SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

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

November 2024 Examination

B.Sc. Respiratory Therapy

Time: 3 Hrs. **[Max. Marks: 100]**

Respiratory Care Technology - Clinical

Q.P Code: J6891

Your answers should be specific to the questions asked.
Draw neat labelled diagrams wherever necessary.

Long Essay **2 X 10 = 20 Marks**

1. Explain detail notes on Airway protection. Brief about ET intubation, procedure, contraindications of ET intubation
2. Explain Aerosol therapy. Add a brief note on Ultrasonic nebulizer.

Short Essay (Answer any Ten) **10 X 5 = 50 Marks**

3. Add a note on Capnography
4. Brief notes on Nasal intubation.
5. Brief notes on small volume nebulizer.
6. Add a note on Pulse oximetry
7. Transcutaneous oxygen monitor
8. Manual resuscitator bag and it's indications
9. Add a note on Oropharyngeal airways
10. Explain briefly about Tracheostomy procedure.
11. Complications of long term intubation
12. Add a note on Nasopharyngeal airways
13. Add a note on Artificial airways care
14. Explain in brief about Weaning criteria

Short Answers (Answer any Ten) **10 X 3 = 30 Marks**

15. Indications of intubation
16. Draw a neat labelled diagram of ET tube and it's parts
17. Define Allen's test
18. Indications of capnography
19. Mention the sites of ABG sample
20. Draw a neat labelled diagram of tracheostomy tube
21. Different types of tracheostomy tube
22. Contradictions of AMBU bag
23. Oropharyngeal airways insertion technique
24. Mention any 3 types of nebulizers
25. Nasopharyngeal airways insertion technique
26. Draw neat labelled diagram of MDI

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

November 2024 Examination

B.Sc. Respiratory Therapy

Time: 3 Hrs. **[Max. Marks: 100]**

Respiratory Care Technology - Advanced

Q.P Code: J6893

Your answers should be specific to the questions asked.
Draw neat labelled diagrams wherever necessary.

Long Essay **2 X 10 = 20 Marks**

1. Define home mechanical ventilation. Briefly explain about its goals, indications and patient selection
2. Define oxygen toxicity and briefly explain about its mechanism and prevention

Short Essay (Answer any Ten) **10 X 5 = 50 Marks**

3. Explain in detail about Management and treatment of drowning
4. Enumerate the Indications and contraindications of NIPPV
5. Briefly explain about non cardiogenic pulmonary edema
6. Explain briefly about CPAP
7. Indications and contraindications of BIPAP
8. Briefly explain about cardiogenic pulmonary edema
9. Pathophysiology of fresh water drowning
10. Pathophysiology of salt water drowning
11. Types of home mechanical ventilation
12. Hyperbaric oxygen therapy
13. Pathophysiology and management of cardiogenic pulmonary edema
14. Explain in detail about Sleep apnea

Short Answers (Answer any Ten) **10 X 3 = 30 Marks**

15. Define near drowning
16. Define continue positive pressure ventilation.
17. Define drowning
18. Types of pulmonary edema
19. Define non cardiogenic pulmonary edema
20. Define cardiogenic pulmonary edema
21. Clinical manifestations of drowning
22. Preventive measures from barotrauma
23. Difference between CPAP and BIPAP
24. Mention various types of interface used in NIPPV
25. Define oxygen toxicity
26. Diagnosis of pulmonary edema

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Sri Devaraj Urs ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)
B.Sc. Allied Health Sciences Third Year Semester-VI
November 2024 Examination
B.Sc. Respiratory Therapy

Time: 2.30 Hrs. **[Max. Marks: 80]**

Respiratory Care Technology Clinical
Q.P Code: K6871

Your answers should be specific to the questions asked.
Draw neat, labelled diagrams wherever necessary.

