

## 1.2.3 List of interdisciplinary courses offered in the institute

Serial	Programme name		Name of the Department (Subject)	Courses	
				No	Content of the course
1	1	DM	Clinical Immunology & Rheumatology	1	Basic Sciences related to the subject
2				2	Practice of Clinical Immunology & Rheumatology
3				3	Practice of Clinical Immunology & Rheumatology including therapeutics, allied specialities
4				4	Recent Advances in Clinical Immunology & Rheumatology
5	2	DM	Gastroenterology	1	Basic Gastroenterology Sciences
6				2	Clinical Gastroenterology
7				3	Clinical and investigative Gastroenterology
8				4	Recent advances in Gastroenterology
9	3	DM	Pediatric Gastroenterology	1	Basic Ped Gastroenterology Sciences
10				2	Clinical Ped Gastroenterology
11				3	Clinical and investigative Ped Gastroenterology
12				4	Recent advances in Ped Gastroenterology
13	4	DM	Clinical Hematology	1	Basic and applied haematology
14				2	Laboratory Haematology
15				3	Clinical Haematology
16				4	Recent Advances in Haematology
17	5	DM	Medical Genetics	1	Basic Genetics
18				2	Clinical Genetics
19				3	Applied and Laboratory Genetics
20				4	Recent evidences in Medical Genetics
21	6	DM	Critical Care Medicine	1	Basic medical sciences related to CCM
22				2	Clinical-etiology, Diagnosis, Treatment of diseases related to CCM
23				3	Procedures, Interventions, Ethics, Research Methods
24				4	Recent advances
25	7	DM	Endocrinology	1	Basic Science of Endocrinology
26				2	Clinical Endocrinology and diagnosis of endocrinology and metabolism disorder
27				3	Therapeutic aspect of endocrinology and metabolism and laboratory technology
28				4	Laboratory and Experimental Endocrinology
29	8	DM	Cardiology	1	Basic Sciences as applied to Cardiology
30				2	Clinical Cardiology
31				3	Laboratory Testing
32				4	Recent advances
33	9	DM	Neurology	1	Basic Sciences of Neurology
34				2	Clinical Neurology -1

35				3	Clinical Neurology -2
36				4	Recent Advances in Neurology
37	10	DM	Nephrology	1	Basic Sciences in Nephrology
38				2	Clinical Nephrology
39				3	Dialysis, Transplantation, Nephro-urology
40				4	Recent advances in Nephrology
41				11	DM
42	2	Clinical pulmonary medicine -1			
43	3	Clinical pulmonary medicine -2			
44	4	Recent advances in pulmonary medicine and lung transplantation			
45	12	DM	Neonatology	1	Basic sciences as applied to neonatology and perinatology
46				2	Core neonatology
47				3	Neonatology and allied specialities
48				4	Recent advances in neonatology
49	13	MCH	Surgical Gastroenterology	1	Basicsciences as applied to surgical gastroenterology
50				2	Clinical and operative surgical gastroenterology
51				3	Surgical gastroenterology including transplantation and minimal access surgery
52				4	Recent advances in surgical gastroenterology
53	14	MCH	Endocrine Surgery	1	Basic science of endocrine and breast surgery
54				2	Clinical endocrine surgery Part 1
55				3	Clinical endocrine surgery Part II
56				4	Recent advances in Endocrine and breastsurgery
57	15	MCH	Cardio-vascular & Thoracic Surgery	1	Cardiac Surgery (thoracic surgery, vascular surgery)
58				2	Adult Cardiac Surgery
59				3	Critical Care
60				4	Cardiovascular engineering, transplant and circulatory support, recent advances in cardiovascular and thoracic surgery
61	16	MCH	Neurosurgery	1	Basic sciences of central nervous system
62				2	Applied clinical neurosurgery
63				3	Advanced clinical and operative neurosurgery
64				4	Recent advances in neurosurgery
65	17	MCH	Pediatic Surgery	1	Basic sciences in Paediatric surgery, Trauma and Transplantation
66				2	Regional paediatric surgery, paediatric oncosurgery
67				3	Regional paediatric surgery
68				4	Recent advances in Paediatric Surgery
69	18	MCH	Plastic & Reconstructive Surgery	1	General priciples and basic sciences relevant to plastic and reconstructive surgery
70				2	Clinical Part 1
71				3	Clinical Part 2
72				4	Recent advances in plastic and reconstructive surgery

