

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0122]

JANUARY 2022

Sub. Code: 1142

(FEBRUARY 2021 & AUGUST 2021 EXAM SESSION)

B.Sc. OPERATION THEATRE & ANAESTHESIA TECHNOLOGY

THIRD YEAR

PAPER II – PRINCIPLES OF ANAESTHESIA - II

Q.P. Code: 801142

Time: Three Hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Describe in detail the safety system in anaesthesia medicine and medical gas supply?
2. What is shock? Mention different types of shock and its management.
3. Define hypothermia. Explain various methods of warming a hypothermia patient?

II. Write notes on:

(8 x 5 = 40)

1. Post operative shivering.
2. Mallampati grading of the airway.
3. Pulmonary function terms.
4. Etomidate.
5. Dexmedetomidine.
6. Post operative cognitive dysfunction.
7. Recent guideline in advanced cardiac life support.
8. Labour analysis.

III. Short Answers on:

(10 x 3 = 30)

1. Four difference between Atropine and Glycopyrrolate.
2. Criteria for adequate reversal of neuromuscular blockade.
3. Ketamine.
4. Bourdon pressure gauge.
5. Oxygen cascade.
6. Entonox.
7. Diathermy.
8. Bio medical waste color coding.
9. Types of sterilization.
10. Ringer lactate.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0922]

SEPTEMBER 2022

Sub. Code: 1142

(FEBRUARY 2022 & AUGUST 2022 EXAM SESSIONS)

B.Sc. OPERATION THEATRE & ANAESTHESIA TECHNOLOGY

THIRD YEAR – (Regulation from 2018-2019)

PAPER II – PRINCIPLES OF ANAESTHESIA - II

Q.P. Code: 801142

Time: Three Hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Preparation of Operation Theatre for emergency Lower Segment Caesarean Section (LSCS).
2. Classify arrhythmias and discuss about their management.
3. Various positioning of patient for surgery. Precaution to be taken during positioning.

II. Write notes on:

(8 x 5 = 40)

1. NYHA Classification.
2. Bronchospasm during general anaesthesia.
3. Total Parenteral Nutrition.
4. Caudal Anaesthesia.
5. Colour coding and pin index in medical gas supply.
6. Cardiopulmonary Bypass.
7. Brachial Plexus Block.
8. Basic modes of ventilators.

III. Short Answers on:

(10 x 3 = 30)

1. Rapid sequence induction.
2. Glasgow coma scale.
3. Methods to reduce Intracranial pressure during brain surgery.
4. Coronary Angiography.
5. Apgar score.
6. Methods to prevent hypothermia during surgery.
7. Protamine.
8. Routes of premedication in paediatric patients.
9. Drugs used in postoperative epidural analgesia.
10. Self inflating resuscitator bag.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0423]

APRIL 2023

Sub. Code: 1142

**B.Sc. OPERATION THEATRE & ANAESTHESIA TECHNOLOGY
THIRD YEAR – (Regulation 2018-2019 onwards)
PAPER II – PRINCIPLES OF ANAESTHESIA - II
Q.P. Code: 801142**

Time: Three Hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: (3 x 10 = 30)

1. Describe in detail about Anaesthesia for Trauma and Shock.
2. List out the postoperative problems of Anaesthesia and its management.
3. Explain about Theatre Setting in a case of Paediatric patient.

II. Write notes on: (8 x 5 = 40)

1. Anaesthesia for Ruptured Uterus.
2. Air embolism.
3. Anaesthesia concerns for MRI procedures.
4. Postoperative airway complications.
5. Epidural Anaesthesia.
6. NYHA classification.
7. Anaesthesia management in Cath lab patients.
8. Bedside Pulmonary Function Tests.

