Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Operation theatre Technology Degree Examination – 06-May-2026

Time: Three Hours **Max. Marks: 100 Marks**

CLINICAL OPERATION THEATRE TECHNOLOGY - PAPER – I (RS2)

Q.P. CODE: 2926

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any two) **2 x 10 = 20 Marks**

1. What is pancreatic duodenectomy? What are the regular and special instruments required for the procedure?
2. Draw a neat diagram and label ETT tube. Write the indications and complications of endotracheal intubation
3. Discuss the methods of sterilization in detail

SHORT ESSAYS (Answer any ten) **10 x 5 = 50 Marks**

4. Operating microscope
5. Define asepsis. Explain the various aseptic techniques
6. Fabrication of metal instruments
7. Prone position
8. Surgical scrubbing procedure
9. Appendicectomy procedure and instruments
10. Explain the indications for breast procedure
11. Peripheral support areas in operation theatre
12. Classify hazards in operation theatre
13. Laparoscopic surgery
14. Colonoscopy
15. Types of lasers and its applications

SHORT ANSWERS (Answer any ten) **10 x 3 = 30 Marks**

16. What is draping?
17. Name the chemical agents used for skin preparation before surgery
18. Nd: YAG laser
19. Liver biopsy
20. Enema
21. Complications of liver surgery
22. Informed consent
23. Name four equipment not allowed in an MRI suite
24. Microsurgery
25. How will you position the patient for thyroid surgery?
26. What is Hemostasis?
27. ABG analysis

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Operation Theatre Technology Degree Examination - 08-May-2026

Time: Three Hours **Max. Marks: 100 Marks**

APPLIED OPERATION THEATRE TECHNOLOGY
PAPER - II (RS2)
Q.P. CODE: 2927

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. What is balanced anaesthesia? What are the indications for endotracheal intubation? Describe the technique.
2. Discuss in brief operating positions used in various surgeries.
3. What is oxygen therapy? Classify oxygen delivery equipment and indications. Add a note on oxygen toxicity.

SHORT ESSAYS (Answer any Ten) **10 x 5 = 50 Marks**

4. What are the contra indication for spinal anaesthesia? How do you prepare and assist for spinal anaesthesia.
5. Breathing circuits
6. Enumerate the types of x-ray equipments and add a note on the C-arm image intensifier.
7. What is the difference between aseptic and sterile technique? Describe the technique of surgical scrub of hands before surgical procedures.
8. Explain the principle of pulse-oximeter and its various limitations.
9. Complication of blood transfusion
10. Write a short note on MRI.
11. What is hypothermia? How do you manage intra operative hypothermia?
12. Mapleson circuit
13. Classified inhalational agents. Explain about nitrous oxide.
14. BLS – Algorithm 2015
15. CPT – chest physiotherapy

SHORT ANSWERS (Answer any Ten) **10 x 3 = 30 Marks**

16. IVRA
17. Management of air embolism
18. Percutaneous needle aspiration
19. What do you mean by hypobaric, hyperbaric and isobaric Bupivacaine?
20. Guedel airway
21. Name two uses of Trendelenburg position.
22. Yoke assembly
23. Name the types of endoscopy.
24. ASA physical status classification
25. Indications of tracheostomy
26. Metoclopramide
27. What are the boundaries of epidural space?

Rajiv Gandhi University of Health Sciences, Karnataka

Third Year B.Sc. Anaesthesia Technology Degree Examination – 06-May-2026

Time: Three Hours **Max. Marks: 100 Marks**

ANAESTHESIA TECHNOLOGY – CLINICAL – PAPER-I (RS-3)
Q.P. CODE: 3271

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Types of Vaporizers and their safety mechanism
2. Explain the steps of Pre-Anaesthetic assessment
   OR
   Enumerate methodically how one checks the anaesthesia machine

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Difficult Airway
4. Flow meters
5. Blood pressure – definition, normal values and types of measurement
   OR
   Informed consent
6. Sites of venous cannulation
7. Atropine
8. Parts of laryngoscope and complications during Laryngoscopy
9. Complications in recovery room following general anaesthesia
10. Narcotics
    OR
    Antacids
11. Reversal from anaesthesia
12. Hydrocortisone

