#### **Government of India**

# Atomic Energy Regulatory Board Radiological Safety Division

Date: December 31, 2020

#### Radiotherapy Technologists courses in India

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# A. Qualification Requirement

The qualification stipulated for radiation therapy technologist in AERB safety code AERB/RF-SC/MED-1 (rev.1), 2011 is as follows:

i. 10+2 or equivalent examination with science subject from a recognized university or board

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ii. 2 years radiation therapy technologist course or equivalent based on the minimum course content prescribed by the competent authority passed from a recognized institution with infield training in radiotherapy.

Further, the candidates who have already successfully completed the Radiation Safety Certification Program for Radiotherapy Technologists conducted by RP & AD, BARC and obtained the radiation professional registration number in e-LORA are also eligible to work as a radiotherapy technologists in the country.

#### **B.** AERB Assessed Training Courses

List of Institutions/Universities conducting Radiotherapy Technologist training courses which are in accordance with AERB requirements as on December, 2020 are given in the Annexure-I.

### Annexure-I

Sr. No.	Name of the institute	Course Name	Affiliation
1.	Sri Venkateswara Institute of Medical Sciences University(SVIMS) Tirupati-517507 Andhra Pradesh	Diploma in Radiotherapy Technology (DRT)	SVIMS, Tirupati (Deemed University)
2.	Yashoda Super Speciality Hospital Hyderabad-500082 Andhra Pradesh	Diploma in Radiotherapy Technician (DRT)	Telangana Para Medical Board,Hyderabad, Telangana
3.	Nizams Institute of Medical Sciences(NIMS) Hyderabad-500082 Andhra Pradesh	Post Graduate Diploma in Radiation Therapy Technology	NIMS, Hyderabad (Deemed University)
4.	GSL Paramedical Institutions Rajahmundry-533105 Andhra Pradesh  Formerly known as:  GSL Trust Cancer Hospital & Research Centre, Rajahmundry-533105 Andhra Pradesh	Diploma in Radiotherapy Technician(DRT)	Andhra Pradesh Para Medical Board,Hyderabad, Andhra Pradesh
5.	M.N.J. Institute of Oncology Hyderabad-500004 <b>Andhra Pradesh</b>	Diploma in Radiotherapy Technician (DRT)	Telangana Para Medical Board,Hyderabad, Telangana
6.	Medwin Institute of Medical Sciences Hyderabad-500001 Andhra Pradesh (Presently course is stopped)	Diploma in Radiotherapy Technician	Telangana Para Medical Board,Hyderabad, Telangana
7.	Basavatarakam Indo- American Cancer Hospital & Research Institute Hyderabad-500034 Andhra Pradesh	Diploma in Radiotherapy Technician (DRT)	Telangana Para Medical Board,Hyderabad, Telangana

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8.	Sri Venkateswara Institute of Medical Sciences University(SVIMS) Tirupati-517507 Andhra Pradesh	B.Sc. Radiotherapy technology	Sri Venkateswara Institute of Medical Sciences University(Deemed University) Tirupati-517507 Andhra Pradesh
9.	Dr. B. Borooah Cancer Institute, Gopinath Nagar Guwahati-781016 <b>Assam</b>	Two Years Diploma in Radiotherapy Technology (DRTT)	Srimanta Sankardeva University of Health Sciences,Guwahati, Assam
10.	Dr. B. Borooah Cancer Institute, Gopinath Nagar Guwahati-781016 <b>Assam</b>	Post Graduate Programme in Radiotherapy Technology (PGDRTT)	Gauhati University,Guwahati, Assam
11.	Indira Gandhi Institute of Medical Sciences (IGIMS), Regional Cancer Centre Patna-800014 Bihar	Diploma in Medical Radiotherapy Technology (DMRT)	IGIMS, Patna (Deemed University)
12.	Indira Gandhi Institute of Medical Sciences (IGIMS), Regional Cancer Centre Patna-800014 Bihar	Bachelor of Medical Radiotherapy Technology	IGIMS, Patna (Deemed University)
13.	Mahavir Cancer Sansthan Patna-801505 <b>Bihar</b>	Diploma in Medical Radiotherapy Technology (DMRT)	Aryabhatta Knowledge University, Patna, Bihar
14.	Postgraduate Institute of Medical Education and Research (PGIMER) Chandigarh-160012 Chandigarh	B.Sc Medical Technology (Radiotherapy)B.Sc. (MRT)	PGIMER, Chandigarh ( Deemed University)
15.	Pt. J. N. M. Medical College & Dr. B.R. Ambedkar Memorial Hospital Raipur-492001 Chattisgarh	M.Sc (Radiotherapy Technology)M.Sc. (RTT)	Ayush and Health Sciences University of Chattisgarh,

