

PRACTICE SET
End Semester Examination, Spring- 2026

Program: Bachelor of Physiotherapy (BPT)
Semester: VI
Course: Physiotherapy in Cardiopulmonary Conditions
Course Code: 23A603

Course Outcome:

On the completion of the Course, the students will be able to:

| Course Outcomes | Description |
|------------------------|--|
| CO1 | Explain anatomy and physiology of cardiorespiratory system in different age group. |
| CO2 | Understand different Cardiopulmonary clinical conditions. |
| CO3 | Analyze and apply Cardiopulmonary theoretical knowledge in Physiotherapy. |
| CO4 | Demonstrate clinical decision-making ability and treat different Cardiopulmonary conditions in different clinical settings |

UNIT I – Adult & Pediatric Lung, ICU

Section A

1. Enlist adult and pediatric lung Cardiopulmonary Anatomy and physiological differences. (CO1), (BTLLOT)(Remember)
2. Define COPD and apply principle of Pulmonary Function Test for diagnosis of it. (CO1) (BTLLOT)(Apply)
3. Analyze the given ABG values [pH 7.25, PCO₂ 48 mmHg, HCO₃⁻ 26 mEq/L, PO₂ 75 mmHg] and interpret the underlying acid–base disorder. (CO1), (BTLLOT)(Remember)
4. Enlist ICU monitoring devices. (CO2), (BTLLOT) (Remember)
5. Enlist types of airway tubes used in ICU. (CO2), (BTLLOT) (Remember)

Section B

6. Analyze bedside assessment findings (vital signs, respiratory patterns, and auscultation) in a cardiopulmonary patient and interpret their clinical significance (CO3) (BTLHOT)(Analyze)
7. Evaluate physiotherapy management strategies in ICU patients and justify their role in improving patient outcomes. (CO4), (BTLHOT)(Evaluate)

8. Apply exercise tolerance testing in a given clinical scenario and interpret the findings (CO3), (BTLLOT) (Apply)
9. Evaluate emergency handling protocols in ICU. (CO4), (BTLHOT) (Evaluate)

UNIT II – Techniques to Increase Lung Volume

Section A

10. Define breathing exercises and describe its types. (CO1), (BTLLOT) (Remember)
11. Differentiate Between incentive spirometry and Spirometry. (CO1, (BTLLOT)(Analyze)
12. Differentiate Between CPAP and BiPAP. (CO2), (BTLLOT) (Analyze)
13. What is Positioning List importance of positioning in FRC. (CO2), (BTLLOT) (Remember)
14. Enlist Physiotherapeutic Techniques to Increase Lung Volume and Describe controlled mobilization. (CO3), (BTLLOT) (Remember)

15. Section B

16. Analyze techniques used to increase lung volume. (CO3), (BTLHOT) (Analyze)
17. Analyze how mechanical aids benefits in physiotherapy management in ICU. (CO3), (BTLHOT) (Analyze)
18. Evaluate the use of neurophysiological facilitation techniques in-patient rehabilitation (CO3), (BTLHOT)(Evaluate)
19. Evaluate CPAP and BiPAP and justify their selection based on different clinical conditions. (CO3), (BTLHOT) (Evaluate)

UNIT III – Secretion Clearance

Section A

20. Define ACBT and list its components.. (CO1), (BTLLOT) (Remember)
21. Define postural drainage and list the positions used for apical lobe drainage. (CO2), (BTLLOT) (Remember)
22. Enlist percussion and vibration techniques. (CO2), (BTLLOT) (Remember)
23. Define Cough Facilitatory Technique and also mention its types and explain in details the procedure of any one type of it. (CO2), (BTL-LLOT) (Remember)
24. Define nebulization and mention the important Drugs used in it (CO1), (BTLLOT) (Remember)
25. Define ARDS and Importance of Ventilation and Oxygen Therapy in it. (CO2), (BTLLOT) (Remember)

Section B

26. Analyze various secretion clearance techniques and their role in managing respiratory disorders. (CO3, (BTL-HOT) (Analyze)
27. Apply ACBT and autogenic drainage clinically in the case of Cystic Fibrosis. (CO3, (BTL-HOT) (Analyze)
28. Evaluate the role of mechanical aids in secretion clearance. (CO3, (BTL-HOT) (Evaluate)

29. Evaluate physiotherapy management in ventilated patients. (CO4) (BTL-HOT)
(Evaluate)

UNIT IV – Drug Therapy & Wound Management

Section A

30. Define bronchodilators and also write about its types (CO2, (BTL-LOT) (Remember)
31. Define anti-inflammatory drugs and also write about its types. (CO2, (BTL-LOT)
(Remember)
32. Define wound healing and its Physiotherapeutic Management. (CO1, (BTL-LOT)
(Remember)
33. Define burns and explain management of burns. (CO2, (BTL-LOT) (Remember)
34. Define Keloid and explain scar management. (CO2, (BTL-LOT) (Remember)

