Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – 07-Jan-2021

Time: Three Hours | Max. Marks: 100 Marks

INTRODUCTION TO ANAESTHESIA TECHNOLOGY
(REVISED SCHEME-2)
Q.P. CODE: 1237

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 types of hypoxemia, its management and hazards of oxygen therapy.
2. Ten golden rules of Anaesthesia.
3. Name the different types of laryngoscopes and their features. Enumerate complication of endotracheal intubation.

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

4. Patient positioning during Anaesthesia and precautions taken.
5. Venturi mask.
6. Magill's breathing system.
7. Role of an Anaesthesia technician during a surgery.
8. Safety features of Anaesthesia machine.
9. Intubation drill.
10. HORACE WELLS.
11. Flow meters.
12. Diameter index safety system and pin index system.
13. Transcutaneous oxygen monitor.
14. Parts of oral airway and its features.
15 Gas Analysis-types and care.
16. Cardiac monitoring.
17. Types of Endotracheal tubes.

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

18. Name two inhalational Anaesthetics.
19. Pressure reducing valves.
20. Oxygen Flush.
21. Epidural set.
22. Hypothermia.
23. AMBU.
24. Temperature conversion.
25. How do you sterilize Endotracheal tube and airway?
26. Entonox and its uses.
27. Anatomical face mask.
28. Patient preparation for anaesthesia.
29. Flow restrictors.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – 19-Jan-2022

Time: Three Hours | Max. Marks: 100 Marks

INTRODUCTION TO ANAESTHESIA TECHNOLOGY (RS2)
Q.P. CODE: 1237
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. Mention various anesthetic preparations for emergency surgery. Describe emergency intubation in detail.
2. Define Hypoxemia, causes of Hypoxemia and clinical signs. Describe oxygen delivery system.
3. Principle of Capnography, types of Capnogram and Capnograph in at least 5 clinical situation.

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

4. Brief history of inhalational agent
5. Cylinder storage
6. Diameter index safety system (DISS)
7. Pressure relief valve
8. Flow meter assembly in anesthesia machine
9. Ten golden rules of anaesthesia
10. Components of circle breathing system
11. Facemask types and principle
12. Venturi principle and important application in anesthesia
13. RAE tubes
14. Define Boyle's law and Charles law. Mention clinical applications of both.
15. Precision and Non-Precision vaporizers
16. Jackson Rees circuit
17. Color coding

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

18. Avogadro's hypothesis
19. Components of scavenging system
20. Soda lime indicator
21. Clinical formula for CO_2 abdorption by soda lime
22. Limitations of pinidex system
23. Dead space and clinical importance
24. Oxygen failure safety devices
25. Define latent heat of vaporization and specific heat.
26. What is scavenging system?
27. Unidirectional (Check) valve
28. Disadvantages of pulse oxymetry
29. Magills contribution to anesthesia equipment

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – 11-Jan-2021

Time: Three Hours | Max. Marks: 80 Marks

MEDICINE RELEVANT TO ANAESTHESIA TECHNOLOGY (RS2)
Q.P. CODE: 1238

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 preparation required in difficult intubation. Write about minimum standard of monitoring in anaesthesia.
2. Patient with COPD for a long surgery. What are the perioperative and post operative issues? Preventable and non preventable.
3. Describe various methods of DVT prevention during long surgical procedure, including pre operative.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. Spinal anaesthesia
5. Uses Carbon dioxide monitor in OT
6. Chronic Bronchitis
7. Endotracheal tube
8. Status Asthmaticus
9. Risk Factors in Hypertension
10. Pulse Oximetry
11. Laryngeal mask airway
12. Rapid Sequence induction
13. Grand Mal Seizure.

