

[KD 605] APRIL 2001

**MASTER OF PHYSIOTHERAPY DEGREE
EXAMINATION.**

Fourth Semester

**Paper II — P.T. IN CARDIO-PULMONARY
DISEASES**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

All questions carry equal marks.

- 1. Discuss the pulmonary rehabilitation programme in exercise induced bronchial asthma. (20)**
- 2. Discuss the cardiac rehabilitation programme following triple artery by pass graft following myocardial infarct. (20)**
- 3. Describe the role of physiotherapy in Paediatric Intensive care unit. (20)**
- 4. Describe the role of physiotherapy in peripheral vascular disorders. (20)**

5. Short notes on any FOUR : (20)

- (a) Pulmonary function tests**
 - (b) Nebuliser**
 - (c) Stress test**
 - (d) E.C.G.**
 - (e) Suctioning.**
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NOVEMBER 2001

[KE 605]

Sub. Code : 8005

**MASTER OF PHYSIOTHERAPY DEGREE
EXAMINATION.**

Paper V — P.T. IN CARDIO PULMONARY DISEASES

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

All questions carry equal marks.

Draw diagram wherever necessary.

1. Discuss and relate Cardiopulmonary Physiotherapy treatment interventions to the underlying Pathophysiology of Cardiopulmonary failure (example Obstructive lung disease, status asthmaticus and coronary artery disease) of the above conditions in the critically ill patient and prepare the rationale. (20)
2. Compare the goals of chest physical therapy for infants and older children. What are the similarities and differences? (20)
3. Discuss the exercise testing and training in secondary Cardiopulmonary dysfunction. (20)
4. Discuss the concepts pertinent to Cardio-pulmonary patient education. (20)

5. Short notes :

(4 × 5 = 20)

- (a) Discuss the concepts in inspiratory muscle fatigue and treatment of fatigue.
 - (b) List eight physiologic effects of frequent changes in body position.
 - (c) How should the effect of gravity on ventilation be considered during exercise and positioning?
 - (d) List three principles and categories of radiographic studies of the chest.
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MARCH 2002

[KG 605]

Sub. Code : 8005

**MASTER OF PHYSIOTHERAPY DEGREE
EXAMINATION.**

Second Year — New Regulation

Paper V — P.T. IN CARDIO-PULMONARY DISEASES

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

Draw Diagrams wherever necessary.

All questions carry equal marks.

1. Discuss Biomechanics of respiration in health and disease. (20)
 2. Describe assessment of respiratory conditions for physiotherapy management. (20)
 3. Describe factors affecting physical exercises. (20)
 4. Discuss principles of cardiac rehabilitation. (20)
 5. Short notes on : (4 × 5 = 20)
 - (a) Ventilation-perfusion ratio
 - (b) Risk factors in heart diseases
 - (c) Spirometry
 - (d) Nebulisers.
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SEPTEMBER 2002

[KH 605]

Sub. Code : 8005

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE
EXAMINATION.**

Second Year — New Regulations

Paper V — P.T. IN CARDIO-PULMONARY DISEASES

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

Draw diagrams wherever necessary.

All questions carry equal marks.

1. Role of physiotherapy in the different phases of cardiac rehabilitation. (20)
 2. Discuss cardiovascular and respiratory factors limiting physical exercise. (20)
 3. Discuss breathing mechanisms in normal and diseased states. (20)
 4. Define 'Stress Test' and its relevance to exercise prescription. (20)
 5. Write short notes on : (4 × 5 = 20)
 - (a) Tidal volume
 - (b) Humidifiers
 - (c) Breathing exercises
 - (d) Autogenic drainage.
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APRIL 2003

[KI 605]

Sub. Code : 8205

**MASTER OF PHYSIOTHERAPY DEGREE
EXAMINATION.**

(New Regulations)

Second Year

**Paper V — PHYSIOTHERAPY IN CARDIO
PULMONARY DISEASES**

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

All questions carry equal marks.

1. Discuss the role of physiotherapist in pulmonary rehabilitation. (20)
2. Discuss the clinical features and P.T. management in Bronchiectasis. (20)
3. Discuss the P.T. management in Peripheral vascular disorders. (20)
4. Discuss the P.T management following coronary artery bypass graft. (20)

5. Write notes on any FOUR :

(20)

- (a) Mechanical Ventilation
 - (b) Airway suctioning
 - (c) Breathing exercises
 - (d) Bronchial drainage.
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OCTOBER 2003

[KJ 605]

Sub. Code : 8205

**MASTER OF PHYSIOTHERAPY DEGREE
EXAMINATION.**

(New Regulations)

Second Year

**Paper V — PHYSIOTHERAPY IN CARDIO
PULMONARY DISEASES**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
Forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

**M.C.Q. must be answered SEPARATELY on the
answer sheet provided as per the instructions on the
first page.**

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay questions : (2 × 15 = 30)

**1. Explain the patho-physiology of atherosclerosis.
Write in detail the post Myocardial infarction cardiac
rehabilitation.**

**2. How will you differentiate between arterial and
venous disorders? Add a note on Winsor and Hyman
functional grading scale.**

II. Short notes : (10 × 5 = 50)

**3. (a) Write briefly about the effects of positioning
on respiratory ventilation.**

**(b) What is Adult Respiratory Distress
Syndrome.**

(c) P.T. management for pneumothorax.

