Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – MARCH 2018

Time: Three Hours Max. Marks: 100 Marks

INTRODUCTION TO ANAESTHESIA TECHNOLOGY (RS)

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. Write about Mapleson classification of circuits and describe any two circuits in detail.
2. Draw the diagram of an oral airway. Mention various sizes available. Describe in detail preparation for emergency intubation.
3. Enumerate types of vaporizes. Discuss about the hazards and maintenance of vaporizer.

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

4. Types of cylinders based on size
5. Low-pressure system
6. Diameter index safety system (DISS)
7. Pressure regulators
8. Color coding of pipeline system
9. Draw a picture and explain components of the circle system.
10. Scavenging system
11. Re-breathing bags
12. Double lumen tube
13. Draw capnograph trace in at least 5 clinical situations.
14. Fixed performance mask. FiO2 and Fresh Gas Flow
15. Magill's contribution to anesthesia equipment
16. Master slave mechanism
17. Indications, advantage and disadvantage of throat pack

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

18. Define specific heat.
19. Factors influencing carbondioxide re-breathing in breathing circuits (Any 4)
20. Avogadro's number
21. Dead space and clinical importance
22. Soda lime indicator
23. Disadvantages of Oxygen flush valve
24. What is mechanical ventilation and indication?
25. Safety mechanisms in gas cylinders
26. Combitude
27. Method of insertion of oral airway
28. What is Resistance and its significance?
29. Limitations of pulse oximetry

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – MARCH-2018

Time: Three Hours | Max. Marks: 80 Marks

MEDICINE RELEVANT TO ANAESTHESIA TECHNOLOGY (RS)

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. Classify types of epilepsy, describe the management of status epilepticus.
2. Describe in detail physiological change during pregnancy.
3. Classification of anti hypertensive drugs, describe in detail any one calcium channel blocking drug.

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

4. Liver function test.
5. Classification of bronchodilator and explain in detail about aminophylline.
6. Pulmonary function test, both bed side and clinical.
7. Management of megaloblastic anemia (Vitamin B12 deficiency anemia).
8. Supine hypotension syndrome-management.
9. Status asthmaticus- management.
10. Diabetic ketoacidosis.
11. Physiological changes in an elderly patient.
12. Anaphylactic shock.
13. Pathophysiology of emphysema.

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

14. ACE inhibitors.
15 Insulin.
16. RFT (Renal function test).
17. End organ damage in hypertension.
18. BMJ.
19. Causes of anemia.
20. Oral Iron preparations.
21. Grand mal epilepsy.
22. Haematological changes in pregnancy.
23. Adrenaline.
24. Respiratory changes in obesity.
25. CSF findings in subdural haematoma.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Operation Theatre Technology Degree Examination – MARCH 2018

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. Explain in detail the duties of a Nurse posted to the operation theatre.
2. Describe the cycle of operation for a low temperature steam formaldehyde sterilization.
3. The care of instruments/apparatus after use is important. Explain how the following instruments will be cleaned-
   A) Sharp instruments b) Scissors c) Suture needles d) Glass syringe
   E) Endoscope F) Suction tubing G) Reusable rubber gloves.

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

4. Describe the closed glove technique.
5. Mention any five ways of preventing the chance of missing mop at surgery.
6. What are the methods of cold sterilization? Write a short note on any one of them.
7. What is ethylene oxide? How does it act on microorganism? What is the major problem of ethylene oxide?
8. What is Betadine? How does it differ from iodine? Mention uses of Betadine.
9. How will you sterilize the gastroscope?
10. Describe the role of nurse in maintaining an operating microscope.
11. How should you store Anaesthesia equipments/drugs in the operation theatre? What are the minimum requirements?
12. What is Ambubag? How does it function? What are the uses of Ambubag?
13. Define colonoscopy. What is the position of the patient and enumerate the instruments you will arrange for colonoscopy?
14. Name any five types of retractors and their specific uses.
15. Write down the instruments and suture material required for hemorroidectomy.
16. Describe mechanical washing of the operating room.
17. What is cholecystectomy? Name the instruments required for the procedure.

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

18. What does operating suite consists of?
19. What is considered as a sterile zone in operation theatre?
20. Name two surgeries where lithotomy position of patient is required.
21. What are the things required when a semi conscious patient is getting shifted from operation theatre to Intensive Care Unit?
22. How are powders sterilized?
23. How will you prepare tension sutures?
24. Define: a) Arthrography b) Embolectomy.
25. Name any two surgeries where Redivac suction drain is used.
26. Name any two Neurosurgical operations.
27. Differentiate disinfection and sterilization.
28. Name any two surgeries where bone cement is used.
29. What is the use of defibrillator?

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Operation Theatre Technology Degree Examination – MARCH-2018

Time: Three Hours | Max. Marks: 80 Marks

Medicine Relevant to Operation Theatre Technology (RS)

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. Define shock. Mention the causes and types of shock. Write in detail the management of shock.
2. Define and classify anemia. Discuss the indications and complications of blood transfusion.
3. Classify intracranial bleed. Discuss in detail about clinical features, investigations and treatment of Subdural Hematoma (SDH).

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

4. Discuss clinical features of asthma. Mention the drugs used for nebulization.
5. I.V fluids
6. Write in detail about clinical feature and management of hypoglycemia.
7. Mention all the airway devices with their indications. Write a note on endotracheal intubation.
8. Define heart failure and mention its types, clinical features and treatment.
9. Definition and staging of hypertension. Mention antihypertensive drugs.
10. Discuss the medical disorders in pregnancy. Add a note on treatment of Eclampsia.
11. Hemoptysis and hemetemesis
12. Obesity and its complications
13. Cardiac arrest and CPR

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

14. Name any four side effects of steroids.
15 ECG changes in myocardial infarction (MI)
16. Cardiac monitoring
17. Uses of atropine
18. Ryle's tube insertion
19. Spinal needle
20. Universal precautions
21. Hospital waste disposal
22. Insulin
23. Name any four antiepileptic drugs.
24. What is parental nutrition?
25. Antiemetic drugs

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