



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION - MEDICAL LAB. TECHNOLOGY

FOURTH SEMESTER – APRIL 2013

ML 4809 - NON-INVASIVE TECHNIQUES

Date : 25/04/2013
Time : 1:00 - 4:00

Dept. No.

Max. : 100 Marks

SECTION –A

Answer ALL questions:

10x2=20 marks

1. Schematically represent the production of gamma rays in PET.
2. Differentiate transducer from sensor.
3. List down the sources of biomedical signals in human body.
4. Define achromatopsia.
5. Mention the types of computed tomography.
6. Define montage electrode selector.
7. Name the leads used in electrocardiography.
8. Mention the interfering factors that occur while performing EEG.
9. Comment on choroid neovascular membrane.
10. Write the difference between grandmal and petitmal epilepsy.

SECTION B

Answer any FOUR of the following:

4x10=40 marks

11. Draw and explain the types of biopotential electrodes.
12. Give an account on electroretinography
13. Explain the principle and procedure of MRI.
14. Describe the different phases, procedure and clinical applications of fluorescein angiography.
15. Discuss the available methods to test the stress.
16. Explain the principle, procedure and clinical findings of mammography.

SECTION-C

Answer any TWO of the following:

2x20=40 marks

17. Describe the working mechanism, procedure and benefits of X rays.
18. Explain the principle, procedure and advantages of positron emission tomography.
19. Give a detailed account on evoked potential studies.
20. Elaborate the principle, procedure and applications of ultrasonography.