16.	Rajiv Gandhi Cancer Institute & Res. Centre New Delhi-110085 <b>Delhi</b>	B.Sc. Medical Technology (Radiotherapy) (BMRT)	Guru Gobind Singh Indraprastha University,New Delhi
17.	Smt. L. P. Patel Institute of Medical Laboratory Technology, Shri Krishna Hospital & Research Centre Karamsad-388325 Gujarat	B.Sc. Medical Technology(Radioth erapy) [B.ScMT(RTT)]	Sardar Patel University Vallabh Vidyanagar,Gujarat
18.	Gujarat Cancer & Resaerch Centre, Ahmedabad-380016 Gujarat	Course in Medical Radiotherapy Technology ( CMRT)	Technical Examination Board, Gandhinagar, Gujarat
19.	Pt. B.D. Sharma P G Institute of Medical Sciences Rohtak-124001 Haryana	Three Year Diploma in Radiography & Radiotherapy Technology	Pt. B.D. Sharma University of Health Sciences, Rohtak,Haryana
20.	Pt. B.D. Sharma P G Institute of Medical Sciences Rohtak-124001 Haryana	B.Sc In Radiotherapy Technology Course	Pt. B.D. Sharma University of Health Sciences, Rohtak,Haryana
21.	M.M Institute of Medical Sciences and Research, Ambala-133207, <b>Haryana</b>	B.Sc. Medical Technology - Radiotherapy	Maharshi Markandeshwar ( deemed to be) University, Ambala- 133207, Haryana
22.	Regional Cancer Centre, Indira Gandhi Medical College Shimla-171001 Himachal Pradesh	B.Sc. Medical Tech. (Radio-diagnosis & Radiotherapy)	Himachal Pradesh University, Shimla,Himachl Pradesh
23.	Sher-i-Kashmir Institute of Medical Sciences(SKIMS) Srinagar-190011 Jammu & Kashmir	B.Sc Radiation Technology B.Sc (RT)	SKIMS, Srinagar (Deemed University)
24.	Kasturba Hospital Manipal-576104 <b>Karnataka</b>	B.Sc in Medical Radiotherapy Technology [B.Sc. MRT]	Manipal Academy Of Higher Education, Manipal, Karnataka (Formerly known as Manipal

			University, Manipal, Karnataka)
25.	Kasturba Hospital Mangalore-575001 <b>Karnataka</b>	Bachelor of Science in Medical Radiotherapy Technology [B.Sc. MRT]	Manipal Academy Of Higher Education, Manipal, Karnataka (Formerly known as Manipal University, Manipal, Karnataka)
26.	Father Muller Medical College & Hospital Mangalore-575002 Karnataka	B.Sc. Radiotherapy[B.Sc.( RT)]	Rajiv Gandhi University of Health Sciences, Bangalore,Karnataka
27.	HCG-Bangalore Institute of Oncology Bangalore-560027 Karnataka (Previously known as Bangalore Institute of Oncology)	B.Sc. Radiotherapy[B.Sc.( RT)]	Rajiv Gandhi University of Health Sciences, Bangalore,Karnataka
28.	Manipal Hospital Bangalore-560017 <b>Karnataka</b>	Bachelor of Science in Medical Radiotherapy Technology [B.Sc. MRT]	Manipal University,Manipal, Karnataka
29.	Kidwai Memorial Institute of Oncology Bangalore-560029 Karnataka	B.Sc. Radiotherapy [B.Sc.(RT)]	Rajiv Gandhi University of Health Sciences, Bangalore,Karnataka
30.	Narayana Hrudayalaya Institute of Medical sciences, Bangalore-560099 <b>Karnataka</b>	B.Sc. Radiotherapy [B.Sc.(RT)]	Rajiv Gandhi University of Health Sciences, Bangalore,Karnataka
31.	Victoria Hospital Banglore Medical Collage & Research Institute Bangalore-560 002 Karnataka	B.Sc. Radiotherapy [B.Sc.(RT)]	Rajiv Gandhi University of Health Sciences, Bangalore,Karnataka

	T		T
32.	Bangalore Baptist Hospital Bellary Road, Hebbal Bangalore-560024 Karnataka	B.Sc. in Radiotherapy [B.Sc.(RT)]	Rajiv Gandhi University of Health Sciences, Bangalore,Karnataka
33.	School of Allied Health Sciences Manipal-575 104 Karnataka	B.Sc Medical Radiotherapy Technology (B.Sc MRT)	Manipal University Manipal,Karnataka
34.	R. L. Jalappa Hospital & Research Centre (A Teaching Hospital of Sri DevarajUrs Medical College) Tamaka, Kolar – 563 101, Karnataka	B.Sc. (Radiotherapy Technology)	Sri DevrajUrs Academy of Higher Education & Research Tamaka,Kolar , Karnataka (A Deemed University)
35.	A J Institute of Medical Sciences & research Centre, Kuntikana, Mangaluru- 575004 Karnataka	B.Sc. Radiotherapy	Rajiv Gandhi University of Health Sciences, Bangalore,Karnataka
36.	Sri Shankara Institute of Allied Health Sciences (A unit of Sri Shankara Cancer Center Foundation), Bangalore-560004, Karnataka	B.Sc Radiotherapy Technology	Rajiv Gandhi University of Health Sciences, Bangalore,Karnataka
37.	School of Medical Education, Centre for Professional and Advanced Studies, Gandhinagar, Kottayam  Formerly known as: Mahatma Gandhi University Kottayam-686008 Kerala	B.Sc in Medical Radiological Technology B.Sc (MRT)	Kerala University of Health Sciences, Thrissur  Formerly known as: Mahatma Gandhi University, Kottayam (Deemed University)
38.	Amrita Institute of Medical Sciences & Research Centre Kochi-682041 Kerala	Bachelor of Science- Medical Radiologic Technology(B.Sc- MRT)	AmritaVishwa VidyapeethamAmritaN agar, Coimbatore,Tamilnadu