73	19	MCH	Urology	1	Basic sciences of urinary tract system
74				2	Applied clinical urology
75				3	Advanced clinical and operative urology
76				4	Recent advances in urology
77	20	MD	Anesthesiology	1	Basic sciences as applied to Anaesthesiology
78				2	Practice of Anaesthesiology
79				3	Anaesthesia in relation to subspecialities/superspecialities
80				4	Intensive Care Medicine, Pain Medicine, Recent advances
81	21	MD	Emergency Medicine	1	Basic Medical Sciences, General Emergency Medicine, Disaster preparedness
82				2	Infectious diseases, Critical Care, Paediatrics, Toxicology
83				3	Respiratory Medicine, Emergencies, Surgical procedures
84				4	Nephrology, Endocrinology, Haematology, Occupational Diseases, Recent advances
85	22	MD	Nuclear Medicine	1	Nuclear Physics
86				2	Diagnostic Nuclear Medicine
87				3	Therapeutic uses of radionucleotide
88				4	Recent advances in Nuclear Medicine
89	23	MD	Microbiology	1	General Microbiology and Immunology
90				2	Clinical/Systemic Microbiology I
91				3	Clinical/Systemic Microbiology II
92				4	Applied Microbiology & Recent Advances
93	24	MD	Radiotherapy	1	Principles of radiotherapy allied specialities
94				2	Related specialities: Surgical oncology and medical oncology
95				3	Clinical management of Tumours
96				4	Recent advances and special topics
97	25	MD	Pathology	1	Basic sciences including general pathology, immunopathology, genetics clinical pathology, tropical pathology and applied microbiology
98				2	Systemic pathology including surgical pathology and cytopathology
99				3	Haematology including transfusion medicine and clinical biochemistry
100				4	Recent advances in pathology
101	26	MD	Transfusion Medicine	1	Basic sciences (immunology, medical genetics, hemostasis, physiology of formed elements of blood)
102				2	Immunohaematology/blood group serology/compatibility testing
103				3	Blood collection/Blood center/ Component Testing
104				4	Clinical Transfusion Service

105	27	MD	Radiodiagnosis	1	Basic sciences related to Radiology
106				2	Chest, CVS, CNS, Eye, ENT, Musculoskeletal, Paediatric and Breast
107				3	Abdominal imaging, GU, Endocrinology, Obstetric and Gynaecology, Interventional radiology
108				4	Recent advances, Nuclear Medicine, radiology related to clinical specialist
109	28	MS	Ophthalmology	1	Basic sciences related to Ophthalmology, Optics and Refraction
110				2	Clinical Ophthalmology
111				3	Systemic diseases in relation to Ophthalmology
112				4	Recent advances in Ophthalmology and Community Ophthalmology
113	29	PDAF	Intensive Care Medicine	1	Basic sciences pertaining to intensive care medicine including pharmacology
114				2	Clinical-etiology, Diagnosis, T; Recent advances treatment of diseases related to intensive care
115				3	Clinical and recent advances
116	30	PDAF	Cardio-vascular & Thoracic Anesthesia	1	Basic sciences as related to Cardiac Anaesthesia
117				2	Clinical aspects as related to cardiac anaesthesia
118				3	Recent advances in Cardiac Anaesthesia
119	31	PDAF	Organ Transplant Anesthesia	1	Basic sciences as related to Organ Transplant Anaesthesia
120				2	Clinical sciences related to organ transplant anaesthesia
121				3	Recent advances in organ transplant anaesthesia
122	32	PDAF	Neuro Anaesthesia and Neuro Critical Care	1	Basic sciences as related to Neuroanaesthesia
123				2	Clinical aspects of Neuroanaesthesia
124				3	Recent advances in Neuroanaesthesia
125	33	PDAF	Pain and Palliative Care Medicine	1	Basic sciences as related to pain and palliative care
126				2	Clinical sciences as related to pain and palliative care
127				3	Recent advances in pain and palliative care
128	34	PDCC	Apheresis Technology & Blood Component Therapy	1	Basic sciences such as immunology, genetics pertinent to blood components, apheresis, instrumentation, automation, computerization and record, legal, ethical and administrative aspect
129				2	Application of blood component in clinical practice, donor apheresis and therapeutic plasma exchange, good practice, recent advances
130	35	PDCC	Breast Surgery	1	Basic sciences as applied to breast
131				2	Clinical mastology
132	36	PDCC	Clinical Molecular	1	Basic sciences related to genetics
133				2	Applied genetics and recent advances

