

Cardiovascular and Respiratory Physiotherapy

Advances in Cardiovascular and Respiratory Physiotherapy (Part I).

(Respiratory Physiotherapy)

1. Structural, functional and Biomechanical basis for assessment and management of dysfunctions of the respiratory system and thorax throughout the life span.
2. Clinical reasoning in physiotherapeutic evaluation & management of all neonatal, pediatric, adult and geriatric dysfunctions of the respiratory system and thorax in acute care and in rehabilitation
3. Advances in functional diagnostic procedures & various outcome measures relevant to assess intervention to dysfunctions of thorax and respiratory system.
4. Interpretation and application of Investigations related to Respiratory and thoracic dysfunction and its relevance to physiotherapy.
5. Evidence based practice in management of Respiratory & Thoracic impairments & dysfunction.
6. Pulmonary rehabilitation
7. Ergonomics and energy conservation in Respiratory dysfunction and use of assistive devices to enhance function and performance.
8. Pathology of pain in medical and Post-surgical conditions related to thoracorespiratory dysfunction and advances in its evaluation and management Clinical decision making and evidence based practice in physiotherapeutic evaluation & management of all medical, surgical and traumatic disorders across the life span in a critical care(ICU) setting
9. Management of the critically ill: knowledge of Airways -types & management Mechanical ventilator, use of Oxygen therapy; Physiotherapeutic Interventions in intensive care, weaning and ICU monitoring.
10. Postoperative respiratory care
11. Principles of health and performance, Risk stratification, Prevention and health promotion
12. Pharmacotherapeutics in respiratory condition and its relevance with physiotherapy

Advances in Cardiovascular and Respiratory Physiotherapy (Part II)

(Cardiovascular Physiotherapy)

1. Structural and functional and Biomechanical basis for assessment and management of dysfunctions of the circulatory system including peripheral vessels and mediastinum throughout the life span.
2. Clinical decision making skills in physiotherapeutic evaluation & management of all neonatal, pediatric, adult and geriatric dysfunctions of the cardiovascular including peripheral Vasculature system and mediastinum in acute care and rehabilitation
3. Advances in functional diagnostic procedures & various outcome measures relevant to assess intervention to dysfunctions of cardiovascular and peripheral vascular system.
4. Evidence based practice in assessment and management of cardiovascular and peripheral vascular dysfunction and failure
5. Ergonomics and energy conservation in cardiovascular dysfunction and use of assistive devices to enhance function and performance.
6. Pathology of pain in medical and surgical impairments related to cardiovascular dysfunction and advances in its evaluation and management
7. Clinical decision-making skills in physiotherapeutic evaluation & management of all medical, surgical and traumatic conditions across the life span in a critical care (ICU) setting
8. Management of the critically ill: knowledge of Airways -types & management Mechanical ventilator, use of Oxygen therapy; Physiotherapeutic Interventions in intensive care, weaning and ICU monitoring
9. Postoperative respiratory care
10. Cardiac Rehabilitation
11. Vascular rehabilitation
12. Principles of health and performance, Risk stratification, Prevention and health promotion, Metabolic and endocrinological disorders
13. Interpretation and application of Investigations related to Respiratory, cardiac and thoracic dysfunction and its relevance to physiotherapy.
14. Pharmacotherapeutics in cardiac condition and its relevance with physiotherapy.
15. Clinical decision-making skills in physiotherapeutic evaluation & management of Lifestyle disorders.
16. Cardio-Respiratory fitness testing and training in sports and diseases
17. Knowledge and skill of basic life support
18. Clinical reasoning, assessment and management of Integumentary and other system impairments due to cardiovascular and respiratory diseases

CLINICAL POSTING

Speciality

Acute care, Emergency units & Rehabilitation in Cardiovascular & Respiratory dysfunctions:
Intensive care units, Cardiovascular & Respiratory, preventive cardiology, metabolic disorders

and health promotion (Indoor & OPD), field visits.