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

14. Arrhythmias in Perioperative period. Mention two Only
15. Hyperthermia
16. Prevention of Hypothermia in Pediatric Patients during surgery
17. Name three intra venous fluids used routinely in OT
18. Glucose, insulin, potassium Solution
19. CVP, sites of insertion
20. Epidural Anesthesia
21. Diuretics
22. Name three Antihypertensive drugs
23. Oral Hypoglycemics
24. Define Morbid Obesity
25. Sinus Bradycardia.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – 21-Jan-2022

Time: Three Hours Max. Marks: 80 Marks

MEDICINE RELEVANT TO ANAESTHESIA TECHNOLOGY (RS2)
Q.P. CODE: 1238

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 causes of Obesity. What are the Anesthetic challenges of an Obese patient in the OT?
2. Intraoperative Arrhythmias, complications and management.
3. Systolic Hypertension. Causes and Management.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. Deep Vein Thrombosis
5. Pregnancy Induced Hypertension
6. Paediatric anaesthesia
7. Status Epilepticus
8. Myocardial Infarction
9. Chronic Bronchitis
10. Iron Defiency
11. Name Liver Function Tests. (List ONLY)
12. Difficult Intubation
13. Co morbidities in the Elderly Patient.

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

14. Name any 3 Anti Hypertensive drugs
15. Bronchodilators
16. Defibrillation
17. Uses of Straight Blade Laryngoscope
18. Pulse oximetry
19. Hypothermia
20. Adrenaline
21. CVP
22. APGAR Score
23. Amiodarone
24. Emergency drugs
25. Laryngeal mask airways

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – 22-Jul-2021

Time: Three Hours | Max. Marks: 100 Marks

INTRODUCTION TO ANAESTHESIA TECHNOLOGY (RS2)

Q.P. CODE: 1237

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 briefly history of anaesthesia.
2. Describe or explain standards & safety of anaesthetic including golden rules of anaesthesia.
3. Types of vaporizers, its hazard & maintenance, filling & draining.

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

4. Bain circuit.
5. Central venous pressures monitoring.
6. Types of Resuscitators Bags its indication & hazards.
7. Oxygen concentrators.
8. Goals of oxygen therapy.
9. Cylinder pressure guage.
10. Diameter index safety system.
11. Gas flow and diffusion.
12. Causes and signs of hypoxemia.
13. Medical gas pipeline system.
14. Gas analysis
15 Reservoir bag
16. Low Pressure system
17. modern anaesthesia era

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

18. Pulse oximetry.
19. Ayre's piece.
20. Flow meter assembly.
21. Modern anaesthetic era.
22. Autoclaving.
23. Color coding.
24. Soda lime.
25. Hagen-poiseullies law.
26. Liquid oxygen.
27. Oxygen Flush.
28. W.T.G Morton.
29. Reducing valve.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – 26-Jul-2021

Time: Three Hours | Max. Marks: 80

Marks

MEDICINE RELEVANT TO ANAESTHESIA TECHNOLOGY (RS2)

Q.P. CODE: 1238

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. Preventive measures in patients with chronic bronchitis before anesthesia
2. Write in detail the various positions used for spinal anaesthesia. Write brief note on the technique of spinal anaesthesia.
3. Describe the anaesthetic management of patient with deep jaundice. Discuss problems in these patients.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. Restrictive airway disease
5. Atrial fibrillation
6. Dopamine
7. Labour analgesia
8. Central venous line
9. Causes of intraoperative hypo and hypertension
10. Esmalol
11. Physiological changes in elderly patients
12. TURP
13. Diabetic ketoacidosis

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

14. IV canulla
15. Thiopentone
16. Vecuronium
17. Adrenaline
18. Renal function test
19. Sevoflurane
20. Laryngeal mask airway
21. Ryles tube
22. Epidural set
23. Trendelenburg position
24. Oxygen cylinder
25. Central suction apparatus

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Operation Theatre Technology Degree Examination – 19-Jan-2022

Time: Three Hours | Max. Marks: 100 Marks

INTRODUCTION TO OPERATION THEATRE TECHNOLOGY (RS2)

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. Blood transfusion and its complications.
2. Discuss about the general anaesthetic agents. Explain any one.
3. Discuss the principles of draping and uses in operation theatre.

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

4. Principles and uses of hot air oven.
5. Crystalloids.
6. Sterilization of HIV patient instruments.
7. Isoflurane.
8. Monitoring of intraoperative patient.
9. Morphine.
10. Chemical sterilization.
11. Long acting muscle relaxant.
12. Pulse oximeter.
13. Waste disposal.
14. Lead apron.
15. Behaviour of an assistant during surgery.
16. Universal precautions.
17. Types and uses of spong holding forceps.