39.	Malabar cancer Centre	Bachelor of Science	Kannur University,
	Kannur-670103	in Medical	Kannur Kerala
l	Kerala	Radiological	
		Technology [B.Sc(M.R.T)]	
40.	Malabar cancer Centre [From	Bachelor of Science	Kerala University of
10.	Session (2013-2017)	in Medical	Health Sciences,
	onwards]	Radiological	Thrissur
	Kannur-670103	Technology	
	Kerala	[B.Sc(M.R.T)]	
41.	Baby Memorial Collage of	Bachelor of Science	Kerala University of
	Allied Health Sciences	in Medical	Health Sciences,
	Indira Gandhi Road	Radiological	Thrissur
l	KOZHIKODE-673004 Kerala	Technology	
42.	Govt. Medical College,	[B.Sc(M.R.T)] Diploma in	Directorate of Medical
72.	Thrissur-680596, <b>Kerala</b>	Radiodiagnosis and	Education,
	111111111111111111111111111111111111111	Radiotherapy	Thiruvananthapuram,
		Technology	Kerala
43.	Court TD Medical Callege	Dinlama in	Directorate of Medical
43.	Govt. T.D. Medical College, Alapuzha-6888005, <b>Kerala</b>	Diploma in Radiodiagnosis and	Education,
	Alapuzha-0000003, Kelala	Radiotherapy	Thiruvananthapuram,
		Technology	Kerala
<u> </u>			
44.	Govt. Medical College	Diploma in	Directorate of Medical
l	Thiruvananthapuram – 69501 Kerala	Radiodiagnosis and	Education,
	Keraia	Radiotherapy Technology	Thiruvananthapuram, Kerala
<u> </u>		reciniology	Ketata
45.	Tata Memorial Hospital	Advance Diploma in	Maharashtra State
	Mumbai-400012	Radiotherapy	Board of Technical
	Maharashtra	Technology(ADRTT	Education, Mumbai,
4.6	D 14 C 4T 11"C	) 	Maharashtra
46.	Rashtra Sant Tukdoji Cancer Hospital & Research Centre	Advance Diploma in Radiotherapy	Maharashtra State Board of Technical
l	Nagpur-440027	Technology	Education, Mumbai,
	Maharashtra	(ADRTT)	Maharashtra
<u> </u>		,	
47.	School of Medical Assistant, INHS Asvini	Diploma in	Maharashtra University
	Mumbai-40005	Radiotherapy Technician	of Health Sciences, Nashik, Maharashtra
	Maharashtra	1 ecililician	Masilik, Maliarasilira
48.	Armed Forces Medical	Bachelor of	Maharashtra University
	College( Command Hospital	Paramedical	of Health Sciences,
	)(Southern Command)	Technology	Nashik, Maharashtra
	Pune-411040	(Radiotherapy)	, and the second

	Maharashtra	Course	
49.	Govt. Medical College & Hospital Nagpur-440003 <b>Maharashtra</b>	Bachelor of Paramedical Technology (Radiotherapy) Course	Maharashtra University of Health Sciences, Nashik, Maharashtra
50.	Govt. Medical College Hospital Aurangabad-431001 <b>Maharashtra</b>	Bachelor of Paramedical Technology (Radiotherapy) Course	Maharashtra University of Health Sciences, Nashik, Maharashtra
51.	Symbiosis Institute of Health Sciences Senapati Bapat Road Pune-411 004 Maharashtra (Only for candidate admitted in 2016,2017,2018)	B.Sc (Radiotherapy) Course  With a letter issued by Deenanath Mangeshkar Hospital, Pune indicating that the candidate has undergone all the required practical training for the Radiotherapy Technologist's course at their institute.	Symbiosis International University,Pune, Maharashtra
52.	Grant Medical College & Sir J.J. Group of Hospitals (Cama & Albless Hospital, Mumbai)-400008 Maharashtra	Bachelor of Paramedical Technology(Radioth erapy Technician) course  Valid with a certificate issued by Cama Hospital, Mumbai indicating that the candidate was admitted to the Radiotherapy Technologist's course at their	Maharashtra University of Health Sciences, Nashik, Maharashtra