Examination Pattern: All papers to be set and evaluated by speciality teachers. Topics from Applied Physiotherapeutics Paper I & II can be subject to application as per speciality

Theory Examination

- There shall be four theory papers of 100 marks each
- Each paper shall be of three hours duration

Paper I - Applied Physiotherapeutics Paper I (Applied biomechanics& clinical kinesiology, exercise physiology and nutrition, Electrophysiology and Electrodiagnosis)

Paper II - Applied Physiotherapeutics Paper II (Physiotherapy Diagnosis and Clinical Decision Making, Evidence Based practice and Advanced Physiotherapeutics)

Paper III – Advances in Physiotherapy (Speciality)- I

Paper IV- Advances in Physiotherapy (Speciality)- II

Question paper pattern :

Q. No.	Nature of question	Distribution of marks	Total marks
1.	Long Answer question answer any one	1 x30	30 marks
2.	Long Answer question answer any one	1x30	30 marks
3.	Solve any four out of five SAQ	4x10	40 marks

Practical 400 marks

Long Case I – Speciality – Paper I – 150 marks
Long Case I – Speciality – Paper II – 150 marks
Short Case – Allied – 50 marks
Dissertation & Research Viva- 30 marks
Presentation of Teaching Skills - 20 marks

BOOKS & JOURNALS OF CARDIO RESPIRATORY SPECIALITY

- 1) Human Physiology By Guyton
- 2) Physiology Of Human Joints By Kapandji
- 3) Hand Book Of Physiology In Aging - Masoro, C.R.C Press
- 4) Mechanical Ventilation By Irwin R.S.Bemers
- 5) Mechanical Ventilation By David W. Chang
- 6) ECG By Schamroth
- 7) Interpretation Of Pulmonary Function Tests: A Practical Guide By Hyatt, Robert E.; Scanlon, Paul D
- 8) Principles Of Exercise Testing And Interpretation: Including Pathophysiology And Clinical Applications By Kalman Wasserman
- 9) Baum’s Text Book Of Pulmonary Diseases
- 10) Crofton And Douglas’s Respiratory Diseases
- 11) Egan’s Fundamentals Of Respiratory Care By Robert Wilkins
- 12) Harrison’s Textbook Of Medicine
- 13) Brawnwald’s Cardiology

- 14) API's Text Book Of Medicine
- 15) Cardio Pulmonary Physical Therapy By Scott Irwin
- 16) Cardio Pulmonary Physical Therapy By Donna Frownfelter
- 17) Principles Of Cardio Pulmonary Physical Therapy By Asbury & Petty
- 18) Cardio Pulmonary Physical Therapy By Helenhillegas, (Saunders)
- 19) PT For RT & Cardiac Problems By Weber
- 20) Cardio Pulmonary Physical Therapy By Joanne Watchie
- 21) Physiotherapy For Respiratory And Cardiac Problems By Pryor JA; Prasad SA, Elsevier
- 22) Respiratory Ca Re – A Guide To Clinical Practice By Burton G.G. & Hodgkin
- 23) Brompton's Chest Physiotherapy
- 24) Physiotherapy In Respiratory Care By Hough A Jaypee Publishers
- 25) Chest Physiotherapy In Intensive Care Unit By Mackenzie CF Williams And Wilkins
- 26) Cardiovascular And Pulmonary Physical Therapy By Felter D.F. Mosby
- 27) Exercise And The Heart By Froelicher V.F. Elsevier
- 28) Cardiovascular Health And Disease In Women By Douglas PS. Saunders
- 29) Acute Care Handbook For Physical Therapist B Y Jamie C. Paz Michel P. West. Butterworth Heine Mann
- 30) Physical Therapy For Children By Campbell Suzann K, W.B Saunders, Philadelphia
- 31) Chest Physiotherapy In Intensive Care Unit By Mackenzie, Williams & Wilkins, Baltimore
- 32) Cardiopulmonary Symptoms In Physiotherapy By Cohen M, Churchill, Livingstone, London
- 33) Physical Rehabilitation: Assessment And Treatment By O'Sullivan, F.A Davis, Philadelphia
- 34) Clinical Application Of Ventilatory Support By Kinky Churchill, Livingstone, New York
- 35) Pulmonary Rehabilitation: Guidelines To Success By Bodkins, Butterworth, Boston
- 36) Cardiac Rehabilitation By Amundsen Lord, Churchill, Livingstone, London
- 37) Physical Therapy Of The Cancer Patient By MgaryexCharles, Churchill, Livingstone, New York
- 38) Multidisciplinary Approach To Breathing Disorder By Leon
- 39) Clinical Exercise Testing By Jones
- 40) Pulmonary Rehabilitation. The Obstructive And Paralytic Conditions By John
- 41) Coronary Artery Disease Essentials Of Prevention And Rehabilitation Program By Peter
- 42) Pulmonary Rehabilitation By John Hodgkin (Elsevier)

Journals

- 1) Journal of cardiovascular Disease & research
- 2) Journal of American Thoracic Society-Thorax
- 3) American Heart Association-Chest
- 4) Indian Journal of Critical Care Medicine
- 5) Respiratory care –European Journal

