

B.Sc IV SEM OEC- PHYSICS(MEDICAL PHYSICS)

VISIT TO DHARWAD INSTITUTE OF MENTAL HEALTH AND NEUROSCIENCES(DIMHANS)

Karnatak University Dharwad, has introduced " MEDICAL PHYSICS" as one of the Open Elective subjects at B.Sc IV sem level. Under this title, students study Human anatomy, Medical Diagnostics tools such as X-Ray , CT Scan, MRI and Sonography and Radiation Physics including radiation detectors. As an academic activity, all students of B.Sc IV Sem (OEC - Physics) class visited DIMHANS on 12th July 2023 to see MRI Machine.

Dr.Saraswati, Medical Superintendent, DIMHANS introduced all students to Radiology Department and Operators and Technicians there. All students were first introduced to CT Scan machine and saw all operations of that machine. Students enquired about few technical specifications of Seimens CT Machine.

Students were then introduced to MRI machine. All students were asked to remove metal items like key chain, rings etc. Students were guided into chamber where MRI instrument is housed. MRI machine at DIMHANS is using 1.5 Tesla Magnetic field produced by Superconducting Magnets. It has 170mm long bore. Students were explained how powerful magnetic field is and why person going near MRI machine should not possess metal objects.

Students discussed with operators technicians , the problem of person who has metal implants(Pace maker, Ics, Rods , tooth implants etc) in body. They understood how magnetic field attracts metals and persons possessing metal objects. Operators of MRI showed all different types of coils used in MRI Scanning.

Mr.Fakiresh, Operator , showed different MRI images of brain explained how it is different from CT scan. He showed how MRI is capable of detecting Grey matter, white matter and different types of internal injuries in head. He also showed the difference between T1 sequence and T2 sequence of MRI images. Advantages of taking image in all three planes such as axial, coronal and saggital.

This visit provided students a real time experience and more insight into MRI imaging technique and its advantages. Over all there was good discussion and interaction with all of Radiology dept.

This Visit to MRI centre , DIMHANS was organized by Department Of Physics, Karnatak Science Coege, Dharwad . M.R.Ranganath, HOD Of Physics, KSCD was present during this visit.