		institute.	
53.	Pravara Rural Hospital & Medical College, Loni, Ahmednager-412736 <b>Maharashtra</b>	B.Sc. Radiotherapy Technology (B.Sc. RTT)	Pravara Institute of Medical Sciences ( Deemed University), Ahmednager-412736 Maharashtra
54.	All India Institute of Medical Sciences, Sijua P.O Dumduma, Bhubaneswar	BSc(H) Medical Technology in Radiotherapy	All India Institute of Medical Sciences, Bhubaneswar
55.	Jawaharlal Institute of Postgraduate Medical Education & Research (JIPMER) Pondicherry-605006 Pondicherry	B.Sc. RadiotherapyTechno logy	JIPMER, Pondicherry (Deemed University)
56.	Homi Bhabha Cancer Hospital (Tata Memorial Centre) District Civil Hospital Sangrur-400 012 <b>Punjab</b>	B.Sc (Radiotherapy) Technology Course	Baba Farid University of Health Sciences Faridkot,Punjab
57.	Guru Gobind Singh Medical College Faridkot-151203 <b>Punjab</b>	B.Sc. in Radiotherapy Technology [B.Sc.(RT)]	Baba Farid University of Health Sciences ,Faridkot, Punjab
58.	Christian Medical College Ludhiana-141008 <b>Punjab</b>	B.Sc. in Radiotherapy Technology [B.Sc.(RT)]	Baba Farid University of Health Sciences, Faridkot, Punjab
59.	Govt. Medical College & S.G.T.B. Hospital Amritsar – 143 001 Punjab	B.Sc in Radiotherapy Technology [B.Sc (RT)] Course	Baba Farid University of Health Sciences Faridkot,Punjab
60.	Advanced Cancer Diagnostic Tratment & Research Centre Plot no. B 15, Industrial Growth Centre Mansa Road, Near Centrel University of Punjab Bhatinda – 151 001 <b>Punjab</b>	B.Sc in Radiotherapy Technology [B.Sc ( RT)] Course	Baba Farid University of Health Sciences Faridkot, Punjab

61.	Sri Guru Ramdas Institute of Medical Sciences & Research Amritsar – 143501 <b>Punjab</b>	B.Sc. in Radiotherapy Technology	Sri Guru Ramdas University of Health Science Amritsar-143501 Punjab
62.	Mohandai Oswal Cancer Hospital, Ludhiana-141009 <b>Punjab</b>	B.Sc Radiotherapy Technology	I.K Gujral Punjab Technical University (IKG Punjab Technical University), Jalandhar- 144603 Punjab
63.	S. M. S. Medical College and Assoc. Group of Hospital, Ramsingh Road Jaipur-302004 <b>Rajasthan</b>	B.Sc Radiation Technology B.Sc. (RT)	Rajasthan University of Health Sciences,Rajasthan
64.	Dr. S.N. Medical College, Jodhpur-342003 <b>Rajasthan</b>	B.Sc Radiation Technology B.Sc. (RT)	Rajasthan University of Health Sciences,Rajasthan
65.	Geetanjali Medical College & Hospital, Udaipur-313002, Rajasthan	B.Sc. Radiotherapy Technology	Geetanjali University, Udaipur-313002, Rajasthan
66.	Sardar Patel Medical College & Assoc. Gr. Of Hospitals, Bikaner- 334003 Rajasthan	B.Sc Radiation Technology B.Sc. (RT)	Rajasthan University of Health Sciences,Rajasthan
67.	Apollo Speciality Hospital Chennai-600035 <b>Tamil Nadu</b>	Post Graduate Diploma in Radiotherapy Technology (PGDRT)	Alagappa University,Karaikudi, Tamil Nadu
68.	Apollo Hospital Enterprise Ltd., Chennai-600035 <b>Tamil Nadu</b>	B.Sc Radiotherapy Technology B.Sc. (RT)	The Tamilnadu Dr. M.G.R. Medical University, Chennai, Tamilnadu
69.	Christian Medical & Hospital, Vellore-632004 <b>Tamil Nadu</b>	B.Sc. in Radiotherapy Technology[B.Sc.(R T)]	The Tamilnadu Dr. M.G.R. Medical University, Chennai, Tamilnadu

