



College of Anaesthesiologists and Intensivists of Sri Lanka

**Preparatory Course for**  
**Selection examination MD Anaesthesiology**  
**September - November 2024**  
**On Zoom Platform**

**1<sup>st</sup> WEEKEND**

**Saturday 14<sup>th</sup> September**

11.30 - 12.00 pm	<b>Introduction</b>	Prof Vasanthi Pinto Dr Lakmali Samaraweera
12.00 - 2.00 pm	<b>Pharmacodynamics</b>	Dr Jeevani Rajasinghe
2.00 - 5.00 pm	<b>Principles of measurement/Graphs and exponentials</b>	Dr P Warusawitharana

**Sunday 15<sup>th</sup> September**

8.00 - 10.00 am	<b>Pharmacokinetics</b>	Dr Gita Jayathilaka
10.00 - 12.00 pm	<b>CT/MRI</b>	Dr Bimal Kudavidanage
12.00 - 1.00 pm	<b>BREAK</b>	
1.00 - 3.00 pm	<b>Haemodynamic monitoring/Measurement of blood pressure</b>	Dr Senani Samarainghe

**2<sup>nd</sup> WEEKEND**

**Saturday 28<sup>th</sup> September**

12.00 - 3.00 pm	<b>Biological potentials</b>	Dr P Warusawitharana
3.00 - 4.00 pm	<b>Compressed gases/Pressure regulators</b>	Dr Janaki Arulmoli
4.00 - 6.00 pm	<b>Anaesthetic Machine/Breathing systems and scavenging systems</b>	Dr Chamil Perera

**Sunday 29<sup>th</sup> September**

8.00 - 10.00 am	<b>Renal physiology and renal function tests</b>	Dr Kesharie de Silva
10.00 - 11.00 am	<b>Autonomic nervous system</b>	Dr Chamil Perera
11.00 - 12.00 am	<b>Temperature regulation</b>	Dr Piyusha Jayawardena
12.00 - 1.00 pm	<b>Cerebral Blood flow and ICP regulation</b>	Dr Piyusha Jayawardena
1.00 - 1.30 pm	<b>BREAK</b>	

1.30 - 3.00 pm	<b>Body fluids and fluid balance/ Concepts of fluid movement across capillaries/Electrolyte balance</b>	Dr Thusitha Jayathilaka
3.00 – 4.30 pm	<b>Gas and vapour analysis</b>	Dr Nanditha Wanigasinghe

### 3<sup>rd</sup> WEEKEND

#### Saturday 12<sup>th</sup> October

12.00 -2.00 pm	<b>Integrated CVS responses - Haemorrhage, Exercise and Valsalva maneuver</b>	Dr Chamil Perera
2.00 - 4.00 pm	<b>Statistics I</b>	Dr Hemantha Kumarihamy

#### Sunday 13<sup>th</sup> October

8.00 - 10.00 am	<b>Inhalational agents</b>	Dr Sandya Somaweera
10.00 - 12.00 pm	<b>Measurement of neuromuscular block and assessment of Awareness</b>	Dr Haritha Dharmakeerthi
12.00 - 1.00 pm	<b>BREAK</b>	
1.00 - 3.00 pm	<b>Acid base physiology</b>	Dr Mithrajee Premarathna
3.00 - 5.00 pm	<b>Lung mechanics/Gas exchange/Mixed venous oxygen</b>	Dr Chandana Karunarathna

### 4<sup>th</sup> WEEKEND

#### Saturday 9<sup>th</sup> November

12.00 - 1.00 pm	<b>Vaporizers/Humidifiers</b>	Dr Charaka Yapa
1.00 - 2.30 pm	<b>Temperature monitoring/Flow and volume</b>	Dr Malin Gunawardena
2.30 – 5.00 pm	<b>Statistics II</b>	Dr Hemantha Kumarihamy

#### Sunday 10<sup>th</sup> November

8.00 - 9.00 am	<b>Transducers</b>	Dr Buddhika Vidanagama
9.00 -10.00 am	<b>Control of BP</b>	Dr Q Weerasingham
10.00 - 12.00 pm	<b>Laser/Doppler/Ultra Sound</b>	Dr Bimal Kudavidanage
12.00 - 1.00 pm	<b>BREAK</b>	
1.00 -3.00 pm	<b>Pulse oximetry/Capnography</b>	Dr Dimuthu Gunasena
3.00 - 4.00 pm	<b>Vasoactive drugs &amp; Inotropes</b>	Dr Ashani Rathnayake

