



**SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH**

**(A DEEMED TO BE UNIVERSITY)**

**B.Sc. Allied Health Sciences Third Year (Semester-V)**

**March 2025 Examination**

**B.Sc. Respiratory Therapy**

**Time: 3 Hrs.**

**[Max. Marks: 80]**

**Respiratory Care Technology - Clinical**

**Q.P Code: K5861**

*Your answers should be specific to the questions asked.*

*Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY**

**2 X 10 = 20 Marks**

1. Define pulmonary edema. explain pathophysiology and add a detailed note on its management
2. Define ARDS .write a note on stages, causes, clinical features and management.

**SHORT ESSAY**

**6 X 5 = 30 Marks**

3. Explain in detail about pulmonary tuberculosis
4. Write the advantages and disadvantages of DPI
5. Define pneumonia , classification , pathophysiology , signs and symptoms
6. Define cough , classification ,causes of cough , mechanism and treatment of cough
7. Advantages and disadvantages of ultrasonic nebulizer
8. Write a note on high flow oxygen devices

**SHORT ANSWERS**

**10 X 3 = 30 Marks**

9. Define cyanosis. and mention its type
10. Describe the pathophysiology of pulmonary tuberculosis.
11. Describe the Chest x ray features of pneumonia
12. Write a note on management of status asthmaticus
13. Describe the mechanism of cough
14. Name few viral infections that affect respiratory system
15. Write a note on diagnosis of bronchial asthma
16. Describe the Chest x ray features of Post TB Sequelae
17. Berlin's definition of ARDS
18. Write a note on Brownian diffusion

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**B.Sc. Allied Health Sciences Third Year (Semester-V)**

**March 2025 Examination**

**B.Sc. Respiratory Therapy**

**Time: 2.30 Hrs.**

**[Max. Marks: 80]**

**Respiratory Care Technology Applied**

**Q.P Code: K5862**

*Your answers should be specific to the questions asked.*

*Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY**

**2 X 10 = 20 Marks**

1. Write in detail about troubleshooting of ventilator alarms
2. Write in detail about lung compliance and airway resistance

**SHORT ESSAY**

**6 X 5 = 30 Marks**

3. Write a note on Lung compliance
4. Write a note Phase variables
5. Explain in detail about strategies to improve oxygenation status
6. Application of chest inspection, percussion and auscultation
7. Write a note Respiratory Acidosis
8. Write a note Sodium abnormalities

**SHORT ANSWERS**

**10 X 3 = 30 Marks**

9. Write any three differences between CMV and Support mode
10. Write a note on Hyperkalemia
11. Troubleshoot low pressure alarm
12. Phase variables of CMV mode
13. Define trans airway pressure with formula
14. Causes of extracellular fluid deficiency
15. Causes of respiratory alkalosis
16. Phase variable of synchronized intermittent mandatory ventilation (SIMV) mode.
17. Difference between side-stream and main-stream capnography
18. Complication of PEEP

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**B.Sc. Allied Health Sciences Third Year (Semester-V)**

**March 2025 Examination**

**B.Sc. Respiratory Therapy**

**Time: 2.30 Hrs.**

**[Max. Marks: 80]**

**Respiratory Care Technology - Advanced**

**Q.P Code: K5863**

*Your answers should be specific to the questions asked.*

*Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY**

**2 X 10 = 20 Marks**

1. Describe in detail about surfactant therapy
2. Describe in detail about initial ventilator settings.

**SHORT ESSAY**

**6 X 5 = 30 Marks**

3. Causes of weaning failure
4. Discuss in detail about hazards and complications of mechanical ventilation.
5. Types of surfactants and dosages
6. Mechanism of gas exchange in high frequency ventilation
7. Advantages of arterial blood gas sampling
8. Equipment's used in neonatal endotracheal intubation

**SHORT ANSWERS**

**10 X 3 = 30 Marks**

9. Timings of surfactant therapy
10. Oxygenation criteria in weaning
11. Define Anion gap
12. What is Allen's test
13. What is Standard base excess
14. List the sites of taking abg
15. Classify neonates based on gestation
16. what are the criteria of weaning success
17. List the condition that hinders successful weaning
18. What is Standard bicarbonate with normal and abnormal range

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