Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Anaesthesia Technology Degree Examination – Mar 2013

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

Clinical Anaesthesia Technology
Paper – I (RS Scheme)

Q.P. CODE: 2932

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. Describe safety features in anaesthesia machine, methods of checking the machine to be dealt in detail
2. ENUMERATE the monitoring systems during anaesthesia and discuss in detail about any one of them
3. CLASSIFY anticholinerigic drugs, describe in detail about atropine

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

4. Discuss metabolic acidosis
5. Arrythmias in anaesthesia
6. Oxygen
7. Seyoflurane
8. Complications of endotracheal intubation
9. Criteria for Extubation
10. Discuss nil per oral (NPO) protocol for a child of 3 years age
11. Discuss the causes of restlessness in the recovery room
12. Treatment of hypotension in recovery room
13. Isoprenaline
14. Albumin
15. Compare endotracheal tubes with Red rubber tubes
16. Antacids
17. Inotropes

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

18. Classify non depolarizing muscle relaxants
19. Causes of hypokelmia
20. Complication of blood transfusion
21. Uses of dobutamine
22. Differences between Thiopentone and Propofol
23. Treatment of Hypoxia during anaesthesia
24. Treatment of pneumothorax
25. Uses of Guedel airway
26. Causes of hypertension in anaesthesia
27. Formula for calculation of endotracheal tube in paediatrics
28. Indications for defibrillation in ACLS during CPR
29. Uses of local anaethetics

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Anesthesia Technology Examination – Mar 2013

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

APPLIED ANAESTHESIA TECHNOLOGY
PAPER – II (RS)
Q.P. CODE: 2933

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 are the methods of Anaesthesia?
2. Enumerate the postoperative complications in Recovery Room and management of the complications.
3. What are the drugs acting on sympathetic nervous system? Enumerate and describe in detail any two.

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

4. Enumerate Neuromuscular Blockers. Explain any one.
5. What are Inhalational Anaesthetics? Explain any one in detail.
6. Indications, dosage, mechanism of action and uses of Fentanyl
7. Indications, dosage, mechanism of action and uses of thiopentone
8. What are benzodiazepines? Explain any one.
9. How will you prevent thermal and electrical injuries?
10. What is Hypercapnia? Causes of it
11. What are the causes of intra operative tachycardia?
12. What is spinal anaesthesia? Complications of spinal anaesthesia
13. What are the stages of ether anaesthesia?
14. What is Hypotensive anaesthesia? What drugs are used for it? Enumerate them.
15. What symptoms a patient will present in recovery room if he is having ischaemia?

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

16. What drugs are used for postoperative analgesia? Enumerate them.
17. Short note on local anaesthetics tonicity
18. Basic monitors in recovery room - Enumerate them.
19. What is Bougie? Uses of it
20. Indications of tracheostomy
21. How will you deepen anaesthesia?
22. What is Bupivacaine? Uses of it
23. What is milrinone? Uses of it
24. What you mean by confirm the identity of patient?
25. Short note on W.G. Morton
26. Short note on brachial plexus block only single approach.
27. Drugs used for postoperative epidural analgesia

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Anesthesia Technology Degree Examination – Mar 2013

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

ADVANCED ANAESTHESIA TECHNOLOGY
(Revised Scheme)
Q.P. CODE: 2934

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 are pulmonary function test? What is their significance?
2. What is Hypo thyroidism? Signs and symptoms and management of a hypothyroid case posted for surgery.
3. What is Hypertension? How will you manage a hypertensive case with history of angina posted for surgery?

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

4. Management of case of hepatic encephalopathy
5. What is protamine? Uses of protamine
6. What is septic shock? Management
7. Preoperative consideration in a patient with bronchial Asthma
8. Intra operative management of a case with diabetes mellitus
9. Complication of double lumen tube
10. Preoperative consideration in management of case of LSCS
11. Types of arrhythmias encountered and management of any two
12. Post operative pain management
13. Enumerate the preparation and monitoring of patient posted for cardiac surgery.
14. How will you take care of arterial and venous lines?
15. How will you calculate maintainance fluid requirement in children?

