



SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

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

March 2026 Examination

B.Sc. Respiratory Therapy

Time: 2 hrs 30 mins.

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. Hypertension – Definition types, pathogenesis and its effects.
3. Classify hemolytic anemia and write a note on its characteristic features
4. Cardiac hypertrophy – causes and pathophysiology

SHORT ANSWERS

5 X 3 = 15 Marks

5. Name three causes for normocytic normochromic anemia
6. Write 3 causes for mitral stenosis
7. Write three complication of sickle cell anemia
8. Briefly describe congenital heart disease.
9. Write three causes for eosinophilia

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 Ventilator associated pneumonia, its causative agents, risk factors and preventive measures (2+2+3+3)

SHORT ESSAY

3 X 5 = 15 Marks

2. Describe the clinical manifestations and laboratory diagnosis of Pneumococci.
3. Describe the risk factors and preventive measures of catheter associated blood stream infection
4. What is MRSA, mention the types of MRSA and its preventive measures

SHORT ANSWERS

5 X 3 = 15 Marks

5. Mention 3 indications for Microbiological surveillance of OT
6. Name three blood borne viruses
7. Routes of transmission of infection in the hospital
8. Name three multidrug resistant organism
9. Mention into which color coded bag are masks, urobag and needle discarded

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Time: 2.30 Hrs.

Paper –II

[Max. Marks: 80]

Introduction to Respiratory Care Technology

Q.P Code: K3800

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

I. LONG ESSAY

2 X 10 = 20 Marks

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

II. SHORT ESSAY

6 X 5 = 30 Marks

3. Describe in detail about Handwash and Handrub steps
4. Add a note on Blood pressure measurement and normal range
5. Write the detailed precautions for contact isolation
6. Write a brief note on Assessment of Neurological Examination
7. Write in detail about complete health history taking.
8. Add a note on Auscultation of respiratory system

III. SHORT ANSWERS

10 X 3 = 30 Marks

9. Mention the Symptoms of COPD
10. Defined Hypotension
11. Defined Hypertension
12. Explain about steps involved in Hand washing
13. Define Cardiothoracic ratio
14. Write any 3 respiratory diseases
15. Mention the Symptoms of Asthma
16. Mention the muscles of Inspiration
17. Defined Pulsation
18. Mention the Respiratory sounds

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B.Sc. Respiratory Therapy

Time: 2.00 Hrs.

[Max. Marks: 40]

Applied Pharmacology

Q.P Code: K3810

I. LONG ESSAY

1 X 10 = 10 Marks

1. List drugs used in Hypertension. Explain the mechanism of action, uses and adverse effects of Beta Blockers

II. SHORT ESSAY

3 X 5 = 15 Marks

2. Explain the mechanism of action, uses and adverse effects of thiazides
3. Explain the mechanism of action, uses and contraindications of propranolol
4. Explain mechanism of action and Write two uses of pancuronium

III. SHORT ANSWERS

5 X 3 = 15 Marks

5. Explain mechanism of action, uses and adverse effects of morphine
6. Write three uses of ACE inhibitors
7. Mention the difference between nitrous oxide and halothane
8. Write three uses of adrenaline
9. Mention three uses of frusemide

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B.Sc. Respiratory Therapy

Paper –IV

[Max. Marks: 80]

Time: 2.30 Hrs.

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.

I. LONG ESSAY

2 X 10 = 20 Marks

1. Define Sepsis & septic shock add a note on SIRS criteria, explain, pathogenesis ,signs and symptom with treatment
2. Add a detailed note on COPD.

II. SHORT ESSAY (Answer any Six)

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 epilepticus. discuss the management of status epilepticus
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 patients. list the causes for type 2 respiratory failure

III. SHORT ANSWERS (Answer any Ten)

10 X 3 = 30 Marks

9. Write the management of myasthenia gravis
10. Write about the difference between HIV and AIDS
11. Write about hypertension
12. Write about types of poisoning
13. Define septic shock
14. Write any 5 restrictive disorders
15. Define GBS
16. Write about type 2 RF
17. List few bacterial respiratory pathogens
18. Mention the risk factors of COPD

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