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Sizes and colour coding of cannula
14. Patient identification
15. Three equipments not allowed on MRI suits
    OR
    Three IV fluids and uses
16. Nil Per oral (NPO)
17. O_2 flush
18. Nasopharyngeal airway
19. O_2 cylinder
20. Soda lime
    OR
    Three indications of endotracheal intubation
21. Investigations prior to anaesthesia
22. Manual resuscitation bag

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Rajiv Gandhi University of Health Sciences, Karnataka

Third Year B.Sc. Anaesthesia Technology Degree Examination – 08-May-2026

Time: Three Hours **Max. Marks: 100 Marks**

ANAESTHESIA TECHNOLOGY – APPLIED - PAPER-II (RS-3)

Q.P. CODE: 3272

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Define Local anaesthesia. Explain the mechanism of action, uses and various preparations of Lignocaine
2. Describe the drugs used prior to general anaesthesia (Pre-anaesthetic medication) also explain the complication
   OR
   Enumerate the different IV fluids. Give the composition, uses and adverse effects of any two

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Enumerate complications of spinal anaesthesia and add a note on contraindications for spinal anaesthesia
4. Causes of hypoxia during general anaesthesia and its management
5. Describe transport of Oxygen in the blood
   OR
   Glascow coma scale
6. Intra operative anaesthesia record
7. Post operative shivering
8. LMA
9. Extubation criteria
10. Morphine
    OR
    Pethidine
11. Combined spinal epidural anaesthesia
12. Mention the differences between Isoflurane and Sevoflurane

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Classify Muscle Relaxants
14. Succinylcholine
15. Anti-Emetics
    OR
    Entonox
16. Atracurium
17. Ephedrine
18. Suction catheter
19. Propofol
20. Name any three drugs in emergency tray
    OR
    William T.G. Morton
21. Name three peripheral nerve blocks
22. Ketamine

Rajiv Gandhi University of Health Sciences, Karnataka

Third Year B.Sc. Anaesthesia Technology & Operation Theatre Technology Degree Examination – 06-May-2026

Time: Three Hours **Max. Marks: 100 Marks**

Anaesthesia & OT Technology – Clinical -PAPER-I

Q.P. CODE: 3393

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any two) **2 x 10 = 20 Marks**

1. Explain basic surgical principles and anaesthetic management of orthopaedic surgeries
2. Pre medication – importance and drugs used
3. What do you mean by vital signs? Explain importance of intraoperative record keeping of vital signs and its management

SHORT ESSAYS (Answer any ten) **10 x 5 = 50 Marks**

4. Care during blood transfusion
5. Awake craniotomy
6. Radiation sterilization
7. Role of OT technician in management of cardiac arrest
8. Liposuction
9. Microsurgical instruments
10. Write a note on PIN INDEX SYSTEM
11. Describe in detail the monitoring of the patient under general anaesthesia posted for CABG
12. Describe the various positions of the patient while the patient is anaesthetized. How will you prevent nerve injuries to the patient?
13. Describe the technique of endotracheal intubation
14. Explain briefly about ultra sonography
15. Surgical sutures

SHORT ANSWER (Answer any ten) **10 x 3 = 30 Marks**

16. Mention the advantages of regional anaesthesia
17. Anaesthetic management of tonsillectomy
18. Management of post operative shivering
19. Tuohy needle
20. Laryngeal Mask Airway (LMA)
21. Chest injury – diagnosis and management
22. Complications of epidural anaesthesia
23. Principles of laparoscopic gynaecological procedures
24. Apgar score
25. TURP syndrome
26. Intraoperative use of C-Arm
27. Informed consent

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Anaesthesia Technology & Operation Theatre Technology Degree Examination – 08-May-2026

Time: Three Hours **Max. Marks: 100 Marks**

Anaesthesia & OT Technology – Applied -PAPER-II

Q.P. CODE: 3394

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

LONG ESSAYS (Answer any two) **2 x 10 = 20 Marks**

1. List all the postoperative pain management techniques. Explain in detail about opioids used in analgesia.
2. Classify IV fluids. Briefly describe the intraoperative fluid management.
3. Explain the clinical features and management of following conditions: a) Laryngospasm b) Anaphylaxis c) Total spinal anaesthesia

SHORT ESSAYS (Answer any ten) **10 x 5 = 50 Marks**

4. DIC
5. Local Anaesthetic Systemic Toxicity (LAST).
6. Pulmonary artery pressure monitoring.
7. Labour analgesia.
8. Diagnosis and management of intraoperative cardiac arrest.
9. Diagnosis and management of postoperative pulmonary edema.
10. List different blood grouping systems. Describe briefly about cross matching.
11. Malignant hyperthermia.
12. Safety considerations for anaesthesia in MRI units.
13. Describe briefly a) Transesophageal Echocardiography b) Capnography
14. Describe invasive blood pressure monitoring.
15. Retrograde tracheal intubation.