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

16. What is pregnancy induced Hypertension? Enumerate 3 complications.
17. What preparations should be made for a case of bronchoscopy?
18. What is obstructive sleep apnoea?
19. Tests for Autonomic Neuropathy - Enumerate.
20. Preoperative consideration in COPD patient
21. What is closing capacity and its significance?
22. What is CPAP mode of ventilation?
23. What is labour analgesia?
24. How will you maintain body temperature intra operatively in paediatric case?
25. What is Humidification?
26. What is Xylocard? Uses of it
27. How will you transport a patient to ICU after cardiac surgery?

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Operation theatre Technology Degree Examination – Aug 2013

Time: Three Hours Max. Marks:100 Marks

CLINICAL OPERATION THEATRE TECHNOLOGY - PAPER – I (RS)

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. Describe the instrument planning and the steps of Cholecystectomy.
2. Discuss the physical layout of operation theatre.
3. Discuss moist heat sterilization.

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

4. Gowning
5. Handling of powered instruments
6. Monopolar electro cautery
7. Laser surgery
8. Care of operating microscope
9. Ultrasonic surgery
10. Describe in brief the assembly and passing of sharp instruments.
11. Operation theatre lighting
12. Ethylene oxide gas sterilization
13. Anti microbial skin cleansing agents
14. Ultrasonic cleaning
15. Dry heat sterilization

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

16. Mention the types of abdominal incisions.
17. Jack knife incision
18. Uses of circular stapler
19. Name three methods of sterilization.
20. What is the difference between disinfection and sterilization?
21. Carbon dioxide laser
22. What are the types of steam sterilization?
23. Biologic hazards in the operation theatre
24. Define aseptic technique.
25. Define sterile technique.
26. Nosocomial infection
27. Pasteurization

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Operation Theatre Technology Degree Examination – Aug 2013

Time: Three Hours | Max. Marks:100 Marks

OPERATION THEATRE TECHNOLOGY

Paper – I (RS)

Q.P. CODE: 2926

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

LONG ESSAYS — 2 x 10 = 20 Marks

1. Discuss in brief sterlisation
2. Discuss in brief positioning and draping the patient
3. Discuss in brief handling of instruments

SHORT ESSAYS — 10 x 5 = 50 Marks

4. Gloving
5. Laser
6. Ultrasonography
7. Betadine
8. Suturing material
9. Ryles tube
10. Foleys catheter
11. Ringer lactate
12. Haemostasis
13. Atropine
14. Cautery
15. Functions of spleen

SHORT ANSWERS — 10 x 3 = 30 Marks

16. Forceps
17. Duties of first assistant
18. Fumigation
19. Skin grafting
20. Intravenous cannulas
21. Splints
22. A.V fistulas
23. Cataract
24. Sebaceous cyst
25. F.N.A.C
26. Fabrication
27. Function of pancreas

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Rajiv Gandhi University of Health Sciences, Karnataka

III year B.Sc. Operation Theatre Technology Degree Examination - Aug 2013

Time: Three Hours | Max. Marks: 100 Marks

APPLIED OPERATION THEATRE TECHNOLOGY
Paper - II (Revised Scheme)
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. Describe in detail the components of Boyle's machine and the use of these components during anaesthesia.
2. What is the use of Laryngoscope? Describe in detail the various laryngoscopes available today.
3. Monitoring of an anesthetized patient is important. Explain your role of monitoring patient under anaesthesia.

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

4. How will you transport the patient to the operating room suite?
5. Mention any five indications of Ultrasonography.
6. Outline the instruments required for an upper gastrointestinal endoscopy.
7. Describe the 5 objectives of general Anaesthesia.
8. What is the role of Nitrous Oxide in Anaesthesia? Write down the advantages and disadvantages of nitrous oxide.
9. Write briefly on balanced Anaesthesia.
10. Name the various uses of Pulmonary artery catheters.
11. Explain briefly central venous Pressure monitoring.
12. Write a note on Ambu resuscitator.
13. What are the hazards of endotracheal intubation?
14. Mention the hazards of using liquid oxygen in anaesthesia.
15. Write a note on light source of an endoscope and the method of sterilizing it.

