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



#### (A DEEMED TO BE UNIVERSITY)

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

March 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**  $2 \times 10 = 20 \text{ Marks}$ 

- 1. Define Aerosol therapy. Briefly explain about Ultrasonic nebulizer.
- 2. Explain detail notes on Airway protection. Brief about ET intubation, procedure, contraindications of ET intubation

## **Short Essay (Answer any Ten)**

10 X 5 = 50 Marks

- 3. Describe in detail about weaning criteria
- 4. Brief notes on emergency intubation.
- 5. Brief notes on Jet nebulizer.
- 6. Explain briefly about SPO2 monitoring
- 7. Complications of long term intubation
- 8. Manual resuscitator bag and it's Contraindications and indications
- 9. Mention Oropharyngeal airways size and color appropriate to patients age
- 10. Explain briefly about Tracheostomy procedure.
- 11. Transcutaneous oxygen monitor
- 12. Nasopharyngeal airways indications and contraindications
- 13. Artificial airways indications
- 14. Add a note on Capnography.

## **Short Answers** (Answer any Ten)

10 X 3 = 30 Marks

- 15. Indications of Nasal intubation
- 16. Draw a neat diagram of ET tube and label it's parts
- 17. Benefits of Allen's test
- 18. Indications of capnography
- 19. Mention the sites of Arterial blood sampling
- 20. Draw a neat labelled diagram of cuffed tracheostomy tube
- 21. Different types of tracheostomy tube
- 22. Indications of AMBU bag
- 23. OPA insertion technique
- 24. Types of nebulizers
- 25. NPA insertion technique
- 26. Draw neat labelled diagram of Ultrasonic nebulizer

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#### (A DEEMED TO BE UNIVERSITY)

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

March 2024 Examination B.Sc. Respiratory Therapy

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

# **Respiratory Care Technology - Applied**

Q.P Code: J6892

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

**Long Essay**  $2 \times 10 = 20 \text{ Marks}$ 

- 1. Define ECG. Explain its normal waveform and write a notes on shockable Rhythm with appropriate ECG waveform.
- 2. Define airway management. Explain detail notes on endotracheal intubation

### **Short Essay** (Answer any Ten)

10 X 5 = 50 Marks

- 3. Sedative drugs used during mechanical ventilation.
- 4. Central venous pressure monitoring
- 5. Define neuromuscular blocking agents and briefly explain about nitric oxide.
- 6. Anaesthesia gases effect on PEEP.
- 7. Define cardiac output and mention normal cardiac output with appropriate formula.
- 8. Classification of various alarm in mechanical ventilation.
- 9. Define humidification and briefly explain about HME.
- 10. Pulmonary artery pressure monitoring.
- 11. Detail notes on tracheostomy procedure.
- 12. Indications and contraindications of tracheostomy procedure
- 13. Briefly explain about premature atrial contraction and premature ventricular contraction with proper ECG waveform
- 14. Define 1st degree, 2nd degree and 3rd degree heart block

### **Short Answers** (Answer any Ten)

10 X 3 = 30 Marks

- 15. Define ECG.
- 16. Propofol during MV
- 17. Draw a neat labelled diagram of normal ECG waveform
- 18. Indications of ET intubation
- 19. MDI
- 20. Phase variables of volume control mode
- 21. Contraindications of tracheostomy tube
- 22. Indications of ECG
- 23. Phase variables of pressure control mode
- 24. How to measure Rate in ECG
- 25. How to measure Rhythm in ECG
- 26. Define active humifier

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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)

March 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** 

 $2 \times 10 = 20 \text{ Marks}$ 

- 1. Define pulmonary edema and briefly explain about non- cardiogenic pulmonary edema
- Define drowning. Briefly explain about pathophysiology of saltwater drowning and freshwater drowning.

### **Short Essay (Answer any Ten)**

10 X 5 = 50 Marks

- 3. Define home mechanical ventilation and it's goals.
- 4. Indications of Non invasive positive pressure ventilation.
- 5. Briefly explain about oxygen toxicity
- 6. Explain briefly about CPAP
- 7. Indications and contraindications of BIPAP
- 8. Briefly explain about non cardiogenic pulmonary edema
- 9. Caissons disease
- 10. Patient selection in home mechanical ventilation
- 11. Explain Life support and Life sustainable ventilation
- 12. Hyperbaric oxygen therapy
- 13. Indications and contraindications of home mechanical ventilation.
- 14. Pathophysiology of pulmonary edema

#### **Short Answers** (Answer any Ten)

10 X 3 = 30 Marks

- 15. Management of drowning
- 16. Define NIV
- 17. Mechanism of oxidative damage
- 18. Define oxygen toxicity
- 19. Define cardiogenic pulmonary edema
- 20. Etiology of cardiogenic pulmonary edema
- 21. Define near drowning
- 22. Define barotrauma
- 23. Difference between CPAP and BIpap
- 24. Mention various types of mask use in Non invasive positive pressure ventilation
- 25. Define sleep apnea
- 26. Clinical manifestations of pulmonary edema