SHORT ANSWER (Answer any ten) **10 x 3 = 30 Marks**

16. Mismatched blood transfusion – three clinical features.
17. Pulse oximetry.
18. List three complications of PCDT.
19. Electrocardiography.
20. TENS.
21. Drain care in postoperative period.
22. Ringer lactate.
23. **Baska mask**
24. AMBU bag.
25. Hypercarbia in intraoperative period.
26. Tight bag.
27. Three clinical features of TURP syndrome.

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Operation Theatre Technology Degree Examination – 06-May-2026

Time: Three Hours **Max. Marks: 100 Marks**

OPERATION THEATRE TECHNOLOGY – CLINICAL – PAPER-I (RS-3)

Q.P. CODE: 3408

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Discuss the instrumentation and steps of modified radical mastectomy
2. What are powered surgical instruments and name any six such instruments and write their uses

OR

What are radiation hazards and write the precautions to avoid them in operation theatre

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Write the precautions to avoid hypothermia in paediatric cases
4. Note the safe guards against fire and explosion in the operation theatre
5. Write the gloving techniques

OR

What are the types of injury to a patient or technician in an operation theatre?

6. Thermal sterilization
7. Write the precautions to be taken while using alcohol as a disinfectant
8. Laproscopic Cholecystectomy
9. Endotracheal intubation
10. Explain various surgical procedures in thyroid

OR

What is pancreatic duodenectomy?

11. Anaesthesia for remote locations
12. Write the handling of instruments used for a HIV infected patient

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Pasteurization
14. Write the complications of positioning during urological surgeries
15. What is colostomy? Name the indications

OR

Nd: YAG laser

16. Arterial Blood Gas (ABG)
17. **Name some neurological surgical instruments**
18. Name the methods of safe handling of cytotoxic agents
19. Draping
20. Name the surgical procedures on stomach

OR

Name the procedures which requires prone position

21. Foley's catheterization
22. Write the precautions to take while placing an electro Cautery under a patient

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc Operation Theatre Technology Degree Examination – 08-May-2026

Time: Three Hours **Max. Marks: 100 Marks**

OPERATION THEATRE TECHNOLOGY – APPLIED- PAPER-II (RS-3)

Q.P. CODE: 3409

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

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Pre-operative assessment, goals, history and physical examination for surgery.
2. Monitoring in anaesthesia, basic and advanced monitor.
   OR
   General anaesthesia protocol for normal healthy patients.

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Factors affecting MAC (Minimum Alveolar Concentration).
4. High pressure system.
5. Desflurane.
   OR
   Mechanism of action of opioids.
6. General considerations in action of local anaesthetics.
7. Beir's Block.
8. Structures encountered during spinal anaesthesia.
9. **Methods of locating epidural space**
10. History of anaesthesia briefly.
    OR
    Types of anaesthesia.
11. Indication and contraindications of blood transfusion.
12. Central gas supply.

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Mallampati classification.
14. Sevoflurane.
15. Blood pressure monitoring.
    OR
    O_2 cylinder.
16. Post dural headache.
17. Types of ET tubes.
18. Causes of Hypoxia.
19. Colour coding of cyclinders.
20. Ether.
    OR
    Tramadol.
21. Bains circuit.
22. Oxygen Flush.

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Anaesthesia Technology Degree Examination – 11-May-2026

Time: Three Hours **Max. Marks: 100 Marks**

ANAESTHESIA TECHNOLOGY - ADVANCED – PAPER – III (RS-3)

Q.P. CODE: 3273

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

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Routes of oxygen delivery to a critically ill patient. Write a brief note on oxygen therapy with a face mask.
2. What is one lung ventilation? Narrate the preparation and procedures of the thoracic surgeries.

   OR

   Preparation of OT for Emergency Caesarean section.

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. What are the methods used to check the placement of double lumen tubes? Name some DLT.
4. What is Ventilator Associated Pneumonia? How do you – prevent it?
5. Hemorrhagic shock.