			Genetics & Genomics		
134	37	PDCC	Critical Care Medicine	1	Basic sciences
135				2	Clinical sciences
136	38	PDCC	Correlative Imaging	1	Basic sciences experiment
137				2	Clinical experiments
138	39	PDCC	Radionuclide Therapy	1	Basic sciences related to radionuclide therapy
139				2	Therapeutic and recent advances in radionuclide therapy
140	40	PDCC	Resuscitative Emergency Medicine	1	Basic sciences of emergency medicine
141				2	Systemic medicine and recent advances of all organ systems
142	41	PDCC	Hemato-Oncology	1	Basic haemato-oncology
143				2	Applied and recent advances in haemato-oncology
144	42	PDCC	Pediatric Hematology	1	Basic Paediatric Haematology
145				2	Applied and recent advances related to paediatric haematology
146	43	PDCC	Hemato-Pathology	1	Basic haemato-pathology
147				2	Applied haematopathology
148	44	PDCC	Infectious Disease	1	General aspects of infectious diseases and basic sciences
149				2	Recent advances in diagnosis and management of infectious disease
150	45	PDCC	Maternal and Fetal Medicine	1	Basic sciences as applied to Maternal and Foetal Medicine
151				2	Applied sciences and recent advances in Maternal and Foetal Medicine
152	46	PDCC	Neonatology	1	Basic aspects of the subject Neonatology
153				2	Recent advances in Neonatology
154	47	PDCC	Neuro Otology	1	Basic sciences: Principles and practices
155				2	Recent advances in neuro-otology
156	48	PDCC	Neuro-Ophthalmology	1	Basic sciences: Refraction and optics
157				2	Systemic diseases and recent advances
158	49	PDCC	Pediatric Endocrinology	1	Basic sciences of pediatrics and endocrinology
159				2	Clinical aspect, Diagnosis, Recent advances
160	50	PDCC	Pediatric Gastroenterology	1	Basic Sciences
161				2	Clinical Sciences and recent advances
162	51	PDCC	Pediatric Clinical Immunology and Rheumatology	1	Basic sciences related to clinical immunology and rheumatology
163				2	Practice of clinical immunology and rheumatology
164	52	PDCC	Renal Pathology	1	Basic sciences of renal pathology
165				2	Applied and recent advances in renal disorders
166	53	PDCC	Hepato-pathology	1	Basic sciences of hepatobiliary pathology and liver transplant pathology
167				2	Applied and recent advances in hepatobiliary disorders

168	54	PDCC	Sleep Medicine	1	Basic aspect of Sleep Medicine
169				2	Applied and recent advances in Sleep Medicine
170	55	PDCC	Gastro-radiology	1	Basic Sciences
171				2	Clinical Sciences
172	56	PDCC	Neuro-radiology	1	Basic Sciences
173				2	Clinical Sciences
174	57	PDCC	Vascular radiology	1	Basic of vascular system, pharmacology
175				2	Intervention of vascular system
176	58	M.Sc.	M.Sc. Medical Bio-technology (Hematology)	1	Biochemistry, Genetics, Molecular biology, Basic Human biology, Practical concepts
177				2	Cell & stem cell biology, Microbiology, Bioanalytic research techniques,
178				3	Genetic engineering, Diagnostic and therapeutic of human diseases, Genomics, proteomics, research methodology
179				4	Presentation of research project, Dissertation
180	59	M.Sc.	M.Sc. Genetic Counselling	1	Introduction to medical genetics, cytogenetics, chromosomal disorders, principles of genetic counselling
181				2	Common presentations in genetics, molecular genetics, genetic counselling,
182				3	Genetic disorders, pre-natal genetics and fetal medicine
183				4	Genetic disorder, genomic medicine and research, preventive genetics, dissertation
184	60	M.Sc.	M.Sc. Medical Laboratory Technology (Medical Virology)	1	Basic microbiology
185				2	Basic virology
186				3	Immunology and cellular structure
187				4	Virology techniques, Epidemiology, Biostatistics
188	61	B.Sc	B.Sc. Medical Laboratory Technology-Transfusion Medicine Technology (Earlier it was MSc)	1	Introduction to healthcare delivery system, basic computer and information sciences, patient safety, communication, soft skill
189				2	Medical terminology, record keeping, medical law, ethics,
190				3	Pathology, microbiology, research methodology, biostatistics
191				4	Advance research methodology
192				5	Hemotherapy, blood & components, blood bank equipments, quality control
193				6	Apheresis, recent advances
194	62	M.Sc.	M.Sc. Molecular Medicine & Biotechnology	1	Introduction to molecular medicine, cell & developmental biology, immune response in health and disease, instrumentation, analytical techniques
195				2	Omics approaches in molecular medicine, research methodology, ethics, biosafety, IPR, recombinant DNA technology