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

16. Define interventional radiology with examples.
17. What is mammography? Name one indication of mammography.
18. What is cryoanaesthesia?
19. Name the colour code used for oxygen and carbon dioxide cylinders.
20. Name the parts of a facemask.
21. Name any two uses of Bronchoscopes in Anaesthesia.
22. Name the contents of soda lime.
23. Name 2 types of airways.
24. Name any two advantages of Tracheostomy.
25. What is the use of electrocardiogram during Anaesthesia?
26. What do you mean by informed consent?
27. Name any two side effects of tracheostomy.

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Operation Theatre Technology Advanced
Degree Examination – Aug 2013

Time: Three Hours | Max. Marks: 100 Marks

Operation Theatre Technology Advanced
Paper – III (RS)
Q.P. CODE: 2928

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. Describe the patient positioning, instrument planning and surgical steps of right pneumonectomy.
2. Discuss the instrumentation, position and steps of Trans urethral prostatectomy (TURP).
3. Discuss the instrumentation and steps of total abdominal hysterectomy.

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

4. Total knee replacement
5. Suture materials
6. Indirect Laryngoscopy
7. Adenoidectomy
8. Hemiglossectomy
9. Caldwell-Luc procedure
10. Rhinoplasty
11. Hemithyroidectomy
12. Vascular grafts
13. Mastoidectomy
14. Cadaver donor
15. Complications of peripheral vascular disease

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

16. Pneumothorax
17. Shirodkar's procedure
18. Oophorectomy
19. Non absorbable suture materials
20. Indications for cystoscopy
21. Circumcision
22. What is Orchiectomy? What are the types of orchiectomy?
23. Indications for liver transplantation
24. What are the grafts used in coronary artery bypass grafting?
25. What are the indications of tracheostomy?
26. What are the types of surgery done for cataract?
27. What is skin grafting? What are the types of skin grafting?

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Operation Theatre Technology Degree Examination – Aug 2013

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

INTRODUCTION TO OPERATION THEATRE TECHNOLOGY (RS)

Q.P. CODE: 1241

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. Define local anaesthetics. Discuss the different types of local anaesthetic agents.
2. Discuss various methods of sterilization.
3. Discuss surgical asepsis in the operation theatre.

SHORT ESSAYS (Answer any Twelve) **12 x 5 = 60 Marks**

4. Blood groups
5. Hot Air oven
6. Management of sharp instruments
7. Care during dusting of an operation theatre.
8. Jack knife position
9. Various parameters monitored during surgery in operation theatre.
10. Chemical sterilization
11. Instrument tray for thyroidectomy
12. Etching of instruments
13. Sterilization of arthroscope
14. Laryngoscope
15. Management of swabs
16. Role of an assistant during surgery
17. Indications for blood transfusion

SHORT ANSWERS (Answer any Ten) **10 x 2 = 20 Marks**

18. Glutaraldeyhde
19. ECG monitor
20. Sponge holding forceps
21. Ether
22. Povidone iodine
23. Sterilization of gastroscope
24. Removal of rust spots
25. Universal precautions to be taken by medical health professionals
26. Headlight
27. Lead apron
28. Care of scissor
29. Patient confidentiality

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Operation Theatre Technology Advanced
Degree Examination – Aug 2013

Time: Three Hours | Max. Marks: 100 Marks

Operation Theatre Technology Advanced
Paper – III (RS)
Q.P. CODE: 2928

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. Describe the patient positioning, instrument planning and surgical steps of right pneumonectomy.
2. Discuss the instrumentation, position and steps of Trans urethral prostatectomy (TURP).
3. Discuss the instrumentation and steps of total abdominal hysterectomy.

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

4. Total knee replacement
5. Suture materials
6. Indirect Laryngoscopy
7. Adenoidectomy
8. Hemiglossectomy
9. Caldwell-Luc procedure
10. Rhinoplasty
11. Hemithyroidectomy
12. Vascular grafts
13. Mastoidectomy
14. Cadaver donor
15. Complications of peripheral vascular disease

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

16. Pneumothorax
17. Shirodkar's procedure
18. Oophorectomy
19. Non absorbable suture materials
20. Indications for cystoscopy
21. Circumcision
22. What is Orchiectomy? What are the types of orchiectomy?
23. Indications for liver transplantation
24. What are the grafts used in coronary artery bypass grafting?
25. What are the indications of tracheostomy?
26. What are the types of surgery done for cataract?
27. What is skin grafting? What are the types of skin grafting?

