



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

B.Sc. Allied Health Sciences Second Year Semester-III

March 2025 Examination

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 atherosclerosis, write briefly its risk factors, pathogenesis, morphology, clinical significance and prevention

SHORT ESSAY

3X 5 = 15 Marks

2. Classify leucocytes. Describe microscopic morphology of leucocytes with a diagram
3. Pathophysiology of left heart failure
4. Classify hemolytic anemia and write a note on its characteristic features

SHORT ANSWERS

5 X 3 = 15 Marks

5. Sudden cardiac death
6. Causes for aortic stenosis
7. Causes for restrictive cardiomyopathy
8. What is Leukemoid reaction and 3 causes
9. Name the clotting factors

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. Enumerate the types of health care associated infection. Discuss in detail the risk factors and infection control practices to prevent catheter associated blood stream infection (3+3+4)

SHORT ESSAY

3 X 5 = 15 Marks

2. Define surgical site infection, its risk factors and infection control practices
3. Enumerate the types of Personal protective equipment's and its uses
4. Describe the Biomedical waste management

SHORT ANSWERS

5 X 3 = 15 Marks

5. List three modes of transmission of HIV infection
6. Mention three important elements of Standard precautions
7. List the Sources and modes of transmission of infection acquired by health care worker
8. Mention three diseases that spread by respiratory route
9. Mention the steps of hand hygiene



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B.Sc. Respiratory Therapy

Paper – II

[Max. Marks: 80]

Time: 2.30 Hrs.

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. Add a note on Assessment of Respiratory system
2. Write a brief note on Assessment of cardiovascular system

SHORT ESSAY

6 X 5 = 30 Marks

3. Add a note on Blood pressure measurement and normal range.
4. Write a brief note on Topography of the heart
5. Add a note on examination of pericardium
6. Add a note on Neurological Examination
7. Add a note on Auscultation of respiratory system
8. Write a Signs & Symptoms of cardiovascular disease

SHORT ANSWERS

10 X 3 = 30 Marks

9. Mention the Symptoms of COPD
10. Defined Hypertension
11. Defined Hypotension
12. Explain about Handwashing
13. Define Cardiothoracic ratio
14. Write the Accessory Muscles of Respiratory
15. Defined Pulsation
16. Write 3 Products of Respiration
17. Symptoms of Asthma
18. Mention the Cardiac sounds

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B.Sc. Respiratory Therapy

Time: 2.00 Hrs.

[Max. Marks: 40]

Applied Pharmacology

Q.P Code: K3810

LONG ESSAY

1 X 10 = 10 Marks

1. Classify the drugs used in Hypertension with examples. Write the mechanism of action , uses and adverse effects of Telmisartan

SHORT ESSAY

3 X 5 = 15 Marks

2. Explain mechanism of action , uses and adverse effects of Dopamine
3. Explain mechanism of action , uses and adverse effects of Pentazocin
4. Write the merits and demerits of Oral route of Administration

SHORT ANSWERS

5 X 3 = 15 Marks

5. Give any three drugs used in Bronchial asthma
6. Mention the three uses and adverse effects of Clopidogrel
7. Write three uses and adverse effects of Lignocaine
8. Write the mechanism of action of Cephalosporin
9. Give the uses and adverse effects of Heparin

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(2021 -22 BATCH ONLY)

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

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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.

Draw neat labeled diagrams wherever necessary.

Long essay

1x10=10 Marks

1. Classify cholinergic blocking drugs. Explain mechanism of action, uses and adverse effects of Atropine.

Short essay

3 x 5 = 15 Marks

2. Explain the mechanism, uses and adverse effects of thiazides
3. List the advantages and disadvantages of intravenous route.
4. Explain the mechanism, uses and adverse effects of ergot alkaloids

Short answer

5 x 3 = 15 Marks

5. Explain mechanism of action, and uses of streptokinase.
6. Write the treatment of anaphylactic shock
7. List three antiplatelet agents and write three uses
8. Mention three uses of pancuronium.
9. Mention three factors affecting bioavailability



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B.Sc. Respiratory Therapy

Time: 2.30 Hrs.

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 ARDS ,explain the pathophysiology ,stages and management of ARDS
2. Define Sepsis & septic shock. add a note on SIRS criteria, explain pathogenesis, signs and symptoms with treatment

SHORT ESSAY

6 X 5 = 30 Marks

3. Define the clinical features of poisoning
4. Discuss the ventilation perfusion mismatch in the type 1 respiratory failure
5. Briefly describe the diseases associated with obesity
6. Explain briefly about IHD
7. Define myasthenia gravis. Explain the pathophysiology of myasthenia gravis
8. Discuss the management of hypertension

SHORT ANSWERS

10 X 3 = 30 Marks

9. Define emphysema
10. Describe the clinical feature of bronchial asthma
11. Write a note on LRTI
12. Describe the risk factors of poliomyelitis
13. Describe the respiratory complication in children
14. Define hypertension
15. Describe the diagnosis of COPD
16. Define pre-eclampsia
17. Add a note on GINA guidelines
18. Define respiratory failure

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