



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

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

March / April 2026 Examination

B.Sc. Operation Theatre Technology (OTT)

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: K3095

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

LONG ESSAY

1 X 10 = 10 Marks

1. Define COPD. Describe etiopathogenesis, morphology and complications of Emphysema

SHORT ESSAY

3X 5 = 15 Marks

2. Classify leukemia. Describe microscopic morphology of AML myeloblast
3. Describe the etiopathogenesis of pleural effusion with examples
4. Define thalassemia. Write classification and etiopathogenesis of thalassemia

SHORT ANSWERS

5 X 3 = 15 Marks

5. Write three causes for neutrophilia
6. Write three causes for thrombocytopenia
7. Note on megaloblastic anemia and name 3 causes of megaloblastic anemia
8. What is leukemoid reaction and name three causes
9. Write three functions of WBC

Section – B

Applied Microbiology (40 Marks)

Q.P Code: K3096

(Use separate answer booklet for Section-B)

LONG ESSAY

1 X 10 = 10 Marks

1. Classify sterilization. Describe in detail the working principle of autoclave with a diagram. List the sterilization controls used in the autoclave.

SHORT ESSAY

3 X 5 = 15 Marks

2. Enumerate Alcohols used in disinfection. Describe the mechanism of action and uses of Alcohols.
3. Describe the mechanism of HEPA filter filtration and its application.
4. Describe the functions and work flow at CSSD.

SHORT ANSWERS

5 X 3 = 15 Marks

5. What is Cold sterilization? Give 2 examples.
6. Mention Spaulding classification of disinfectants with examples.
7. Enumerate 3 agents causing Ventilator associated Pneumonia.
8. Describe the preventive measures for MRSA infection.
9. Enumerate the 3 antiseptics and mention one application for each.

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

March / April 2026 Examination

B.Sc. Anesthesia & Operating Theatre Technology

Time : 2.30 Hrs.

Paper –II

[Max. Marks: 80]

Subject: Introduction to Anesthesia and OT Technology

Q.P Code: K3100

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

I. LONG ESSAY

2 X 10 = 20 Marks

1. Classify LMA, briefly mention the parts with a neat diagram in detail.
2. Discuss about the safety features in an anesthesia workstation with pin index system?

II. SHORT ESSAY

6 X 5 = 30 Marks

3. What is Bain's circuit? What are the advantages and disadvantages of Bain's circuit
4. Write a note on ketamine and its adverse effects
5. Write a note on oxygen devices using in anaesthesia practice.
6. Write a short note on Autoclave sterilization.
7. Classify intravenous anesthetic agents. Writing short note on each of them?
8. Write a note CSSD and its functions in detail

III. SHORT ANSWERS

10 X 3 = 30 Marks

9. DISS
10. Write a note on uses of Etomidate
11. What are the different forms and concentration in which lignocaine is available in the OT?
12. What are the components of a breathing circuit?
13. What is soda lime made up of?
14. What are the parts of an endotracheal tube?
15. Name any three airway used in OR
16. What is the full form of AMBU? Where is it used?
17. ETO gas sterilization
18. Name three volatile Anesthetic agents .

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March / April 2026 Examination

B.Sc. Anaesthesia & Operation Theatre Technology

Time: 2 Hrs.

[Max. Marks: 40]

APPLIED PHARMACOLOGY

Q.P Code: K3110

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

I. LONG ESSAY

1 X 10 = 10 Marks

1. Classify beta blockers. Describe the mechanism of action, uses and adverse drug reactions of propranolol

II. SHORT ESSAY

3 X 5 = 15 Marks

2. List the therapeutic uses and adverse effects of morphine
3. Advantages and disadvantages of intramuscular route of drug administration
4. Thiopentone sodium

III. SHORT ANSWERS

5 X 3 = 15 Marks

5. Write three uses of adrenaline
6. Mention three complications of general anaesthesia
7. List the uses of neostigmine
8. Explain mechanism of action and write two uses of diazepam
9. Rationale of combining lignocaine and adrenaline

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

March / April 2026 Examination

B.Sc. Anesthesia and Operation Theatre Technology

Paper – IV

[Max. Marks: 80]

Time: 2.30 Hrs.

Subject: Medicine relevant to Anesthesia and OT Technology

Q.P Code: K3120

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 Bronchial asthma.. Write about Etiopathogenesis, Risk factors, clinical features and treatment of asthma.
2. Define anemia. Describe Etiopathogenesis, peri-operative complications and management of anemia.

II. Short Essay

6 X 5 = 30 Marks

3. Define COPD. What are the causes, investigations and management of COPD?
4. Write about the causes, risk factors, complications and management of hypertension.
5. Classify obesity. Mention the perioperative complications and management of obese patients.
6. Write about Etiopathogenesis, classification and management of PIH
7. Define Emphysema. Describe its pathophysiology and management.
8. Add a short note on Peri-operative complications and treatment of IHD

III. Short Answers

10 X 3 = 30 Marks

9. Body Mass Index
10. Treatment of hypoglycemia
11. Name three Complications of PIH
12. Name 3 physiological changes in pregnancy.
13. Name oral hypoglycemic drugs.
14. Cardiovascular and respiratory system changes in pregnancy
15. Name three risk factors of IHD.
16. Classify hypertension.
17. Complications of diabetes mellitus.
18. Diagnosis of Pre-eclampsia.

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