35. Section B

36. Analyze various drug therapies used in respiratory disorders and correlate them with
their clinical indications (CO3, (BTL-HOT)(Analyze)
37. Evaluate the role of physiotherapy in the management of burn patients.
(CO4)(Evaluate) (BTL-HOT)
38. Analyze the stages of wound healing (CO3, (BTL-HOT)(Analyze)
39. Design an electrotherapy treatment protocol for wound healing in a clinical case
(CO3, (BTL-HOT)(Create)

UNIT V – Dermatology & Chest

Section A

40. Define vitiligo and write importance of UVR therapy on it also explain procedure.
(CO2, (BTL-LOT) (Remember)
41. Define hyperhidrosis and explain Faradic foot Bath. (CO2, (BTL-LOT) (Remember)
42. Define leprosy and explain its management. (CO3, (BTL-LOT) (Remember)
43. Enlist any five neonatal emergency condition and write importance of physiotherapy
in NICU. (CO3, (BTL-LOT) (Remember)
44. Differentiate between Leprosy and Vitiligo. (CO3, (BTL-HOT)(Analyze)

45. Section B

46. Analyze physiotherapy in dermatological conditions. (CO3, (BTL-HOT) (Analyze)
47. Evaluate neonatal chest physiotherapy techniques. (CO4, (BTL-HOT)(Evaluate)
48. Apply prosthetic & orthotic training principles. (CO4, (BTL-HOT)(Analyze)
49. Evaluate emergency neonatal care. (CO4, (BTL-HOT)(Evaluate)

UNIT VI – Lung Conditions

Section A

50. Differentiate between obstructive lung disease and restrictive lung disease. And write
about Pulmonary Rehabilitation. (CO2, (BTL-LOT) (Analyze)

Section B (BTL-HOT)

51. Analyze physiotherapy in COPD. (CO4, (BTL-HOT)) (Analyze)
52. Apply pulmonary rehabilitation techniques. (CO3, (BTL-HOT))(Analyze)
53. Evaluate physiotherapy post lung surgery. (CO4, (BTL-HOT))(Evaluate)

54. Analyze ARDS management with Mechanical Ventilation. (CO4, (BTL-HOT) (Analyze)

UNIT VII – Cardiac & PVD

Section A

55. . Define CABG and Explain in details about cardiac rehabilitation. (CO3, (BTL-LOT) (Remember)

56. Define PVD. And Explain Faradic Under Pressure (CO2, (BTL-LOT) (Remember)

57. Define hypertension and Write exercise prescription for it (CO2, (BTL-LOT) (Remember)

58. Define diabetes and Write exercise prescription for it. (CO2, (BTL-LOT) (Remember)

59. Define and Write exercise prescription for it obesity. (CO2 (BTLOT) (Remember)

60. Sketch 9 quadrants of Abdomen, Types of incision of abdominal surgery and enlist complications with Physiotherapeutic Management. (CO2, BTL-LOT) (Apply)

Section B (BTL-HOT)

61. Analyze the phases of cardiac rehabilitation and their role in patient recovery (CO4, (BTL-HOT) (Analyze)

62. Evaluate physiotherapy interventions in peripheral vascular disease (PVD) and justify their effectiveness. (CO4, (BTL-HOT) (**Evaluate**)

63. Apply physiotherapy rehabilitation principles in the management of a patient following abdominal surgery. (CO4, (BTL-HOT) (Apply)

64. Analyze physiotherapy interventions in the management of hypertension and obesity (CO3, (BTL-HOT) (Analyze)

Summary Sheet

CO Wise

| CO | Q. No | Marks |
|--------------|---|------------|
| CO1 | 1-4,11-12,21,25,33 | 100 |
| CO2 | 5-6,13-16,22-24,26,31-32,34-35,41-42,51,57-61 | 100 |
| CO3 | 7,9,15,27-29,43-45,53,65 | 90 |
| CO4 | 8,10,30,37-40,47-50,52-55,62-64 | 90 |
| Total | | 380 |

Unit Wise

| Unit | Q. No | Marks |
|--------------|-------|------------|
| Unit 1 | 1–10 | 60 |
| Unit 2 | 11–20 | 60 |
| Unit 3 | 21–30 | 60 |
| Unit 4 | 31–40 | 60 |
| Unit 5 | 41–50 | 60 |
| Unit 6 | 51–55 | 50 |
| Unit 7 | 56–65 | 30 |
| Total | | 380 |

Blooms Taxonomy Level (BTL) Wise

| BTL | Q. No | Marks |
|--------------|--|------------|
| LOT | 1–6, 9, 11–16, 21–26, 31–36, 41–46, 51, 56–61 | 200 |
| HOT | 7, 8, 10, 17–20, 27–30, 37–40, 47–50, 52–55, 62–65 | 180 |
| Total | | 380 |

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Disclaimer: -This is a Practice set. The Question in End term examination will differ from the Practice set. This Practice set is meant for practice only.