Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – APRIL 2017

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. Describe the gas laws. Explain any two with examples.
2. Explain the hanger and yoke system assembly in anaesthesia machine. Give a brief description of pin index with neat-labeled diagram.
3. Describe oxygen concentrator. Mention the types and working principles with advantages.

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

4. Diameter index safety system
5. Hazards of oxygen therapy
6. Classify vaporizers. Explain maintenance, filling and draining of vaporizer.
7. Explain a pressure regulator working principle with a diagram.
8. Enumerate different types of cylinders. Describe about its maintainance.
9. John snow
10. Classify breathing systems. Explain Mapleson A circuit working principles.
11. Enumerate the safety features of anaesthesia machine.
12. Enumerate the various devices available to administer oxygen with advantages & disadvantages.
13. Explain flow meter assembly and its advantages.
14. Pulse oximeter – working principle and types.
15. Indications, advantages and disadvantages of manual resuscitators
16. Explain oral endotracheal tube with a diagram. Indications for intubation
17. Intraoperative monitoring

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

18. Sterilization of endotracheal tubes
19. Ether day
20. Colour coding of medical gas pipelines
21. Goals of oxygen therapy
22. Venturi effect.
23. Explain types of capnograms with diagram.
24. List the sizes of facemasks used with anesthesia circuit.
25. Sizes of spinal needles available and explain one.
26. Diagram of a non-rebreathing valve
27. Halothane hepatitis
28. Master slave mechanism.
29. Checking method of Bain's circuit

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – APRIL 2017

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. What are the causative factors of IHD and preoperative management of patient with IHD?
2. Preoperative evaluation, intraoperative management and postoperative care of patient with diabetes mellitus
3. Describe pathophysiology and management of hypovolemic shock.

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

4. Labour analgesia
5. Hyperkalemia
6. Perioperative management of patients with COPD
7. Mention common arrhythmias seen during anaesthesia and management of intraoperative tachycardia.
8. Describe physiological changes of respiratory systems during pregnancy.
9. Bedside pulmonary function test
10. Glasgow coma scale
11. Differential diagnosis of acute chest pain and what are the investigation of acute MI?
12. Classification of chronic hepatitis
13. Organ function changes in geriatric patients

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

14. Phenytoin
15. Body mass index
16. Aminophylline
17. Glucose tolerance test
18. Factors affecting placental transfer of drugs
19. Oral hypoglycemic drugs
20. Cardioversion
21. Insulin
22. b-blockers
23. Intravenous Lignocaine (Xylocard)
24. Defibrillator
25. Universal precaution

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II Year B.Sc. Operation Theatre Technology Degree Examination – APRIL 2017

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. What are the medical ethics to be followed by a nurse? How shall he/she behave during the surgical procedure?
2. Separate linen or paper packets of sterile materials for individual operation is better than drum system. Explain the contents in the packet and enumerate the differences between drum system and packet system.
3. Explain in details the various components of basic Boyle's type of anaesthetic apparatus.

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

4. How would you store the sterilization packets in the operation room?
5. Describe the different types of chemical indicator Brownies tubes used to determine adequate sterilization of equipments.
6. Write a short note on cetrimide.
7. Describe how you will sterilize electrical instruments used in operating theatre.
8. How will you sterilize the Arthroscope?
9. What are the advantages of laminar airflow in the operation theatre?
10. What preoperative care will you give before the patient is getting shifted to operation table?
11. Describe the maintenance of operating microscope.
12. What is proctoscopy? Mention the instrumental requirements for the same.
13. What do mean by laparoscopy? Arrange the instruments for ectopic pregnancy through laparoscope.
14. Name any five, bone instruments and specify their uses.
15 Explain how ultrasonic cleaner is better than mechanical washing.
16. How will you advice the juniors about scrubbing of hand before wearing the gown.
17. Mention the complications of blood transfusion.

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

18. Expand: CCSD and TSSU.
19. What does the nano laminar flow indicate?
20. Name any 2 duties of circulating nurse.
21. Name any 4 natural absorbable sutures.
22. Name any two positions available for spinal Anaesthesia.
23. Define: a) Orchidectomy, b) Rhinoplasty.
24. What is Vulvectomy? Name the position of the patient for this surgery.
25. Name any two, suture materials used in nerve anastamosis.
26. What is mesh grafting?
27. Mention the use of Foley's self-retaining catheter?
28. Name the position of patient for fistula in ano operation. What do you mean by fistula in ano?
29. Name any 2 drugs used during cardiac arrest.

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II Year B.Sc. Operation Theatre Technology Degree Examination – APRIL 2017

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. Diagnosis and management of Diabetes mellitus.
2. Diagnosis and management of Ischemic heart disease.
3. Diagnosis and management of Anemia.

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

4. Renal function tests.
5. C T Scan.
6. Stages of Labor.
7. Electroencephalogram.
8. Motor milestones of a child.
9. Breast feeding-benefits.
10. Bronchial asthma.
11. Drug therapy- problems in the elderly.
12. Beta blockers.
13. Glucose tolerance test.

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

14. Hemorrhagic stroke.
15 Iron deficiency anemia-blood picture.
16. Body Mass Index.
17. Spirometry.
18. Define COPD.
19. Types of shock.
20. Foods to be avoided by a patient in renal failure.
21. Nitrates.
22. Precautions to be taken while administering Insulin.
23. Vital capacity.
24. Gestational diabetes.
25. Define Jaundice.

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