



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

**M.Sc. Anaesthesia & Operation Theatre Technology First Year (Semester-I)**  
**April 2025 Examination**

**Time: 3 Hrs.**

**[Max. Marks: 100]**

**Review of Applied Sciences**  
**Q.P Code : MA1130**

*Your answers should be specific to the questions asked.*  
*Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY**

**2 X 20 = 40 Marks**

1. Explain about various types of liver diseases and their management. What is the anaesthetic management a patient with chronic liver disease undergoing total hip replacement?
2. Write in detail about the pathophysiology, clinical features, types, diagnosis and management of COPD. Write the differences between chronic bronchitis and Emphysema.

**SHORT ESSAY**

**6 X 10 = 60 Marks**

3. Pulmonary function tests.
4. What is balanced anaesthesia and explain about it? Dexmedetomidine.
5. Explain about Chloride shift and oxygen cascade.
6. Conduction system of heart.
7. Myocardial infarction. Add a note on NTG.
8. Write about atropine and Glycopyrolate.



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**Anaesthetic Equipments and Procedures**

**Q.P Code : MA1140**

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*Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY**

**2 X 20 = 40 Marks**

1. What is the classification of LMAs? Draw a neat labelled diagram of classic LMA. Explain in detail about I-gel, intubating LMA and Baska mask.
2. Explain in detail about the equipment, instruments and drugs required for spinal, epidural and caudal anaesthesia. Add a note on indications, procedure, drugs used and complications of Spinal anaesthesia.

**SHORT ESSAY**

**6X 10 = 60 Marks**

3. Describe the safety features in anaesthesia workstation and explain how they work in detail.
4. TOF.
5. Define cardiac output. What are cardiac output monitors and how do they work.
6. What is gas manifold? What are the types of cylinders and add a note on their safety features.
7. What is the principle behind ultrasound? Mention the uses of ultrasound in OT, ICU and emergency room.
8. Explain in detail about Sub mental intubation and retrograde intubation.



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**Pharmacology of Anaesthetics**

**Q.P Code: MA1150**

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

*Draw neat labelled diagrams wherever necessary.*

**LONG ESSAY**

**2 X 20 = 40 Marks**

1. Classify the drugs used in treating hypertension. Describe the mechanism of action and adverse effects of ACE inhibitors.
2. Write the classification of opioid analgesics. Explain the pharmacological action of morphine and fentanyl with their clinical implications.

**SHORT ESSAY**

**6 X 10 = 60 Marks**

3. What are antiarrhythmics? Write the classification of antiarrhythmics. Add a note on loxicard.
4. Classify muscle relaxants and add a note on succinylcholine.
5. Crystalloids.
6. Intravenous induction agents.
7. Explain in detail about hazards related to blood transfusion.
8. Mention various applications of corticosteroids and add a note on their uses in OT and ICU