196				3	Molecular basis of disease, diagnostic and therapeutics, regenerative medicine,
197				4	Translation research approaches, dissertation
198	63	M.Sc.	M.Sc. Nuclear Medicine Technology (Nuclear Medicine)	1	Fundamentals of radiation physics, Human anatomy, Human physiology, General principles of hospital practice and care
199				2	Radio-isotope application, radiation safety, radiation biology, fundamentals of biostatistics and computer application
200				3	Nuclear medicine imaging, principles of radiological protection, PET cyclotron and other instrumentation
201				4	Principles of radiopharmacy, recent advances, dissertation
202	64	M.Sc.	M.Sc. Radio pharmacy and Molecular Imaging (Nuclear Medicine)	1	Fundamentals of radiation physics, basic radio-chemistry, radio-pharmacy, nuclear medicine instrumentation and imaging
203				2	Isotope production, basics of human biology and laboratory animals in biomedical research, PET radiochemistry
204				3	Nuclear pharmacy-design and regulation, clinical application of radiopharmaceuticals, bioinformatics, IPR, biostatistics
205				4	Advancement in radiopharmacy, principles of molecular targets and imaging, dissertation
206	65	B.Sc.	Bachelor of Physiotherapy (B.P.T)	1	Anatomy I, physiology I, biochemistry, health care delivery system, basic computer and information science, english communication, soft skills, yoga, community orientation and clinical visits
207				2	Anatomy II, physiology II, psychology, basic principles of biomechanics, medical terminology and record keeping
208				3	pathology, microbiology, pharmacology, biomechanics, kinesiology, exercise therapy, therapeutics massage, quality, patient safety
209				4	Exercise therapy, biophysics, electrotherapy, medical law and ethics
210				5	Clinical orthopedics, traumatology, general surgery, burn, plastic surgery, OBG, Pediatrics, Psychiatric, community medicine, Diagnostic imaging
211				6	Physiotherapy in orthopedics and sports, clinical neurology and neurosurgery, professionalism, values
212				7	Physiotherapy in neurology and psychosomatic disorders, biostatistics, research methodology, health promotion, fitness- clinical cardiovascular and pulmonary

213				8	Physiotherapy in cardiovascular, pulmonary, intensive care, community physiotherapy and rehabilitation, evidence based physiotherapy, research project, teaching skills
214	66	B.Sc.	B.Sc. Operation Theater and Anesthesia Technology	1	Anatomy I, physiology I, biochemistry, health care delivery system, basic computer and information science, english communication, soft skills, yoga, community orientation and clinical visits
215				2	Anatomy II, physiology II, psychology, medical terminology and record keeping, medical law, ethics, professionalism, OT and anesthesia technology
216				3	Clinical microbiology, Medicine and introduction relevant to OT and anesthesia technology, principles of anesthesia
217				4	Biostatistics, clinical pharmacology, basic techniques of anesthesia
218				5	Research methodology, basics of surgical procedures, CSSD procedures, advance anesthesia technique, basic intensive care
219				6	Advance OT and anesthesia technology, specialized surgery, including robotics, minimal invasive surgery
220				67	B.Sc.
221	2	Anatomy II, physiology II, medical terminology and record keeping, medical law, ethics, professionalism, conventional radiography and equipment, physics of imaging equipment			
222	3	Pathology, microbiology, clinical radiography, radiographic an dimage processing, research methodology and biostatistics			
223	4	Clinical radiography II, quality control, radiation safety, regulatory requirements			
224	5	Physics of new imagig, techniques including patient care, hospital practice and care of patient, contrast and special radiography			
225	6	Physics of advance imaging technology, AERB guidelines, cross-sectional anatomy and physiology, advance imaging technology			
226	68	B.Sc.	B.Sc. Medical Laboratory Technology (Hematology)	1	Basic computer and information science, introduction to health care delivery, community orientation, quality and patient safety, environmental science, communication, soft skills, anatomy I, physiology I