   OR

   Types of Anesthesia if IHD patients undergo surgery
6. **Explain in details about things to be kept ready in an OT during the case of anticipated difficult intubation**
7. Difficult airway management in the thyroid surgery.
8. Management of hypotension during major surgery.
9. Pneumothorax.
10. Arterial blood pressure settings.

    OR

    Hypotension after spinal anaesthesia.
11. Septic shock.
12. Central venous pressure monitoring.

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Humidification.
14. Propped up position in ICU.
15. Antiasthmatic agents.

    OR

    Complications of Epidural anaesthesia.
16. Causative agents of malignant hyperthermia.
17. Neurological complications of cardiac arrest.
18. Signs and symptoms of aspiration of gastric contents.
19. What are the most important criteria to indicate severe respiratory compromise?
20. Body Warmers.

    OR

    Drugs used for resuscitation of new born.
21. Combitube.
22. Diabetic ketoacidosis.

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Anaesthesia Technology & Operation Theatre Technology Degree Examination – 11-May-2026

Time: Three Hours **Max. Marks: 100 Marks**

Anaesthesia & OT Technology – Advanced -PAPER-III

Q.P. CODE: 3395

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

LONG ESSAYS (Answer any two) **2 x 10 = 20 Marks**

1. Explain organisational and triage issues in mass casuality incidents. How do you prepare the operation theatre and critical care units for the same?
2. Explain in detail management of status asthmatics. Discuss the mechanism of action of various antiasthmatic agents.
3. Discus in detail management of Burns injury.

SHORT ESSAYS (Answer any ten) **10 x 5 = 50 Marks**

4. Recovery from general anaesthesia.
5. Weaning from mechanical ventilation.
6. Drugs used in ICU for inotropic support.
7. Post anaesthesia care unit.
8. Preparation of OT for a paediatric inguinal hernia – repair surgery.
9. Pulmonary oedema.
10. Preparation of OT for Thoracic surgery.
11. NIV (Non Invasive Ventilation).
12. Haemorrhagic shock.
13. Sepsis clinical features and management.
14. Preparation of OT for vaginal hysterectomy.
15. Post Dural Puncture Headache (PDPH).

SHORT ANSWER (Answer any ten) **10 x 3 = 30 Marks**

16. Hand washing.
17. Bladder care.
18. Glasgow coma scale.
19. Causes and prevention of deep vein thrombosis.
20. Oxygen Flush.
21. Aspiration prophylaxis.
22. Adrenaline.
23. Nasopharyngeal airway.
24. Intubating LMA.
25. Total intravenous anaesthesia.
26. Defibrillator.
27. Anti arrhythmic drugs.

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Operation Technology Degree Examination – 11-May-2026

Time: Three Hours **Max. Marks: 100 Marks**

OPERATION THEATRE TECHNOLOGY – ADVANCED – PAPER-III (RS-3)

Q.P. CODE: 3410

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. What is Appendectomy? Explain in detail the position of patient, instruments required and the procedure
2. Classify renal failure. Indications for dialysis and describe the anaesthetic management of patient with renal failure

   OR

   Write the surgical assistance in a neurosurgical procedure and its equipments

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Write the preparation for coronary artery bypass
4. What are the components of a cytoscopic instruments? How will you prepare the patient for the procedure?
5. What is TURP and write its complications?

   OR

   Write the POP application for fracture of bones of forearm
6. Skin grafting
7. Write the instrumental layout for circumcision surgery
8. What are absorbable sutures? Name an absorbable suture and its uses
9. **Tongue -tie surgery**
10. Write the role of anti-coagulants in vascular surgery

    OR

    Write in detail about abdominal incisions
11. Prosthetic grafts in vascular surgery
12. Write the postoperative complications of tonsillectomy

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Full time normal delivery
14. Write the various diagnostic procedures for investigations of general surgeries
15. Swab and culture tests for CT

    OR

    Types of suture needles
16. Write the different types of tracheostomy tubes
17. Write the benefits of laproscopic surgery
18. Brachial plexus block
19. What is self retaining retractor? Name the surgery, where it is used?
20. Postoperative fluid management

    OR

    Physiotherapy – for total knee replacement
21. Ultrasonography of abdomen
22. Anaesthetic drugs used for colonoscopy

Rajiv Gandhi University of Health Sciences, Karnataka