

Dr. D.Y. Patil School of Allied Health Sciences

**Dr. D. Y. Patil Vidyapeeth, Pune
(Deemed to be University)**



Programme Framework

**Bachelor of Science in Respiratory
Care Technology
(B.Sc. RCT)**

First Year

First Semester

Course code	Course Title	Credit			Hours			Marks			
		Theory	Practical	Total	Theory	Practical	Total	Internal	Theory	Practical	Total
BRCT 101	Introduction to Healthcare Delivery System in India	2	0	2	30	0	30	40	80	80	200
	Medical Terminology and record keeping (including anatomical terms)	1	0	1	15	0	15				
	Medical Law and Ethics	1	0	1	15	0	15				
	Introduction to Quality and patient safety	2	1	3	30	30	60				
BRCT 102	Basic computers and Information Science	1	1	2	15	30	45	30	60	60	150
	Research Methodology and Biostatistics	2	1	3	30	30	60				
BRCT 103	Basic English and Communication	2	0	2	30	0	30	40	80	80	200
	Professionalism and Values	1	1	2	15	30	45				
	Principles of Management	2	0	2	30	0	30				
BRCT 104	Community orientation and clinical visit	0	2	2	0	60	60				
Total		14	6	20	210	180	390	110	220	220	550

Second Semester

Course code	Course Title	Credit			Hours			Marks			
		Theory	Practical	Total	Theory	Practical	Total	Internal	Theory	Practical	Total
BRCT 201	Human Anatomy and Physiology	6	2	8	90	60	150	40	80	80	200
BRCT 202	Biochemistry	2	1	3	30	30	60	40	80	80	200
BRCT 203	Basics of Medical Disorders	2	2	4	30	60	90	40	80	60	200
BRCT 204	BRCT Directed Clinical Education – part I (studentship)*	0	5	5	0	150	150	50	0	0	50
Total		10	10	20	150	300	450	170	240	240	650

Second Year Third Semester

Course code	Course Title	Credit			Hours			Marks			
		Theory	Practical	Total	Theory	Practical	Total	Internal	Theory	Practical	Total
BRCT 301	Pathology	3	2	5	45	60	105	40	80	80	200
BRCT 302	Microbiology	3	2	5	45	60	105	40	80	80	200
BRCT 303	Pharmacology	3	2	5	45	60	105	40	80	80	200
BRCT 304	BRCT Directed Clinical Education – Part II (studentship)*	0	5	5	0	150	150	50	0	0	50
	Total	9	11	20	135	330	465	170	240	240	650

Fourth Semester

Course code	Course Title	Credit			Hours			Marks			
		Theory	Practical	Total	Theory	Practical	Total	Internal	Theory	Practical	Total
BRCT 401	Applied Pathology	2	3	5	30	90	120	40	80	80	200
BRCT 402	Applied Microbiology	2	3	5	30	90	120	40	80	80	200
BRCT 403	Introduction to Respiratory care technology	3	2	5	45	60	105	40	80	80	200
BRCT 404	BRCT Directed Clinical Education – part III (studentship)*	0	5	5	0	150	150	50	0	0	50
	Total	7	13	20	105	390	495	170	240	240	650

Third Year Fifth Semester

Course code	Course Title	Credit			Hours			Marks			
		Theory	Practical	Total	Theory	Practical	Total	Internal	Theory	Practical	Total
BRCT 501	Basic Respiratory care technology	3	3	6	45	90	135	40	80	80	200
BRCT 502	Basic Respiratory therapeutics and monitoring	2	3	5	30	90	120	40	80	80	200
BRCT 503	Chest Physical Therapy and Pulmonary Rehabilitation	2	2	4	30	60	90	40	80	80	200
BRCT 504	BRCT Directed Clinical Education – part IV (studentship)*	0	5	5	0	150	150	50	0	0	50
		7	13	20	105	390	495	170	240	240	650

Sixth Semester

Course code	Course Title	Credit			Hours			Marks			
		Theory	Practical	Total	Theory	Practical	Total	Internal	Theory	Practical	Total
BRCT 601	Respiratory Care Technology - Clinical	2	3	5	30	90	120	40	80	80	200
BRCT 602	Respiratory Care Technology - Applied	2	3	5	30	90	120	40	80	80	200
BRCT 603	Respiratory Care Technology - Advanced	2	3	5	30	90	120	40	80	80	200
BRCT 604	BRCT Directed Clinical Education – part V (studentship)*	0	5	5	0	150	150	50	0	0	50
	Total	6	14	20	90	420	510	170	240	240	650

Fourth Year Seventh and Eighth Semester

Course Title	Hours		
	Theory	Practical	Total
Internship and Project Work	0	1200	1200
Credits	40		