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

18. Xylocaine.
19. UV sterilization.
20. Betadine.
21. Vicryl.
22. Difference between toothed and non-toothed forceps.
23. HEPA filter.
24. Thoracotomy positions.
25. Uses of propofol.
26. Uses of CT scan.
27. Cataract.
28. ECG.
29. Parts of needle holders.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Operation Theatre Technology Degree Examination – 07-Jan-2021

Time: Three Hours | Max. Marks: 100 Marks

INTRODUCTION TO OPERATION THEATRE TECHNOLOGY (RS2)

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. Discuss various methods of sterilization.
2. Biomedical waste management.
3. General anesthesia.

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

4. Spinal anesthesia.
5. Hot sterilization.
6. Invasive blood pressure monitoring.
7. Preoperative preparation of patient for hemicolectomy.
8. Various patient positions on O T table.
9. Sterilization of ophthalmic instruments.
10. Upper gastrointestinal endoscopy
11. Tourniquet and its complications
12. Grafts used in hernioraphy.
13. Glutarldehyde
14. Universal precautions
15 Endotrachial intubation
16. Instruments used in vaginal hysterectomy.
17. Duties of a nurse

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

18. Artery forceps.
19. Skin staplers.
20. Hot air oven.
21. Ether.
22. Valsellum.
23. Patient confidentiality.
24. Muscle relaxants.
25. EMLA cream.
26. Pulse oximeter.
27. Platelet concentrate.
28. Instruments for abscess drainage.
29. Jack knife position.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Operation Theatre Technology Degree Examination – 11-Jan-2021

Time: Three Hours | Max. Marks: 80 Marks

MEDICINE RELEVANT TO OPERATION THEATRE TECHNOLOGY (RS2)

Q.P. CODE: 1242

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 causes and management of systemic hypertension.
2. Discuss physiological changes in Pregnancy.
3. What is hypovolemic shock? How is it managed?

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. CPR.
5. Status epilepticus.
6. Chronic bronchitis.
7. Emphysema.
8. Difficult intubation.
9. Gestational diabetes.
10. Pre-operative evaluation.
11. Problems in OT with an obese patient.
12. Spinal anaesthesia.
13. Types of insulin.

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

14. Status asthmaticus.
15 Angina pectoris.
16. Paediatric anaesthesia.
17. COPD.
18. Protection of pressure points in OT.
19. Bronchodilators.
20. Geriatric anaesthesia.
21. Vital capacity.
22. Septic shock.
23. Transient ischemic attack.
24. Uses of Pulse Oximeter in OT.
25. Capnography

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Operation Theatre Technology Degree Examination – 22-Jul-2021

Time: Three Hours | Max. Marks: 100 Marks

INTRODUCTION TO OPERATION THEATRE TECHNOLOGY (RS2)

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. Discuss peripheral support areas and layout of operation theatre with a neat labelled diagram.
2. Explain the different types of blood transfusion and its complications.
3. Describe the general principles of sterilization. Write an elaborate note on moist heat and dry heat sterilization.

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

4. Asepsis.
5. Care of anesthetized patient.
6. Suction apparatus.
7. Laminar airflow in operating room.
8. Role of scrub nurse during surgery.
9. Name all the instruments included in a general set.
10. Cardiopulmonary resuscitation.
11. Epidural anaesthesia.
12. Operating table and its parts.
13. Endotracheal tube.
14. Different types of laryngoscope blades with diagrams.
15 Closed method of gloving.
16. Capnography.
17. Disposal of radioactive products.

