



**SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH**  
(A DEEMED TO BE UNIVERSITY)

**B.Sc. Allied Health Sciences Second Year (Semester-III)**

**March 2024 Examination**

**B.Sc. Respiratory Therapy**

**Time: 2.30 Hrs.**

**[Max. Marks: 80]**

**Paper – IV**

**Medicine Relevant to Respiratory Care Technology**

**Q.P Code: J3880**

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

**LONG ESSAY**

**2 X 10 = 20 Marks**

1. Define AIDS .explain the etiology ,pathogenesis ,signs and symptom with treatment .Draw a neat labelled diagram of virus
2. Define diabetes mellitus ,types and explain the pathophysiology signs & symptoms and management

**SHORT ESSAY (Answer any Six)**

**6 X 5 = 30 Marks**

3. Discuss the management of IHD
4. Define bronchial asthma. Describe the pathophysiology of bronchial asthma
5. Discuss the management of hypertension
6. Discuss the clinical features of COPD
7. Briefly describe the diseases associated with obesity
8. Describe the complications associated with pregnancy
9. Define hypertension. Explain about pathogenesis of secondary hypertension
10. Describe the airway management in poisoning patients

**SHORT ANSWERS (Answer any Ten)**

**10 X 3 = 30 Marks**

11. Define respiratory failure and mention its types
12. Mention the causes of IHD
13. Define hypertension and mention its types
14. Define ARDS and mention its stages
15. Classification of respiratory infection in children
16. Mention the risk factors causing COPD
17. Define sepsis
18. Define status asthmaticus
19. Define myasthenia gravis
20. Mention signs and symptoms of HIV
21. Describe the diagnosis of COPD
22. Define pre-eclampsia



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**[Max. Marks: 80]**

**Paper – II**

**Introduction to Respiratory Care Technology**

**Q.P Code: K3800**

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

*Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY**

**2 X 10 = 20 Marks**

1. Write a detailed assessment of general appearance and add a note on respiratory system.
2.
  - a) List the major vital signs(3 marks)
  - b) Define blood pressure .mention its sites (3marks)
  - c) Briefly describe the measurement of blood pressure(4 marks)

**SHORT ESSAY**

**6 X 5 = 30 Marks**

3. Describe the topography of heart.
4. Write a short note on needle stick injury.
5. Add a note on conducting system of heart
6. Describe the assessment of skin and extremities
7. Write a note on assessment of neurological system
8. Describe the imaginary planes in chest topography

**SHORT ANSWERS**

**10 X 3 = 30 Marks**

9. Mention 3 cardiovascular disorders
10. Write 3 Products of Respiration
11. Define orthopnea
12. Add a note on cardiac sounds
13. Define eupnea
14. Describe closed loop communication
15. Write steps involved in Donning of PPE & Doffing of PPE
16. Add a note in checking pulse
17. Define Cardiothoracic ratio and mention its normal range
18. Define platypnea

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**Paper – IV**

**[Max. Marks: 80]**

**Medicine Relevant to Respiratory Care Technology**

**Q.P Code: K3820**

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

*Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY**

**2 X 10 = 20 Marks**

1. Define poliomyelitis .explain the pathophysiology, risk factors and management of poliomyelitis.
2. Define AIDS .explain the etiology ,pathogenesis ,signs and symptom with treatment .Draw a neat labelled diagram of virus

**SHORT ESSAY**

**6 X 5 = 30 Marks**

3. Discuss the clinical manifestation of bronchial asthma
4. Describe the pathogenesis of type 1 and type 2 DM
5. Define hypertension. Explain about etiology and pathogenesis of primary hypertension
6. Define IHD. Explain the pathophysiology of IHD
7. Define ARDS. Explain the pathogenesis of ARDS
8. Define the criteria to determine respiratory failure in a patients. list the causes for type 2 respiratory failure

**SHORT ANSWERS**

**10 X 3 = 30 Marks**

9. Define status asthmaticus
10. Mention signs and symptoms of diabetes mellitus
11. List the clinical manifestations of septic shock
12. Define Berlin definition of ARDS
13. List the causes of type 1 respiratory failure
14. Mention signs and symptoms of HIV
15. Define pre-eclampsia
16. Write the Chemical formula of Respiration
17. Describe the diagnosis of IHD
18. Define poliomyelitis

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**B.Sc. Respiratory Therapy**

**Time: 2.30 Hrs.**

**Paper – I**

**[Max. Marks: 80]**

**Applied Pathology & Microbiology**

*(Use separate answer booklet for Section A & B)*

**Section – A**

**Applied Pathology (40 Marks)**

**Q.P Code : K3795**

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

*Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY**

**1 X 10 = 10 Marks**

1. Define anemia. Classify anemia based on morphology and etiological factors and add a note on laboratory investigations in anemia

**SHORT ESSAY**

**3X 5 = 15 Marks**

2. Define leukemia. Write the classification of leukemia
3. Hypertension – Definition types, pathogenesis and its effects.
4. Describe the pathogenesis of Hemophilia and discuss the laboratory diagnosis

**SHORT ANSWERS**

**5 X 3 = 15 Marks**

5. Describe the causes for right sided heart failure
6. Causes for pericardial effusion
7. What is Leukemoid reaction and 3 causes
8. Causes of obstructive congenital heart diseases
9. Causes for neutrophilia

**Section – B**

**Applied Microbiology (40 Marks)**

**Q.P Code : K3796**

*(Use separate answer booklet for Section-B)*

**LONG ESSAY**

**1 X 10 = 10 Marks**

1. Define needle stick injury in health care setting, discuss in detail source of infection, mode of transmission, risk factors associated with needle stick injury in health care workers (2+2+2+4).

**SHORT ESSAY**

**3 X 5 = 15 Marks**

2. Define health care associated infection discuss the role of health care worker in preventing the transmission of infections
3. Describe the risk factors and preventive measures to prevent Clostridium difficile infection
4. Discuss the types of biomedical waste generated in hospitals

**SHORT ANSWERS**

**5 X 3 = 15 Marks**

5. Mention the Source of infection and modes of transmission of Ventilator Associated Pneumonia
6. Name three PPE
7. Name three multidrug resistant organisms prevalent in health care setting
8. Define the term CLABSI and its risk factors
9. List three infections transmitted through faeco oral route

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**B.Sc. Respiratory Therapy**

**Time : 2 Hrs.**

**[Max. Marks : 40]**

**Applied Pharmacology**

**Q.P Code: K3810**

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

**1x10=10 Marks**

1. Classify drugs used in hypertension, Explain mechanism of action, uses and adverse effects ACE inhibitors.

**Short essay**

**3 x 5 = 15 Marks**

2. Explain mechanism of action, uses and adverse effects of nitrates .
3. Explain mechanism of action, uses and adverse effects of amlodipine
4. Explain mechanism of action, uses and adverse effects of morphine.

**Short answer**

**5 x 3 = 15 Marks**

5. Rationale of combining Lignocaine and Adrenaline.
6. Mention three anti-cholinesterase drugs and its uses
7. Mention three uses and adverse effects of Morphine.
8. Mention three antiplatelet agents and three uses
9. Classify antihistamines with examples

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