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

SUBJECT CODE: 11PH/ME/BM53

B.Sc. DEGREE EXAMINATION NOVEMBER 2016 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. Write any two applications of x-ray imaging?
- 3. Define branch of Agnostics
- 4. What is phonocardiography?
- 5. What are types of Synapse?
- 6. Write any three applications of diagnostic techniques?
- 7. Define Lorentz force.
- 8. What is MEG?
- 9. Define Gamma radiation.
- 10. What is nuclear radiactivity?

SECTION - B

ANSWER ANY FIVE QUESTIONS:

(5x6=30)

- 11. Explain the photographic x-ray films.
- 12. Define ultrasound, and write the uses of ultrasound.
- 13. Explain the electrophysiology in general.
- 14. Explain the spontaneous electrical activity in Bio-magnetism.
- 15. Explain the radioactivity in medical diagnostics?
- 16. Explain the radiation therapy for cancer.
- 17. Explain the IVP.

SECTION - C

ANSWER ANY TWO QUESTIONS:

(2x20=40)

- 18. Explain the angiography and digital subtraction angiography (DSA).
- 19. Explain the electrocardiography ECG and its uses.
- 20. Explain the position emission Tomography PET.
- 21. Write the applications of diagnostics techniques in (i) EEG (ii) MEG.