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

18. Betadine.
19. Functions of CSSD.
20. Operation theatre lights.
21. Name four synthetic sutures.
22. What are the metals suitable for surgical implants?
23. Soda lime.
24. Adrenaline.
25. Epidural needle and spinal needle with diagrams.
26. Sponge holder forceps.
27. Difficult airway trolley.
28. Name two surgeries where lateral positioning of the patient is required.
29. Name any four types of retractors.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Operation Theatre Technology Degree Examination – 21-Jan-2022

Time: Three Hours | Max. Marks: 80 Marks

MEDICINE RELEVANT TO OPERATION THEATRE TECHNOLOGY (RS2)

Q.P. CODE: 1242

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 disorders of pregnancy, investigations, clinical features and management associated with preclamsia.
2. Discuss clinical feature, investigations and management of myocardial infaction.
3. Discuss etiology, clinical features, investigation and management of bronchial asthma.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. Type one diabetes mellitus.
5. Anesthesia problem in elderly patients.
6. Management of ARDS.
7. Write down all the complications of obesity.
8. What is Mannitol? Name all the conditions where it is used? What are its side effects?
9. How does theophylline act? What are its uses? Enumerate its toxic symptoms.
10. Which gland produces oxytocin? How is useful in initiating labour? What are its side effects?
11. What is anaphylaxis? Name the drugs that can produce such a reaction.
12. Name any five drugs consumed by pregnant women and illustrate their effects on fetus.
13. What is parkinsonism? Describe the drug used in Parkinsonism.

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

14. Three complications of hypertension.
15 Angina pectoris.
16. Cyanosis.
17. Causes of Iron deficiency anaemia.
18. Causes of proteinuria.
19. Three causes of Haematuria.
20. Clinical signs of Uremia.
21. Proton pump inhibitors.
22. Pneumothorax.
23. Three drugs used in management of diabetes.
24. Risk factors for stroke.
25. Causes of hypotension.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Operation Theatre Technology Degree Examination – 26-Jul-2021

Time: Three Hours | Max. Marks: 80 Marks

MEDICINE RELEVANT TO OPERATION THEATRE TECHNOLOGY (RS2)

Q.P. CODE: 1242

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. Types of shock. Discuss about causes, clinical features and management of Anaphylactic shock.
2. Risk factors of ischemic heart disease (IHD). Discuss in detail about management strategies of IHD. Add a note on care during CABG.
3. Clinical features and management of hypertensive emergencies during surgeries. Mention the classification of antihypertensive drugs.

SHORT ESSAYS (Answer any Eight) 8 x 5 = 40 Marks

4. Oral anti-diabetic drugs.
5. Complications during labour. Add a note on labour analgesia.
6. NSAIDS.
7. Write down all the complications of obesity.
8. Causes, clinical features and treatment of raised intracranial tension (ICT).
9. Mention the Bronchodilator drugs. Write a note on nebulization.
10. Pulmonary embolism.
11. Hypotension during surgeries and its management.
12. Blood transfusion-indications and complications.
13. Classify epilepsy/seizures. Management of status epilepticus.

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

14. Adrenaline.
15 Oxygen cylinder.
16. Foley's catherization.
17. Anuria and Oliguria.
18. Xylocaine (XYLOCARD).
19. Furosemide (LASIX).
20. Causes of respiratory failure.
21. ABG.
22. ECG changes of myocardial infarction (MI).
23. Aspiration pneumonia.
24. What is parental nutrition?
25. Post exposure prophylaxis of HIV.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – 30-Jul-2021

Time: Three Hours | Max. Marks: 100 Marks

CLINICAL ANAESTHESIA TECHNOLOGY
PAPER – I (RS2)
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 pre-anaesthetic checklist for anaesthesia machine and equipments.
2. Discuss in detail various technique of intubation, preparation, protocol for difficult intubation.
3. Name the intravenous induction agents. Explain in detail about Thiopentone.

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

4. Capanography
5. Nitrous oxide
6. Halothane
7. Ephidrine
8. How will you assess blood loss during anaesthesia?
9. Hypercorbia
10. What are the criteria for extubation?
11. Laryngeal mask airway
12. Crystalloids
13. Ranitidine
14. Coagulation profile and its uses
15. Intra operative bronchospasm
16. How will you protect the external organs during anaesthesia?
17. Pin index system

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

18. Problem during prone position
19. Hyperkalemia
20. Mouth prope
21. Suction apparatus
22. Ambu resuscitator
23. Tracheostomy tube
24. Treatment of supraventricular tachycardia
25. Soda bicarb
26. Reservoir bag
27. Glycopyrulate
28. Technique of intravenous canulation
29. Pre operative instructions

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