70.	Cancer Institute, Adyar Chennai-600020 <b>Tamil Nadu</b>	B.Sc. in Radiotherapy Technology [B.Sc.(RT)]	The Tamilnadu Dr. M.G.R. Medical University, Chennai, Tamilnadu
71.	Government Mohan Kumaramangalam Medical College HospitalSalem- 636001 <b>Tamil Nadu</b>	Diploma in Radiotherapy Technology,(DRTT)	The Director of Medical Education, Chennai, Tamil Nadu
72.	Tirunelveli Medical College Tirunelveli-627011 <b>Tamil Nadu</b>	Diploma in Radiotherapy Technology,(DRTT)	The Director of Medical Education, Chennai, Tamil Nadu
73.	Madras Medical College, Barnard Institute of Radiology & Oncology Chennai-600003 Tamil Nadu	Diploma in Radiotherapy Technology (DRTT)	The Director of Medical Education, Chennai, Tamil Nadu
74.	Dr. Kamakshi Memorial Hospital Chennai-600100 Tamil Nadu	B.Sc. in Radiotherapy Technology[B.Sc.(R T)]	The Tamil Nadu Dr. M.G.R. Medical University Chennai, Tamil Nadu
75.	Govt. Rajaji Hospital & Madurai Medical College Maduri-625020 <b>Tamil Nadu</b>	Diploma in Radiotherapy Technology (DRTT)	The Director of Medical Education, Chennai, Tamil Nadu
76.	Madras Medical College & Govt. General Hospital Chennai-600003 Tamil Nadu	B.Sc. in Radiotherapy Technology [B.Sc.(RT)] Course	The Tamilnadu Dr. M.G.R. Medical University, Chennai, Tamilnadu
77.	Paterson Cancer Centre Chennai-600026 Tamil Nadu	B.Sc. in Radiotherapy Technology [B.Sc.(RT)] Course	The Tamilnadu Dr. M.G.R. Medical University, Chennai, Tamilnadu
78.	Kovai Medical Centre and Hospital Limited Coimbatore-641014 <b>Tamil Nadu</b>	B.Sc. in Radiotherapy Technology [B.Sc.(RT)] Course	The Tamilnadu Dr. M.G.R. Medical University, Chennai, Tamilnadu

79.	Government Kilpauk Medical	Diploma in	The Director of
	Collage & Govt. Royapettah	Radiotherapy	Medical
	Hospital Chennai-600014	Technology	Education, Chennai, Tamil Nadu
	Tamil Nadu	[D.R.T.T] Course	Tamii Nadu
80.	Govt. Stanley Hospital	Diploma in	The Director of
	Chennai-600001	Radiotherapy	Medical
	Tamil Nadu	Technology [D.R.T.T] Course	Education, Chennai, Tamil Nadu
		[D.R.T.T] Course	Taimi Nada
81.	Coimbatore Medical Collage	Diploma in	The Director of
	Hospital	Radiotherapy	Medical
	Coimbatore-641018 <b>Tamil Nadu</b>	Technology [D.R.T.T] Course	Education, Chennai, Tamil Nadu
	Tanin Nadu	[D.R.T.T] Course	Turrir rada
82.	PPG Institute of Allied Health	B.Sc Radiotherapy	The Tamilnadu Dr.
	Sciences (A unit of P Perichi Gounder Memorial Charitable	Technology	M.G.R Medical University,
	Trust)		Chennai-600032
	Coimbatore-641035		Tamilnadu
	Tamil Nadu		
83.	International Cancer Centre	B.Sc Radiotherapy	The Tamilnadu Dr.
	( Kanyakumari Medical Mission)	Technology	M.G.R Medical University,
	Neyyoor-629802		Chennai-600032
	Tamil Nadu		Tamilnadu
84.	Sri Ramakrishna Hospital	B.Sc. Radiotherapy	The Tamilnadu Dr.
	Coimbatore-641044	Technology	M.G.R Medical
	Tamil Nadu		University, Chennai-600032
			Tamilnadu
85.	Saveetha Medical College and	B.Sc AHS	Saveetha Institute of
	Hospital,	(Radiotherapy	Medical and Technical
	Chennai-602105, Tamil Nadu	Technogy)	Sciences, Chennai
86.	Sri Ramachandra Institute of	B.Sc (Hons.)	Sri Ramachandra
	Higher Education& Research,	Radiotherapy	Institute of Higher
	Porur, Chennai-600116,	Technology Degree	Education& Research
	Tamilnadu		(Deemed to be University), Porur,
			Chennai
87.	Thanjavur Medical College	Diploma in	The Director of
	Thanjavur-613004	Radiotherapy	Medical
	Tamilnadu	Technology	Education, Chennai,
			Tamil Nadu

