

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

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

September 2021 Examination

B.Sc. Respiratory Care Technology

Time: 3 Hrs.

Paper – I

[Max. Marks: 100]

Applied Pathology & Microbiology

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

(Use separate answer booklet for Section A & B)

Section – A

Applied Pathology (50 Marks)

Q.P Code :J4855

LONG ESSAY

2 X 10 = 20 Marks

1. Classify pneumonia. Describe the etiology, clinical features staging and morphology of lobar pneumonia
2. Define and classify Chronic kidney disease. Describe the etiopathogenesis, clinical features, laboratory findings and morphology of kidney in chronic kidney disease

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

3. Describe the etiopathogenesis, clinical features and morphology of pneumoconiosis
4. Describe the etiopathogenesis, clinical features and morphology of acute pyelonephritis
5. Describe the etiopathogenesis, clinical features and morphology of bronchiectasis
6. Describe the etiopathogenesis, clinical features and morphology of minimal change disease
7. Describe the etiopathogenesis, clinical features and morphology of obstructive uropathy

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

8. List the etiology and types of urine stones
9. List 03 causes of pulmonary edema
10. List 03 causes of restrictive lung disease
11. Draw a labelled diagram of histology of kidney
12. List 06 functions of kidney
13. List the etiology and findings seen in nephritic syndrome
14. Describe the gross findings of lung in emphysema

Section – B

Applied Microbiology (50 Marks)

Q.P Code : J4856

(Use separate answer booklet for Section-B)

LONG ESSAY

2x10= 20marks

1. Describe the various infection control measures in ICU
2. Define sterilization. Classify the various methods of sterilization. Describe in detail about the chemical method of sterilization (2+3+5)

SHORT ESSAYS (Answer any three).

3X5=15 marks

3. Describe different methods of cold sterilization with examples
4. Draw a neat labelled diagram of autoclave and describe its principle and uses
5. Classification of patients care units based on the risk involved and the appropriate methods of disinfection
6. Define decontamination and discuss the importance of cleaning and decontamination in sterilization
7. Describe the principle, uses, advantages and disadvantages of plasma sterilization

SHORT ANSWERS (Answer any five).

5X3=15 marks

8. Mention three indications for fogging in Operation theatre
9. Mention three microbiological sampling methods in OT
10. Name three methods of sterilization used in single use devices
11. Mention three articles sterilized by hot air oven
12. Mention the four zones of Central Sterile Supply Department
13. Mention the accepted bio load in OT
14. Name three types of patient care items in Spaulding's classification with examples



SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

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

September 2021 Examination

B.Sc. Respiratory Care Technology

Time : 3 Hrs.

Paper – II

[Max. Marks : 100]

Introduction to Respiratory care Technology

Q.P Code : J4860

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

Long Essay

2x10=20 Marks

1. Define Chest Physiotherapy, describe Indication, Contraindication, Complications and its different techniques in reference to Respiratory Therapy.
2. Write in detail about Pulmonary function test and draw a neat diagram of Spirogram.

Short Essay (any 10)

10x5=50 Marks

3. Draw a neat diagram of ECG & Explain it.
4. Oxygen Therapy
5. Steps of Spirometry Test
6. Flowmeters and Its Types
7. Write in details about High Flow Oxygen Delivery Devices
8. Explain About Non Heated Humidifiers
9. Metered Dose Inhalers
10. Steps in Interpretation of Chest X ray
11. Initial patient assessments
12. Oxygen Concentrators
13. Colour Coding & Sizes for Medical Gas Cylinders
14. Write about Alarms & Safety Devices in Medical gas supply

Short answer (any 10)

10x3=30 marks

15. HME filter
16. Dry powder Inhalers
17. Indications of Aerosol Therapy
18. Jet Nebulizer
19. Bag Mask Valve Device
20. Oxygen Hood
21. Complications of Suctioning
22. Pulse Oximetry
23. Explain Boyle's Law in relation to respiration
24. Mobilization of ICU patients
25. Airway Resistance
26. Aerosol Therapy





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

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

September 2021 Examination

B.Sc. Respiratory Care Technology

Paper - III

[Max. Marks : 40]

Time : 2 Hrs.

Subject : Applied Pharmacology

Q.P Code : J4870

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

LONG ESSAY

1 X 10 = 10 Marks

1. Classify opioids agonist and antagonists. Explain the mechanism of action, uses and adverse effects of Morphine (3+2+3+2)

SHORT ESSAY (Answer any Three)

3X 5 = 15 Marks

2. List intravenous anesthetics, write the advantage and disadvantages of thiopentone sodium (1+2+2)
3. Explain the mechanism of action, uses and adverse effects of ipratropium bromide (2+1.5+1.5)
4. Explain the mechanism of action, uses and adverse effect of insulin (2+1.5+1.5)
5. Explain the mechanism of action, uses and adverse effects of gentamicin (1.5+2+1.5)

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

6. Mention three different groups of drugs used in cough with examples
7. Mention three local anaesthetic agents and write three uses
8. Mention two aldosterone antagonists and write their uses
9. List three uses and three adverse effects of metronidazole
10. Write the mechanism of action and two uses of tacrolimus
11. Mention three carbapenems and write three uses

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

B.Sc. Allied Health Sciences Second Year (Semester-IV)
September 2021 Examination

B.Sc. Respiratory Care Technology

Time : 2.30 Hrs.

[Max. Marks : 80]

PAPER-IV

Medicine Relevant to Respiratory care Technology

Q.P Code : J4880

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

I. Long Essay

2x10=20 Marks

1. Explain in detail about Lung abscess, its causes, risk factors, Diagnosis and Management.
2. Describe the types, clinical features, etiology, risk factors, Diagnosis and management of Pulmonary edema.

II. Short Essay (Any 6)

6x5=30 Marks

3. Write about signs and symptoms of Pulmonary tuberculosis
4. Explain the clinical features and risk factors of Atypical Pneumonia.
5. Explain Thoracentesis.
6. Define the role of respiratory therapist in the management of Acute Lung Injury
7. Respiratory Failure-Types & Management
8. Write a short note on Pleural effusion and its types.
9. Explain the Characteristics of Immuno-compromised patients.
10. Explain the use of postural drainage in the treatment of Lung abscess.

III. Short answer (any 10)

10x3=30 marks

11. Name the abnormal conditions of chest wall.
12. Symptoms of smoke Inhalation.
13. Name three bacteria that causes pneumonia
14. Silicosis
15. Differentiate between hospital acquired and community acquired Pneumonia.
16. Drugs used in treating Pulmonary tuberculosis.
17. Pneumonitis
18. Write a Short note on Lung Cancer.
19. Explain the preventive Measures for Hospital acquired Pneumonia.
20. Explain about Ventilator associated Pneumonia.
21. Management of Toxic Inhalation.
22. Define Pneumothorax.
