

M. Sc RT Curriculum

First Year:

1.	Communication skills with patients, patient care. development of practical & clinical skills, maintenance of log book
2.	Knowledge of radiation physics, radiobiology, physics of radiotherapy, radiation equipment and quality assurance.
3.	Theoretical and working knowledge of radiotherapy machines
4.	Demonstration of dosimetric & other equipment
5.	Assisting dosimetry, daily QA of machines
6.	Treatment simulation and mould room techniques
7.	Maintenance of patient records, research methodology, approval of preliminary synopsis of thesis
8.	Seminar presentations on syllabus topics, poster and paper presentations
9.	Demonstration of emergency situations (clinical and technical) on machines
10.	Radiography practice on phantom and its evaluation
11.	Safe practices on machine using personal monitoring devices

Second Year:

1.	Knowledge of radiotherapy planning and techniques, radiation dosimetry, radiation protection, modern radiotherapy equipment and techniques.
2.	Radiotherapy machine postings
3.	Seminar presentations and literature review
4.	Development of teaching skills and techniques
5.	Completion and submission of thesis
6.	Patient treatment plan execution on machines
7.	Manual planning using Isodose charts
8.	Dosimetry of teletherapy machines as per TRS-398 protocol and dosimetry of brachytherapy
9.	Radiation survey of radiotherapy machines
10.	Practice on management of emergency situations in radiotherapy treatments
11.	Practical record of dosimetric and clinical work, log book maintenance
12.	Acquisition of patient data from different modalities
13.	Follow up record of patients during the treatments

Weekly Classes

DAY	MRT I	MRT II
Monday	Radiation physics and radiobiology	Radiotherapy planning and techniques
Tuesday	Physics of radiotherapy	Modern radiotherapy equipment
Wednesday	Radiation equipment	Brachytherapy machines and treatment techniques
Thursday	Radiation protection	Modern radiotherapy treatment techniques
Friday	QA and QC of machines	Radiation dosimetry and radiation protection
Saturday	Practical demonstration of machines	Dosimetry and survey of machines



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