III. Short Answers on: (10 x 3 = 30)

1. Deep Vein Thrombosis.
2. Mention the post operative analgesics for Thoracic surgeries.
3. What is Laryngeal edema?
4. Special features of Day Care Anaesthesia.
5. Bradyarrhythmias.
6. Various positions of the patient during Neuro surgery.
7. Regional vs General Anaesthesia.
8. What is ICP and drug used to reduce ICP?
9. What is CABG?
10. Uses of Double Lumen Tubes.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1123]

NOVEMBER 2023

Sub. Code: 1142

B.Sc. OPERATION THEATRE & ANAESTHESIA TECHNOLOGY

THIRD YEAR – (Regulations 2018-2019 onwards)

PAPER II – PRINCIPLES OF ANAESTHESIA - II

Q.P. Code: 801142

Time: Three Hours

Answer ALL Questions Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Describe in detail about the physiology of Neuromuscular junction and pharmacology of Muscle Relaxants. Add a note on Succinyl Choline.
2. Describe in detail about the Physiological changes in Pregnancy and its Anaesthetic concerns.
3. How will you check the Anaesthesia machine before Surgery? Discuss the safety features in Anaesthesia machine.

II. Write notes on:

(8 x 5 = 40)

1. Anaesthesia in Bronchoscopy and Oesophagoscopy.
2. Complications in Spinal Anaesthesia.
3. Write a note on special features, advantages, disadvantages of daycare Anaesthesia.
4. Laryngospasm.
5. Post-Operative nausea and vomiting.
6. Pulmonary function test.
7. Short note on Cardiopulmonary bypass and its weaning.
8. Ambu Bag.

III. Short Answers on:

(10 x 3 = 30)

1. APGAR Score.
2. Regional vs General Anaesthesia in OBG.
3. Additives used in Spinal Anaesthesia.
4. Post operative Headache.
5. Guedell's airway.
6. Diseases of aging.
7. Goals of premedication.
8. Ringer lactate.
9. Resuscitation in trauma and Shock.
10. Complications of Laparoscopy.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0424]

APRIL 2024

Sub. Code: 1142

B.Sc. OPERATION THEATRE & ANAESTHESIA TECHNOLOGY

THIRD YEAR – (Regulation 2018-2019 onwards)

PAPER II – PRINCIPLES OF ANAESTHESIA - II

Q.P. Code: 801142

Time: Three Hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Define Epidural anaesthesia. How will you prepare the Epidural tray and describe the techniques of Epidural anaesthesia in detail.
2. How will you arrange emergency airway cart and equipments in operating room?
3. Anaesthesia for Electro Convulsive Therapy (ECT).

II. Write notes on:

(8 x 5 = 40)

1. BLS – Basic Life Support.
2. Resuscitation of New born.
3. Noninvasive blood pressure monitoring.
4. Day care anaesthesia.
5. Glasgow Coma Scale.
6. Preoperative preparation for Thoracic anaesthesia.
7. NIV – Non Invasive Ventilation.
8. Chest tube management.

III. Short Answers on:

(10 x 3 = 30)

1. List any three problems faced while extubating a child after paediatric anaesthesia.
2. Define Air embolism.
3. Differentiate Regional and General Anaesthesia.
4. Specify any three precautions to be taken when inducing anaesthesia for cardiac patient.
5. Define Vitalograph.
6. List any three vascular complications of post anaesthesia.
7. Define Rapid Sequence Induction.
8. Mention any three pharmacokinetic changes in the geriatrics related to anaesthesia.
9. Name the types of anaesthesia that can be given for mastoidectomy.
10. Define Mean arterial pressure.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0125]

JANUARY 2025

Sub. Code: 1142

B.Sc. OPERATION THEATRE & ANAESTHESIA TECHNOLOGY

THIRD YEAR – (Regulation 2018-2019 onwards)

PAPER II – PRINCIPLES OF ANAESTHESIA - II

Q.P. Code: 801142

Time: Three Hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. What is Hypoxia? Describe in detail about causes and management of Perioperative hypoxemia.
2. What is Spinal Anaesthesia? What are the complications of Spinal anaesthesia? How will you prepare the Operation Theatre for Spinal Anaesthesia?
3. Describe about Cardiopulmonary resuscitation. Recent guidelines for Basic Life Support (BLS) and Advanced Cardiac Life Support (ACLS).

