



**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. Operation Theatre Technology (OTT)**

**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 : 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 anemia. Classify anemia based on morphology and etiological factors. Add a note on laboratory investigations in Iron deficiency anemia (2+ 4+4)

**SHORT ESSAY**

**3X 5 = 15 Marks**

2. Write etiopathogenesis of emphysema
3. Define leukemia. Write the classification of leukemia
4. Define macrocytic anemia, classification and characteristics laboratory features

**SHORT ANSWERS**

**5 X 3 = 15 Marks**

5. Write three causes for neutrophilia
6. Write three tests used to evaluate bleeding disorder
7. Name the clotting factors
8. Describe the morphology of Asbestos body
9. What is leukemoid reaction and name three conditions causing it

**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 hot air oven with a diagram. List the sterilization controls used in the hot air oven. (4+4+2).

**SHORT ESSAY**

**3 X 5 = 15 Marks**

2. Enumerate Aldehydes used in disinfection. Describe the mechanism of action and uses of Aldehydes.
3. Describe the mechanism of HEPA filter filtration and its application.
4. Describe the segregation of Biomedical waste with 2 examples for each.

**SHORT ANSWERS**

**5 X 3 = 15 Marks**

5. Name the methods of sterilization of Vaseline, Lowenstein Jensen's medium and surgical gauze.
6. Five moments of Hand Hygiene.
7. Mention the mode of action and uses of Sodium hypochlorite in the hospital.
8. Enumerate 3 agents causing Catheter Associated Urinary Tract Infection.
9. Enumerate the components of standard precautions

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

**March 2025 Examination**

**B.Sc. Anesthesia & Operating Theatre Technology**

**Time: 2.30 Hrs.**

**Paper –II**

**[Max. Marks: 80]**

**Subject: Introduction to Anaesthesia and OT Technology**

**Q.P Code: K3100**

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

*Draw neat labelled diagrams wherever necessary.*

**Long Essay**

**2 X 10 = 20 Marks**

1. Enumerate the Mapleson breathing circuits. Write a note on each one of them in detail.
2. Discuss the indications and various equipment used in the oxygen therapy.

**Short Essay**

**6 X 5 = 30 Marks**

3. Write a note on endotracheal tube, Types uses of each type of ET tube?
4. Draw a labelled diagram of a gas cylinder. What are the parts of cylinder and their functions
5. What are the considerations when using packing materials for sterilization?
6. Write a note on nitrous oxide?
7. Write a short note on Closed circuit
8. What are the different types of anaesthesia? What are the surgeries done under each type of anaesthesia?

**Short Answers**

**10 X 3 = 30 Marks**

9. What are the signs and symptoms of local anesthetic toxicity?
10. Advantages and disadvantages of Thiopentone?
11. What is flash sterilization?
12. What are two folds of wrapping items for sterilization? Where should package be wrapped?
13. What are 3 different types of laryngoscope blades?
14. Name 3 different types of oral airways?
15. Name 3 different ways to give oxygen patients?
16. Vaporizers
17. Colour coding for waste disposable
18. What is RAE tube? Where are they used?

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**March 2025 Examination**

**B.Sc. Anaesthesia & Operation Theatre Technology**

**Time: 2 Hrs.**

**[Max. Marks: 40]**

**SUBJECT: APPLIED PHARMACOLOGY**

**Q.P Code: K3110**

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

*Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY**

**1 X 10 = 10 Marks**

1. Describe various routes of drug administration with suitable example. Write various advantages and disadvantages of intravenous route

**SHORT ESSAY**

**3 X 5 = 15 Marks**

2. Define and classify biotransformation. Mention the phase I reactions with examples
3. Write the mechanism of action, uses and adverse effects of propranolol
4. Write the mechanism of action, uses and adverse effects of D-tubocurarine

**SHORT ANSWERS**

**5 X 3 = 15 Marks**

5. Pilocarpine
6. Nasal decongestants
7. Uses of adrenaline
8. Write three routes of drug excretion
9. Mention three crystalloids and three uses

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**March 2025 Examination**

**B.Sc. Anesthesia and Operation Theatre Technology**

**Time: 2.30 Hrs.**

**Paper – IV**

**[Max. Marks: 80]**

**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.*

**Long Essay**

**2 X 10 = 20 Marks**

1. What are the Complications of Diabetes Mellitus? Add a note on how are they managed
2. Classification of Anemia. Write about Diagnosis and Treatment of iron deficiency Anemia?

**Short Essay**

**6 X 5 = 30 Marks**

- 3 Add a short note on Physiological Changes in Pregnancy patient.
- 4 Write about Informed Consent for surgery
- 5 Write a short note on Diabetic ketoacidosis
- 6 Define Plasma Component
- 7 Add a short note on Apgar score
- 8 Mention the Problems of obesity

**Short Answers**

**10 X 3 = 30 Marks**

- 9 Physiological changes in geriatric patients
10. Name three COPD Complications
11. Supine Hypotension syndrome
12. Metabolic syndrome
13. Diagnosis of preeclampsia
14. Name 3 drugs used in treatment of asthma
15. Hypertensive Crisis
16. Name three Beta Blockers
17. What is Angina? What is Angiography
18. Name three Oral Hypoglycemia Drugs

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