227				2	Anatomy II, Physiology II, medical sociology, medical law and ethics, professionalism and values, medical terminology and record keeping, clinical biochemistry
228				3	Biostatistics and research, general pathology, microbiology, applied clinical biochemistry, biochemical metabolism, transfusion and blood banking
229				4	Systematic bacteriology and virology, pathology, immunology, serology, applied clinical biochemistry
230				5	medical mycology, parasitology, entomology, applied hematology, histopathology, cytopathology, genetic and cytogenetic techniques
231				6	Laboratory automation and quality control, advance hematology and immunopathology, molecular genetic techniques
232	69	B.Sc.	B.Sc. Perfusion Technology	1	Basic computer and information science, introduction to health care delivery, community orientation, quality and patient safety, environmental science, communication, soft skills, anatomy I, physiology I
233				2	Anatomy II, Physiology II, medical sociology, medical law and ethics, professionalism and values, medical terminology and record keeping, laboratory technology related to perfusion technology
234				3	General pathology, microbiology, applied hematology, biophysics, research methodology and biostatistics I
235				4	research methodology and biostatistics II, perfusion techniques and technology, medicine and clinical application
236				5	Pediatric perfusion, neuropsychological assessment, cardiovascular perfusion
237				6	Mechanical circulatory support, perfusion for heart and lung transplantation
238	70	B.Sc.	B.Sc. Dialysis Therapy Technology	1	Basic computer and information science, introduction to health care delivery, community orientation, quality and patient safety, environmental science, communication, soft skills, anatomy I, physiology I
239				2	Anatomy II, Physiology II, medical sociology, medical law and ethics, professionalism and values, medical terminology and record keeping, laboratory technology related to dialysis technology
240				3	General pathology, microbiology, applied hematology, biophysics, research methodology and biostatistics I

241				4	research methodology and biostatistics II, dialysis techniques and technology, medicine and clinical application
242				5	Pediatric dialysis, neuropsychological assessment, cardiovascular perfusion
243				6	Mechanical circulatory support, perfusion for heart and lung transplantation
244	71	B.Sc.	B.Sc. Radiotherapy Technology	1	Basic computer and information science, introduction to health care delivery, community orientation, quality and patient safety, environmental science, communication, soft skills, anatomy I, physiology I, Radiation quantity- units and measurements
245				2	Medical terminology, record keeping, medical law, ethics, professionalism, values, oncology science, radiotherapy techniques, basic radiation physics,
246				3	Pathology, microbiology, oncology science II, radiotherapy equipment I, research methodology
247				4	Patient care, radiotherapy equipment II, quality assurance, basic radiotherapy physics,
248				5	Radiation safety, radio biology, biological effects of radiation, MOULD room, special RT techniques, recent advances
249				6	Radiographics anatomy, Imaging techniques in RT planning, RT treatment delivery and perational issues
250				72	B.Sc.
251	2	Applied biochemistry, nutrition, dietetics, nursing foundation, informatics and technology			
252	3	Applied microbiology, infection control, pharmacology, pathology I, adult health nursing I, BCLS			
253	4	Pharmacology II, Pathology II, Adult health nursing II, genetics, professionalism, ethics, palliative care, fundamentals of prescribing			
254	5	Child health nursing I, mental health nursing I, community health, nursing education, forensic nursing, Indian laws			
255	6	Child health nursing I, mental health nursing I, Nursing management, leadership, midwifery, OBG nursing I			
256	7	Community nursing II, midwifery II, OBG II, nursing research and statistics			
257	8	Intensive practical/ residency posting			