88.	Government Kilpauk Medical College And Hospital, Chennai-600010 Tamil Nadu	B.Sc. Radiotherapy Technology	Dr. M G R Medical University, Chennai			
89.	Tripura Institute of Paramedical Sciences Tripura-799014 Tripura	B.Sc in Medical Radiotherapy Technology (BMRT) (Valid with a certificate issued by Regional Cancer Center, Agartala indicating that the candidate was admitted to the Radiotherapy Technologist's course at their institute.)	Tripura Central University,Tripura			
90.	Institute of Medical Sciences BHU Varanasi-221005 Uttar Pradesh	PG Diploma in Medical Technology (Radiotherapy)	Banaras Hindu University,			
91.	J.N. Medical College & Hospital, Aligarh Muslim University Aligarh-202002 Uttar Pradesh	Bachelor in Radiation Therapy Technology (BRTT)	Aligarh Muslim University, Aligarh,Uttar Pradesh			
92.	Dr. Ram Manohar Lohia Institute of Medical Science Lucknow-226010 Uttar Pradesh	Diploma in Radiotherapy Technician (DRTT)	Uttar Pradesh State Me Faculty, Lucknow, Pradesh			
93.	King George's Medical University, Lucknow – 226003 Uttar Pradesh	B.Sc. (Radiotherapy Technology)	King George's Medical University, Lucknow – 226003 Uttar Pradesh ( A deemed University)			
94.	Swami Ramma Himalyan University, Sushila Tiwari Memorial Cancer Research Institute,(Formerly Himalayan Institute Hospital Trust ( HIHT)) Dehradun-248140 Uttarakhand	B.Sc Medical Technology (Radiotherapy)	Swami Ramma Himalyan University( Formerly HIHT), Dehradun (Deemed University)			

95.	All India Institute of Medical Sciences, Rishikesh – 249203, Uttarakhand	B.Sc. Radiotherapy Technology	All India Institute of Medical Sciences, <b>Rishikesh</b> – <b>249203</b> Uttarakhand
96.	King George's Medical University (K.G.M.U) Institute of Paramedical Sciences, Lucknow - 226003 Uttar Pradesh	Diploma in Radiotherapy Technician	Uttar Pradesh State Medical Faculty, Lucknow,
97.	J. K. Cancer Institute Kanpur-208002 Uttar Pradesh	Diploma in Radiotherapy Technician	Uttar Pradesh State Medical Faculty, Lucknow
98.	Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow-226014 Uttar Pradesh	B.Sc. Radiotherapy Technology	Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow-226014
99.	Apex Paramedical Institute Varanasi-221004 Uttar Pradesh	Diploma in Radiotherapy Technician	Uttar Pradesh State Medical Faculty, Lucknow
100.	Medical CollegeKolkata Kolkata-700073 <b>West Bengal</b>	Diploma in Radiotherapeutic Technology(DRT)	State Medical Faculty of West Bengal, Kolkata, West Bengal
101.	NRS Medical College,Kolkata-700014 <b>West Bengal</b>	Diploma in Radiotherapeutic Technology(DRT)	State Medical Faculty of West Bengal, Kolkata, West Benga
102.	Burdwan Medical College, Burdwan-713104 <b>West Bengal</b>	Diploma in Radiotherapeutic Technology(DRT)	State Medical Faculty of West Bengal, Kolkata, West Benga
103.	Bankura Sammilani Medical College, Bankura-722102 West Bengal	Diploma in Radiotherapeutic Technology(DRT)	State Medical Faculty of West Bengal, Kolkata, West Bengal
104.	Institute of Post Graduate Medical Education & Research, Kolkata-700020 West Bengal	Diploma in Radiotherapeutic Technology(DRT)	State Medical Faculty of West Bengal, Kolkata, West Bengal

105.	Chittaranjan National Cancer Institute, Kolkata-700026 <b>West Bengal</b>	Diploma in Radiotherapeutic Technology(DRT)	State Medical Faculty of West Bengal, Kolkata, West Bengal
106.	Saroj Gupta Cancer Centre & Research Institute( Formerly Cancer Centre Welfare Home & Research Institute), Kolkata-700063  West Bengal	Diploma in Radiotherapeutic Technology(DRT)	State Medical Faculty of West Bengal, Kolkata, West Bengal
107.	Apollo Gleneagles Hospitals Kolkata-70005 <b>West Bengal</b>	Diploma in Radiotherapeutic Technology(DRT)	State Medical Faculty of West Bengal, Kolkata, West Bengal
108.	R.G.Kar Medical College Hospital Kolkata-700 004 <b>West Bengal</b>	Diploma in Radiotherapeutic Technology [DRT]	State Medical Faculty of West Bengal,Kolkata,West Bengal
109.	North Bengal Medical College and Hospital, Siliguri Darjeeling – 734012 <b>West Bengal</b>	Diploma in Radiotherapeutic Technology [DRT]	State Medical Faculty of West Bengal,Kolkata,West Bengal
110.	Narayana Super-Speciality Hospital (Unit of Meridian Medical Research & Hospital Ltd.) Kolkata- 711103, West Bengal	Diploma in Radiotherapeutic Technology [DRT]	State Medical Faculty of West Bengal,Kolkata,West Bengal
111.	Tata Medical Center  Kolkata- 700160  West Bengal	Diploma in Radiotherapeutic Technology [DRT]	State Medical Faculty of West Bengal,Kolkata,West Bengal

