



B.Sc. Allied Health Sciences Second Year Semester-III

September-2023 Examination

B.Sc. Anesthesia & Operation Theatre Technology

Paper – I

[Max. Marks: 100]

Time: 3 Hrs.

Applied Pathology & Microbiology

Your answers should be specific to the questions asked.

Draw neat labelled diagrams wherever necessary.

(Use separate answer booklet for Section A & B)

Section – A

Applied Pathology (50 Marks)

Q.P Code : J3095

Long Essay

2 X 10 = 20 Marks

1. Define Anemia . Describe the classification, pathophysiology and clinical features of Anemia
2. Define Emphysema. Describe etiopathogenesis, clinical features and complications of emphysema

Short Essay (Answer any Three)

3 X 5 = 15 Marks

3. Classify Leukemia. Note on difference between leukemia and leukemoid reaction
4. Classify pneumoconiosis
5. Coagulation cascade
6. Pleural effusion- definition, etiology, Types
7. Microcytic hypochromic anemia- causes, pathophysiology

Short Answers (Answer any Five)

5 X 3 = 15 Marks

8. Three causes for transudate fluid
9. Asthma- types
10. Three causes of pulmonary edema
11. Name the three RBC indices
12. List three causes of hemolytic anemia
13. Agranulocytosis
14. Eosinophilia

Section – B

Applied Microbiology (50 Marks)

Q.P Code : J3096

(Use separate answer booklet for Section-B)

Long Essay

2 X 10 = 20 Marks

1. Classify sterilization. Describe in detail the working principle of hot air oven with a diagram. List the sterilization controls used in the hot air oven. (4+4+2).
2. Define health care associated infection. Enumerate the causative agents, predisposing factors and Describe the preventive measures for Catheter Associated Urinary Tract Infection (2+2+3+3)

Short Essay (Answer any Three)

3 X 5 = 15 Marks

3. Enumerate Aldehydes used in disinfection. Describe the mechanism of action and uses of Aldehydes. (1+1+3)
4. Describe the mechanism of HEPA filter filtration and its application. (3+2)
5. Describe the segregation of Biomedical waste with 2 examples for each .
6. Describe the functions and work flow at CSSD.
7. Describe the infection control practices in Infection control unit (ICU).

Short Answers (Answer any Five)

5 X 3 = 15 Marks

8. Name the methods of sterilization of Vaseline , Lowenstein Jensen's medium and surgical gauze.
9. Five moments of Hand Hygiene .
10. Mention the mode of action and uses of Sodium hypochlorite in the hospital. (1+2)
11. Enumerate 3 agents causing Surgical site infections.
12. Enumerate the components of standard precautions
13. Describe blood spill management.
14. Describe the principle of Tyndallization and mention the items sterilized by this method. (1+2)

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SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

B.Sc. Allied Health Sciences Second Year (Semester-III)

September-2023 Examination

B.Sc. Anesthesia & Operation Theatre Technology

Time : 3 Hrs.

[Max. Marks : 100]

Paper-II

Introduction to OT Technology

Q.P Code : J3100

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

Long Essay

2 X 10 = 20 Marks

1. Describe various safety features in anaesthesia machine?
2. Write brief history of spinal anaesthesia. Mention various indications, contra indications and complications of spinal anaesthesia?

Short Essay (Answer any Ten)

10 X 5 = 50 Marks

3. Note on Isoflurane.
4. What is a Tourniquet? What are the precautions to be taken while using a Tourniquet?
5. Mention MAC values and blood gas co-efficient of anesthetic gases?
6. Describe endotracheal tube with neat labelled diagram?
7. Biers block?
8. Chemical sterilization?
9. Indications and contra indications an airway?
10. Describe the importance of sterilization and disinfection, advantages and disadvantages of auto clave?
11. Describe in detail about laryngoscope, types and blades?
12. Describe devices used in oxygen therapy?
13. ETO sterilization?
14. Blocks of upper limb?

Short Answers (Answer any Ten)

10 X 3 = 30 Marks

15. Face mask?
16. What is semicritical level of contamination? Mention it.
17. Triad of general anaesthesia?
18. Biomedical waste discarded in block bag?
19. Treatment of malignant hyperthermia?
20. AMBU bag?
21. Physical agents of sterilization?
22. Drugs used in subarachnoid block?
23. Guedels airway?
24. Wrapping and packing?
25. Thiopentone?
26. Disadvantages LMA?



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B.Sc. Allied Health Sciences Second Year (Semester-III)
September-2023 Examination

B.Sc. Anesthesia & Operation Theatre Technology

Time : 2 Hrs.

[Max. Marks : 40]

SUBJECT : PHARMACOLOGY

Q.P Code : J3110

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

Long Essay

1 X 10 = 10 Marks

1. Describe various routes of drug administration with suitable example. Enumerate the various Merits and demerits of the oral route.

Short Essay (Answer any Three)

3 X 5 = 15 Marks

2. List the pre anesthetic medications and explain the basis of their use.
3. Explain the mechanism of action, uses and adverse effects of succinylcholine
4. Explain the mechanism of action, uses and adverse effects of diazepam
5. Explain mechanism, action, uses and adverse effects of metoprolol

Short Answers (Answer any Five)

5 X 3 = 15 Marks

6. Mention three skeletal muscle relaxants
7. Explain mechanism of action, uses and adverse effects of morphine.
8. Mention three anticholinergic drugs
9. Mention three crystalloids and write three uses
10. Mention the therapeutic uses of adrenaline.
11. Write the mechanism of action and two uses of neostigmine

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B.Sc. Allied Health Sciences Second Year (Semester-III)

September 2023 Examination

B.Sc. Anesthesia & Operation Theatre Technology

Time : 2.30 Hrs.

[Max. Marks : 80]

PAPER-IV

Medicine relevant to OT Technology

Q.P Code : J3120

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

Long Essay

2 X 10 = 20 Marks

1. Define and classify obesity. Describe its risk factors, Etiology, pathogenesis and Complications of Obesity?
2. A 45 Years old male patient with COPD posted for Laparotomy. What are the preoperative complications anticipated and how will u manage?

Short Essay (Answer any Six)

6 X 5 = 30 Marks

3. Physiological changes in pregnancy.
4. Supine hypotension syndrome
5. Preoperative complications and treatment of anemia
6. Define emphysema, describe its etiopathology
7. Anatomical and physiological changes in elderly patient
8. Diabetic ketoacidosis
9. Define and classify hypertension and its complications
10. Treatment of anemia

Short Answers (Answer any Ten)

10 X 3 = 30 Marks

11. Oral hypoglycemia
12. Preoperative complications of diabetes mellitus
13. Treatment of Diabetes ketoacidosis
14. Clinical features of bronchial asthma
15. Clinical features of anemia
16. Cardio vascular and respiratory changes in pregnancy
17. Treatment of Hypoglycemia
18. Beta blockers
19. Risk factors of ischemic heart disease
20. Care taken to obese patient during positioning for spine surgery
21. Insulin
22. Body mass index