



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**M.Sc. DEGREE EXAMINATION – MEDICAL LAB TECHNOLOGY**

**FOURTH SEMESTER – APRIL 2016**

**ML 4809 / ML 4814 - NON-INVASIVE TECHNIQUES**

Date: 15-04-2016

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

**Answer ALL the questions**

**PART A**

**10 x 2 = 20 Marks**

1. List the benefits of ultrasonography.
2. What are the types of visual acuity test.
3. Expand DEXA and SPECT.
4. Mention the need for breast compression in mammography.
5. Write the purpose of microangiography.
6. What are the risks of oculoplethysmography.
7. Illustrate the emission of electron in Positron Emission Tomography.
8. Enumerate the risks of colonoscopy.
9. Draw the basic medical instrumentation system.
10. Write the purpose of electroencephalography.

**Answer any FOUR of the following**

**PART B**

**4 x 10 = 40 Marks**

11. Explain the principle and procedure of computed tomography.
12. Give an account on ultrasonography.
13. Describe the principle and procedure of direct and indirect ophthalmoscopy.
14. Discuss the principle, patient preparation and procedure of X rays.
15. Draw and explain biopotential electrodes.
16. Describe the procedure and patient preparation of fluoroscopy.

**Answer any TWO of the following**

**PART C**

**2 x 20 = 40 Marks**

17. Discuss the principle, patient preparation and procedure of coronary angiography.
18. Explain the principle, procedure and advantages of positron emission tomography.
19. Describe the patient preparation, procedure and disadvantages of MRI.
20. Give an account on the principle, patient preparation and procedure of electroencephalography.

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