LONG ESSAY **2 X 10 = 20 Marks**

1. Explain detailed notes on Airway protection. Brief about ET intubation, procedure, contraindications of ET intubation
2. Write a note in detail about metered dose inhaler, and its technique and neat labelled diagram

SHORT ESSAY **6 X 5 = 30 Marks**

3. Brief notes on Jet nebulizer
4. Complications of long-term intubation
5. Mention techniques of insertion of Oropharyngeal airways and how to measure size and mention different size, color appropriate to patients age
6. Enumerate the indications, contraindication of Artificial airways
7. Explain briefly about Transcutaneous oxygen monitor
8. Add a note on Capnography

SHORT ANSWERS **10 X 3 = 30 Marks**

9. Enumerate the Indications of Nasal intubation
10. Add a note on Benefits of Allen's test
11. Write the advantages and disadvantages of dry powder inhaler
12. Different types of tracheostomy tube
13. Enumerate the Indications of AMBU bag
14. Enumerate the Types of nebulizers
15. Add a note on NPA insertion technique
16. Draw neat, labelled diagram of Ultrasonic nebulizer
17. Explain lung compliance
18 Draw a neat, labelled diagram of LMA

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SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
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B.Sc. Allied Health Sciences Third Year Semester-VI November 2024 Examination

B.Sc. Respiratory Therapy

Time: 2.30 Hrs. **[Max. Marks: 80]**

Respiratory Care Technology Applied

Q.P Code: K6872

Your answers should be specific to the questions asked.
Draw neat, labelled diagrams wherever necessary.

LONG ESSAY **2 X 10 = 20 Marks**

1. Define ECG. Explain its normal waveform and write a note on shockable Rhythm with appropriate ECG waveform.
2. Describe the goals, indication and complication of mechanical ventilation and add a note on Troubleshooting of high- and low-pressure alarms.

SHORT ESSAY **6 X 5 = 30 Marks**

3. Write a note on anticholinergic agents.
4. Explain in detail about intubation procedure.
5. Write a note oxygen dissociation curve and graph
6. Write a note on air trapping.
7. Write hemodynamic consideration of positive pressure ventilation.
8. Write a note on drugs used to improve ventilation.

SHORT ANSWERS **10 X 3 = 30 Marks**

9. Define humidification.
10. Draw a neat labelled diagram of LMA.
11. Enumerate the equipment's used in extubation
12. Draw the graph of flow volume loop in
    - Air trapping
    - Air leak
    - Increased airway resistance
13. Write goals of long-term airway.
14. Write complications of humidity therapy.
15. Classify various types of output waveforms
16. Write mechanism of action and uses of salbutamol.
17. Draw a neat, labeled diagram of two types of second-degree heart block with appropriate ECG waveform
18 Write indications of tracheostomy

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B.Sc. Allied Health Sciences Third Year Semester-VI November 2024 Examination
B.Sc. Respiratory Therapy

Time: 2.30 Hrs. **[Max. Marks: 80]**

Respiratory Care Technology Advanced

Q.P Code: K6873

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 function test & Explain in detail about spirometry, indication, contraindication, complication and steps involved in this procedure.
2. Explain in detail about Hyperbaric oxygen therapy

SHORT ESSAY **6 X 5 = 30 Marks**

3. Differentiate Life support and Life sustainable ventilation
4. Write a short note on obstructive sleep apnea
5. Explain briefly Pathophysiology of cardiogenic pulmonary edema
6. Explain briefly about Caissons disease
7. Write a note on home mechanical ventilation and its indication
8. Define drowning. Briefly explain about pathophysiology of saltwater drowning.

SHORT ANSWERS **10 X 3 = 30 Marks**

9. Differentiate CPAP and BIPAP.
10. Mention various types of masks and interface used in Noninvasive positive pressure ventilation.
11. Define sleep apnea.
12. Clinical manifestations of drowning.
13. Complications of oxygen toxicity.
14. Enumerate the Prevention of barotrauma
15. State preventive measures of oxygen toxicity.
16. Signs and symptoms of pulmonary edema.
17. Write complications of NIV.
18 Mention Goals of home mechanical ventilation.

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