**(d) What are the age related changes in
respiratory system?**

(e) What is nosocomial pneumonia?

(f) Characteristics of Resting ECG.

(g) Maximum Voluntary Ventilation.

(h) What is autogenic drainage?

**(i) Silverman scoring system for assessing
breathing performance in pre-mature infants.**

(j) Clinical indications of humidifier Therapy.

APRIL 2004

[KK 605]

Sub. Code : 8205

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE
EXAMINATION.**

(New Regulations)

Second Year

**Paper V — PHYSIOTHERAPY IN CARDIO
PULMONARY DISEASES**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

A. Essay : (2 × 15 = 30)

**(1) Pulmonary rehabilitation – Increase the
quality of life for patients – comment.**

**(2) Discuss the role of exercise tolerance testing
in cardio respiratory conditions.**

B. Write short notes on :

(10 × 5 = 50)

(1) Lipid profile

(2) Blood gas analysis

(3) Pulmonary function test

(4) Pulmonary oedema

(5) Ventilators

(6) Cough

(7) Endurance training

(8) Prescriptive and routine body positioning

**(9) Functional and therapeutic classification of
heart disease**

(10) Occupational lung hazards.

AUGUST 2004

[KL 605]

Sub. Code : 8205

**MASTER OF PHYSIOTHERAPY (MPT)
DEGREE EXAMINATION.**

(New Regulations)

Second Year

**Paper V — PHYSIOTHERAPY IN CARDIO
PULMONARY DISEASES**

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay : (2 × 15 = 30)

(1) What are the indications for supplemental oxygen? Explain the various methods through which oxygen can be administered.

(2) Describe cough reflex. Explain in detail the assessment of cough.

II. Short notes :

(10 × 5 = 50)

- (a) Bruce Protocol.
- (b) Burgher Allan Exercise.
- (c) Clinical Evaluation of Respiratory Muscle Fatigue and Treatment.
- (d) VO_2 max.
- (e) Exercise Induced Asthma and its management.
- (f) Transport of Carbon-di-oxide.
- (g) Multiple Drug Resistant Tuberculosis.
- (h) Pulmonary Function Testing changes in patients with Restrictive Lung Diseases.
- (i) IPPB : Indications and Contraindications.
- (j) Diaphragm.

FEBRUARY 2005

[KM 605]

Sub. Code : 8205

MASTER OF PHYSIOTHERAPY (MPT) DEGREE
EXAMINATION.

(New Regulations)

Second Year

Paper V — PHYSIOTHERAPY IN CARDIO
PULMONARY DISEASES

Time : Three hours Maximum : 100 marks

Theory : Two hours and Theory : 80 marks
forty minutes

M.C.Q. : Twenty minutes M.C.Q. : 20 marks

Answer ALL questions.

Draw suitable diagrams wherever necessary.

I. Essay Questions : (2 × 15 = 30)

(1) Latest trends in rehabilitation of cystic
fibrosis.

(2) Cardiac rehabilitation following coronary
angioplasty.

II. Short Notes : (10 × 5 = 50)

- (a) Broncho pulmonary segments.
 - (b) Cardio-respiratory assessment.
 - (c) Nikity Wilson syndrome.
 - (d) Pulmonary function test.
 - (e) Mechanical Nebulizer.
 - (f) Management of patient with atelectases.
 - (g) Effect of training programme on pulmonary
function.
 - (h) Tetralogy of fallot.
 - (i) Pneumatic pumps in vascular disorders.
 - (j) Cardiac arrest and its management.
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[KR 605]

Sub. Code : 8205

**MASTER OF PHYSIOTHERAPY (MPT) DEGREE
EXAMINATION.**

Second Year — New Regulations

Paper V — P.T. IN CARDIO-PULMONARY DISEASES

Time : Three hours

Maximum : 100 marks

**Theory : Two hours and
forty minutes**

Theory : 80 marks

M.C.Q. : Twenty minutes

M.C.Q. : 20 marks

Answer ALL questions.

Draw diagrams wherever necessary.

I. Essays :

1. List out the airway clearance techniques. Discuss its physiological mechanisms of secretion clearance from pulmonary tree. (20)

2. Define cardiac rehabilitation. Discuss in detail about the phase-I program following coronary artery bypass grafting surgery. (15)

3. Discuss the complication that may arise in patient with penetrating injury to chest. How will you manage such a patient? (15)

II. Short notes :

(6 × 5 = 30)

(a) Ventilation/perfusion.

(b) METS.

(c) Intercostal drainage.

(d) Risk factor modification for cardiac patients.

(e) Emphysema.

(f) Ventricular septal defect.