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Anaesthesia Technology Degree Examination – Aug 2013

Time: Three Hours | Max. Marks: 100 Marks

Clinical Anaesthesia Technology
Paper – I (RS Scheme)

Q.P. CODE: 2932

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. Preparation of operation theatre, Prior to a major surgery
2. Various Measures to be taken to Prevent Physical injuries to patients during Positioning for surgery.
3. Anaesthetic Management of a forty year old female posted for Cholecystectomy

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

4. Pre medication for paediatric patient
5. Various Blood Components available for use in perioperative period
6. Effect of smoothing in perioperative period
7. Importance of Informed Written Consent for surgical procedure
8. Intra operative fluid management for a major abdominal surgery
9. Enumerate the Causes of postoperative shivering and management of it.
10. Causes of Low oxygen saturation in immediate postoperative period - How will you identify?
11. Various Antiseptic solution commonly used in operating room
12. Hypoglycaemia in immediate postoperative period, its identification and management
13. Evaluation of clotting system
14. Various uses of Adrenaline
15. Documentation of critical events in intra operative period
16. Monitoring of vital signs during Intra operative period
17. Enumerate induction agents and describe one.

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

18. Preparation for peripheral I.V. Cannulation
19. Enumerate the various types of Laryngoscope Blade available.
20. Preparation for Removal of Endo tracheal Tube
21. Various sizes of Oral Pharyngeal Airway
22. Precautions to be taken during intra hospital transfer of patient
23. Enumerate uses of Atropine.
24. What are the uses and side effects of Neostigmine?
25. Sellick's Manoeuver
26. What is Magill's forceps? Uses of it
27. Uses of Oxygen Flush
28. Various Airway gadgets available for Difficult Intubation
29. Various Modalities available for Monitoring Blood Pressure

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Anesthesia Technology Examination – Aug 2013

Time: Three Hours | Max. Marks: 100 Marks

APPLIED ANAESTHESIA TECHNOLOGY
PAPER – II (RS)

Q.P. CODE: 2933

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. Classify Local Anaesthetic agents. Describe the mechanism of action the same
2. Recent ACLS guidelines for CPR
3. Stages of ether anaesthesia

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

4. Adrenaline
5. Airway pressure
6. Laryngoscope
7. Hypercarbia
8. Spo_2
9. Endotracheal tube
10. Suxamethorium
11. Nitrous oxide
12. What is MAC? Give MAC values of different inhalation agents
13. PIN Index
14. Arrhythmias
15. Signs of deep anaesthesia

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

16. Name two complications spinal anaesthesia
17. Treatment of post dural puncture headache
18. Propofol
19. Dissociative anaesthesia
20. Sodium bicarbonate
21. Non depolarizing muscle relaxants
22. Nerve stimulations
23. Treatment of Bradycardia
24. Methods to conform ET intubation
25. Combitube
26. Name two uses of $ETCO_2$
27. Types of hypoxia

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Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Anesthesia Technology Degree Examination – Aug 2013

Time: Three Hours | Max. Marks: 100 Marks

ADVANCED ANAESTHESIA TECHNOLOGY
(Revised Scheme)

Q.P. CODE: 2934

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. Discuss the management of a 4 year old child with foreign body in the larynx.
2. Classify antihypertensive drugs. Describe any one in detail.
3. Classify types of Diabetes Mellitus. Describe the pathophysiology and management of Type 2 Diabetes Mellitus.

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

4. Post Anaesthesia Care Unit
5. Capanography
6. Classify Antiarrythmic Drugs.
7. Amiodarone
8. Physiological changes during pregnancy
9. Differences between Adult and Paediatric Airway
10. Discuss the various modes of mechanical ventilation.
11. Fetal Circulation
12. Double Lumen Tubes
13. Acute Severe Asthma
14. Bed side pulmonary function tests
15. Define septic shock and discuss the management strategies.

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

16. Left bundle branch block
17. Clinical features of Hyperthyroidism
18. Neostigmine
19. Sites of temperature monitoring
20. PEEP
21. Activated Clotting Time (ACT)
22. Vecuronium
23. Ventricular tachycardia
24. Bronchodilators
25. Sleep Apnoea Syndrome
26. Hypokalemia
27. Sodium bicarbonate

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