# C. Important Instruction

- 1. It is advised that candidates must verify the status of the Radiotherapy Technologist Training course with the course conducting institutions and enroll themselves only in those institutions whose course is in line with AERB requirements as listed in Annexure-I. Candidates completing the Radiotherapy Technologist Training Course from any other institutions will not be considered eligible to work as radiotherapy technologist in the country.
- 2. Institutions who are interested to start radiotherapy technologist training course are advised Page 15of28

to approach AERB for assessment of their course in line with AERB requirements, failing to which candidates completed their course will not be considered eligible to work as Radiotherapy Technologist in the country and the institutions will be solely responsible for unemployment or career of the candidates, those have been admitted by the institutions without obtaining conccurence letter from AERB. Therefore, institutions are advised not to admit the candidates until their course is in line with AERB requirements.

# D. Application for assessment of Radiotherapy Technologist Course



## GOVERNMENT OF INDIA ATOMIC ENERGY REGULATORYBOARD NIYAMAK BHAVAN, ANUSHAKTINAGAR, MUMBAI – 400 094



#### AERB/RSD/RT/RTT-Course

# INFORMATION REGARDING THE COURSE CONDUCTED FOR RADIATION THERAPY TECHNOLOGISTS

(Please send the filled in form to the Head, Radiological Safety Division, AERB, NiyamakBhavan, Anushaktinagar, Mumbai-400094 so as to evaluate the training programme conducted by your institution for Radiation Therapy Technologists as per AERB requirements. Attach extra sheets ifrequired)

1.	Name & address of the Institution	:		
2.	Name and Designation of Head of the institution	:		
3.	Name and Designation of the Person, coordinating for the course	:		
	(a) Telephone No.(withSTDcode)	:		
	(b) FaxNo.	:		
	(c) e-mail	:		
4.	Name of the training programmeinfull (in capitalletters)	:		
5.	Abbreviation of the training programme, if any : (like Dip.RT, DMRT, CRAetc.)			
6.	Since how long the training programme isbeing: year(s)conducted			
7.	Is it affiliated to any EducationBoard/University:		Yes	No 🗌
	(a) If yes, Name of Education Board/University : (please attach a copy of the affiliationletter)			

8.	Qualification for admission tothecourse		:	Matricu	ılate		
				10+2in	10+2inScience		
				10+2 in	anydiscipline		
				Gradua	teinScience		
				Gradua	te inanydiscipl	ine	□Any
				othersp	ecify:		
9.	Duration o	Duration ofthecourse		1 year		П	
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<ul><li>11. Whether the enclosed syllabus onradiationsafety : Yes is covered in the training programme</li><li>(a) If NO, list the topics of the enclosed syllabus not covered in a separatesheet.</li></ul>							
12	•	dlabus SHOULD NOT BE SEN Board/University examinationing		ication.			
12.		•	ciudes.		Т. 4.11-	T D	11
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13.	On success	ful completion	oftheTraining	:	Radiotherapy Department					
	programm	e the trainees ar	e eligible to work in		Radiolo	gy Dep	artment	[		
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SEAL Place :			Signature of the Head of Institution							
			Name:							
Date:			Designation:							

# E. Syllabus pertaining to safety requirements for Technologist's course in Radiotherapy

#### 1. Basic qualification for admission: 10+2 in sciencesubjects

#### 2. Duration of the course:

- **2.1.** Exclusively for Radiotherapy: **2vears**
- **2.2.** Combined course for Radiotherapy and Radio-diagnosis: **3years**
- 2.3. Minimum of 50 hrs for standalone course or 75 hrs for the combined course should be devoted to Radiation Safety. This should cover both theory as well as practical demonstrations during the training.

# 3. Common Syllabus for the training on "Radiation Safety in Radiotherapy and Radio diagnosis"

#### 3.1. Basic Radiation Physics

Atomic Structure, Nucleus, Atomic No., Mass No., Electron orbit and energy levels, Isotopes and isobars, Radioactivity, Radioactive decay, Half life, Particle radiation, Electromagnetic Radiation, Production of X-rays, Continuous X-ray spectrum, Bremsstrahlung radiation Characteristic X-rays, Filters, Quality of X-rays, Effect of voltage and current on the intensity of X-rays, Properties of X-rays.

#### 3.2. Interaction of Radiation with Matter

Photoelectric effect, Compton Effect, Pair production, Ionisation of matter, Energy absorbed from X-rays, X-rays Scattering, X-rays transmission through the medium, linear and mass attenuation coefficient, HVT and TVT, Interaction of charged particle and neutrons with matter

#### 3.3. Radiation Quantities and Units

Radioactivity, Flux, Fluence, Kerma, Exposure, Absorbed Dose, Equivalent Dose, Weighting Factors, Effective Dose, Natural Background Radiation, Occupational Exposure Limits, Dose limits to Public.