II. Write notes on:

(8 x 5 = 40)

1. Bupivacaine.
2. Femoral nerve block and Ankle block.
3. Anaesthesia for ECT.
4. Rapid Sequence induction.
5. Arrhythmias.
6. Post operative nausea and vomiting.
7. Management of Post tonsillectomy bleeding.
8. Venous air embolism.

III. Short Answers on:

(10 x 3 = 30)

1. Anaesthesia for Bronchoscopy.
2. Epidural kit.
3. Glasgow Coma Scale.
4. Caudal Anaesthesia.
5. Extubation criteria.
6. Invasive monitoring in Anaesthesia.
7. Brain death.
8. Name three Upper limb nerve blocks.
9. Management of shivering in perioperative period.
10. Components of CPB circuit.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0425]

APRIL 2025

Sub. Code: 1142

B.Sc. OPERATION THEATRE & ANAESTHESIA TECHNOLOGY

THIRD YEAR – (Regulation 2018-2019 onwards)

PAPER II – PRINCIPLES OF ANAESTHESIA - II

Q.P. Code: 801142

Time: Three Hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Discuss the aetiology and management of Intra Operative Hypotension.
2. What is Hypoxia? Types of Hypoxia. How to recognize and manage hypoxia pre operatively?
3. How would you prepare an operating room for emergency post tonsillectomy bleeding in 20Kg 4-year-old child?

II. Write notes on:

(8 x 5 = 40)

1. Anaphylaxis.
2. Anaesthesia for manual removal of placenta.
3. Post extubation stridor.
4. Central venous access.
5. Double lumen tube.
6. How will you diagnose and confirm brain death?
7. Anaesthesia concerns in outside Operating Room (OR) procedures.
8. Air embolism.

III. Short Answers on:

(10 x 3 = 30)

1. Name the investigations to diagnose cardiac diseases.
2. Ocular Complications of Anaesthesia.
3. Neurological changes in geriatric patients.
4. Intra Cranial Pressure.
5. APGAR score.
6. Blood transfusion reaction.
7. Rapid Sequence Induction.
8. Treatment of intraoperative bronchospasm.
9. Heparin.
10. Echocardiography.

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY

[AHS 1125]

NOVEMBER 2025

Sub. Code: 1142

B.Sc. OPERATION THEATRE & ANAESTHESIA TECHNOLOGY

THIRD YEAR – (Regulation 2018-2019 onwards)

PAPER II – PRINCIPLES OF ANAESTHESIA - II

Q.P. Code: 801142

Time: Three Hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Explain in detail about postoperative complications in regional and general Anaesthesia and its management.
2. How would you prepare an operation theatre in an emergency situation of LSCS?
3. Explain in detail about the steps of general anaesthesia. Write a note on Rapid Sequence Intubation.

II. Write notes on:

(8 x 5 = 40)

1. Day care anaesthesia.
2. Post tonsillectomy bleeding.
3. Local anaesthetics.
4. Weaning of Cardiopulmonary bypass.
5. Advanced Cardiac Life Support.
6. APGAR score.
7. Epidural anaesthesia.
8. Difficult airway cart.

III. Short Answers on:

(10 x 3 = 30)

1. Mention five different nerve blocks.
2. Pulse oximetry.
3. Glasgow coma scale.
4. Mention the Monitoring: Invasive and Non-invasive in Cardiac anaesthesia.
5. Arrhythmias.
6. Double lumen tubes.
7. Laryngeal Mask airway.
8. Ambu bag.
9. Oxygen and Nitrous oxide cylinder.
10. Pin Index Safety System (PISS).