4.00– 5.00 pm	<b>Blood gas electrode</b>	Dr Chandana Nawarathna
5.00 – 6.00 pm	<b>Cardiac output &amp; Venous Return</b>	Dr Chamil Perera

## 5<sup>th</sup> WEEKEND

### Saturday 23<sup>rd</sup> November

12.00 - 1.00 pm	<b>Anticoagulants/Ant platelet drugs and reversal agents</b>	Dr Ashoka Wijayananda
1.00 - 3.00 pm	<b>Recorders /Display Units II -</b>	Dr Chandana Nawarathna
3.00 - 5.00 pm	<b>Physiology of nerve and muscle/Neuromuscular transmission</b>	Dr Dakshi Jayawickrama
5.00 – 6.00 pm	<b>Isomerism</b>	Dr Chamila Jayasekera

### Sunday 24<sup>th</sup> November

8.00 -10.00 am	<b>Physics Tutorial</b>	Dr Buddhika Vidanagama
10.00 - 12.00 pm	<b>Operating theatre pollution and hazards</b>	Dr Bimal Kudavidanage
12.00 - 1.00 pm	<b>BREAK</b>	
1.00 - 3.00 pm	<b>Gastrointestinal physiology/Liver/Coagulation</b>	Dr Anura Abeysundara
3.00 - 5.00 pm	<b>Physiology Tutorial</b>	Dr Chandana Karunarathna
5.00 - 6.00 pm	<b>Pharmacology Tutorial</b>	Dr Hemantha Kumarihamy

## 6<sup>th</sup> Weekend

### Saturday 7<sup>th</sup> December 2024

12.00 - 2.00 pm	<b>Local Anaesthetics</b>	Dr Gayani Walpola
2.00 - 4.00 pm	<b>Electricity and electrical safety</b>	Dr Anupa Herath
4.00 - 5.00 pm	<b>Recorders /Display Units I</b>	Dr Chandana Nawarathna

### Sunday 8<sup>th</sup> December 2024

8.00 – 9.00 am	<b>Neuromuscular blockers and reversal agents</b>	Dr Gita Jayathilake
9.00 - 11.00 am	<b>Endocrine system/Metabolic response to trauma</b>	Dr Sagarie Ranasinghe

11.00 - 1.00 pm	<b>Carriage of oxygen and carbon dioxide in blood/ Control of ventilation/ Foetal oxygenation</b>	Dr Upul Ranjith
1.00 - 2.00 pm	<b>BREAK</b>	
2.00 - 3.00 pm	<b>Antihypertensives/Antiarrhythmics</b>	Dr Deepani Wijesinghe
3.00 - 5.00 pm	<b>Opioids &amp; antagonists/Non-opioid analgesics</b>	Dr Harini Jagoda

**Full course fee = Rs. 9,000**

**Physiology only = Rs 6,000**

**\* Physiology - Colour coded in orange**

The course fee should be paid online at <https://store.anaesthesia.lk/> **CASH WILL NOT BE ACCEPTED.**

**This course is conducted online via Zoom. No refreshments will be provided.**

**Registration on or before 12<sup>th</sup> of September 2024**

**Advice to students: You are expected to read the above topics before attending the lectures and tutorials. Please inform us via email ([office@anaesthesia.lk](mailto:office@anaesthesia.lk)) of the areas that you find difficult to understand in advance, so that the lecturers can highlight more on those specific topics allocated to them.**

### **HELPFUL REFERENCE MATERIAL**

#### **Physiology:**

Guyton and Hall Textbook of Medical Physiology  
Ganong's Review of Medical Physiology  
West's Respiratory Physiology: The Essentials  
Nunn's Applied Respiratory Physiology  
Principles of Physiology for the Anaesthetist (Peter Kam & Ian Power)

#### **Pharmacology:**

Stoelting's Pharmacology & Physiology in Anesthetic Practice  
Pharmacology for Anaesthesia and Intensive Care (Tom Peck, Sue Hill [& Mark Williams])  
Principles and Practice of Pharmacology for Anaesthetists (Norman Calvey, Norton Williams)

#### **Physics & Clinical Measurements:**

Basic physics and measurement in anaesthesia (Davis, [Parbrook] & Kenny)  
Principles of Clinical Measurement (MK Sykes, MD Vickers, CJ Hull)  
Ward's Anaesthetic Equipment  
Anaesthesia Equipment (JA Dorsch, SE Dorsch)  
Statistics at Square One

#### **General:**

Guide to the FRCA Examination - The Primary (RCoA)  
BJA Education (formerly continuing Education in Anaesthesia, Critical Care and Pain)

#### **Dr Lakmali Samaraweera,**

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