#### 3.4. Radiation Hazard evaluation and control

Philosophy of radiation protection, Effect of Time, Distance and Shielding, Calculation of workload, Calculation of Weekly dose to the radiation worker and general public, good work practices in diagnostic radiology and/or radiotherapy practices (including teletherapy and Brachytherapy), Planning consideration for radiologyand/or

radiotherapy installation including work load, use factor & occupancy factors, effect of different shielding material.

#### 3.5. Biological effects of radiation

The Cell, Effect of ionising radiation on Cell, Chromosomal aberration and its application for the biological dosimetry, Somatic effects and hereditary effects, stochastic and deterministic

effects, Acute exposure and Chronic exposure, LD<sub>50/60</sub>.

#### 3.6. Detection and measurement of radiation & measuringinstruments

Ionisation of gases, Fluorescence and phosphorescence, Effect on photographic emulsion, Ionisation chambers, Proportional Counters, G.M. Counters, Scintillation Detectors, Liquid scintillator, Pocket Dosimeters, TL Dosimeters and their use in personnel monitoring badges. Advantages and disadvantages of various detectors, appropriateness of different types of detectors for different types of radiation measurement.

### 4. Exclusive Syllabus for the training on "Radiation Safety inRadiotherapy"

#### 4.1. Basic Radiation Therapy Physics

Historical developments in Radiotherapy, Physical components of Telecobalt Unit / Linear Accelerator Unit / Remote After Loading Brachytherapy Unit / Gamma Knife Unit / Simulator and their descriptions, Various types of sources used in Radiotherapy and their properties, Physics of Photons, electrons, protons and neutrons in radiotherapy, Physical parameters of dosimetry such as Percentage Depth Dose, Tissue-Air Ratio, Tissue Maximum Ratio, Physics of Bolus and Phantom materials, Compensators, Wedges, Shielding Blocks, Patient immobilization devices, Port film, processing and development, Special techniques in Radiotherapy such as SRS, SRT, IMRT, IGRT and Tomotherapy.

#### 4.2. QA inRadiotherapy

Accessories and tools used for QA tests in Radiotherapy such as Front pointer, Back pointer, Laser Alignment etc. Optical and radiation field congruence, Beam shaping blocks, Beam shaping jaws, Delineator/Diaphragm movements, Isocentre alignment, Patient support system, Beam on and off mechanisms, Technician's role in QA tests on telecobalt /Linear Accelerator / Brachytherapy/ Gamma knife/Simulator/CT Simulator machines.

#### 4.3. Radiation Emergency Preparedness

Safety and security of radiation sources, case histories of emergency situations and preparedness, equipments and tools including role of Gamma Zone Monitor, Regulatory requirements and prevention of emergency, Preventive maintenance and Safety Culture, Role of technicians in handling radiation emergencies.

#### 4.4. Regulatory requirements

National Regulatory Body, Responsibilities, organization, Safety Standards, Codes and Guides, Responsibilities of licensees, registrants and employers and Enforcement of Regulatory requirements

#### 4.5. Demonstration:

- Time, Distance and Shielding, measurement of HVT &TVT
- Familiarisation of radiation survey meters and their functional performancechecks
- Radiological Protection Survey of Radiotherapy, Simulator and CT Simulator Installations
- QA on X-ray, Simulator and RadiotherapyEquipment(s)
- Procedures followed for calibration of measuring and monitoringinstruments

#### 5. Exclusive Syllabus for the training on "Radiation Safety in Radiodiagnosis"

#### 5.1. Physics of DiagnosticRadiology

Familiarisation with various X-ray diagnostic tools, Radiological image formation, Use of contrast media, Films, Characteristic of X-ray films, Film Processing, Optical Density Measurements, Different types of Screens, Use of fluorescent screens in radiology, Effect of screen in reduction of patient dose, Various types ofgrids

#### 5.2. QA in DiagnosticRadiology

Verification of Optical and Radiation field congruence, Beam alignment, Focal spot size, Linearity of tube current mA and Timer, applied potential, HVT and total tube filter, Contact between film and intensifying screen, Contrast resolution, Grid alignment, Special techniques like mammography, CT and DigitalRadiography.

#### 5.3. Regulatory requirements

National Regulatory Body, Responsibilities, organization, Safety Standards, Codes and Guides, Responsibilities of licensees, registrants and employers and Enforcement of Regulatory requirements, Role of technologist in radiology department.

#### **5.4. Demonstration:**

- Time, Distance and Shielding, measurement of HVT &TVT
- Familiarisation of radiation survey meters and their functional performancechecks
- Radiological Protection Survey of Diagnostic X-rayinstallation
- QA on DiagnosticEquipment(s)

Note: The syllabus for the training associated with medical /clinical subjects such as	ĭ
Anatomy and Physiology, Patient preparation and positioning procedures etc. in	l
addition to the safety part of the syllabus, mentioned above, shall be approved by the	?
Board/University affiliating the training course.	

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