X-ray production.
- 12. Explain briefly Stethoscope.
- 13. Draw the diagram of nerve cell and label its parts.
- 14. Write note on EEG.
- 15. Briefly explain Radioactivity.
- 16. Give the effect of radiation on living tissue.
- 17. Write note on sound spectra.

SECTION – C

ANSWER ANY TWO QUESTIONS:

(2x20=40)

- 18. Give the applications of X ray imaging in Medicine.
- 19. Write briefly on Bio magnetism and Bio-electricity.
- 20. Write an essay on Nuclear Medicine.
- 21. Highlight the importance of Medical Sonography.

(5x6=30)