

SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH
(A DEEMED TO BE UNIVERSITY)

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

March 2021 Examination

B.Sc. Operation Theatre Technology

Time: 3 Hrs.

Paper – I

[Max. Marks: 100]

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 morphology of iron deficiency anemia. Write the investigations done in case of iron deficiency anemia
2. Define Emphysema. Describe etiopathogenesis, clinical feature and complications of emphysema

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

3. Classify leukemia. Write the differences between leukemia and leukemoid reaction
4. Write causes and clinical features of pleural effusion
5. Describe etiopathogenesis of sickle cell anemia
6. Hemophilia
7. Write the classification of pneumoconiosis

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

8. Write three causes for pulmonary edema
9. What three test used to evaluate bleeding disorder
10. Write three causes for lymphocytosis
11. What is bleeding time
12. Write three clotting factors
13. Asbestos bodies
14. Draw microscopic picture of macrocytic blood picture

Section – B

Applied Microbiology (50 Marks)

Q.P Code : J3096

(Use separate answer booklet for Section-B)

LONG ESSAY

2X10=20 Marks

1. Explain in detail about Nosocomial infections and methods to prevent them.
2. Define & classify sterilization. . Discuss in detail about the principle of autoclaving and its sterilization control.(2+3+5)

SHORT ESSAY (Answer any three)

3X5=15 Marks

3. Function and work flow at CSSD
4. Methods of testing disinfectants.
5. Spaulding's classification
6. HEPA Filters
7. Vancomycin resistant enterococci

SHORT ANSWERS (Answer any five)

5X3= 15 Marks

8. Segregation of biomedical waste
9. Name three virucidal disinfectants
10. Blood Spill management
11. Steps of hand hygiene
12. Name 3 sporicidal agents
13. Name 3 High level disinfectants
14. Precautions to be taken when loading articles into the Hot Air Oven.



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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

2X10=20 Marks

1. Classify local anaesthetic agents. Describe local anaesthetic systemic toxicity and treatment
2. Describe the importance of sterilization & disinfection, advantages & disadvantages of autoclaving

Short Essay (Any ten)

10X5=50 Marks

3. Define disinfection – mention tests for disinfection
4. Nitrous oxide
5. Tourniquet
6. Chemical sterilization
7. Thiopentone sodium
8. Mechanism of action of local anaesthetics
9. Describe laryngoscope
10. Lignocaine
11. Mention types of laryngeal mask airways. How do you sterilize LMA – Neat labelled diagram of LMA
12. Classification of biomedical wastes
13. Indications & contraindications of an airway
14. Dry heat sterilization

Short Answers (Any ten)

10X3=30 Marks

15. Materials sterilized by autoclave
16. ETO gas sterilization
17. What is critical level of contamination? Give examples.
18. Seitz filter
19. Flash sterilization
20. Physical agents of sterilization
21. Sterilization of an endoscope
22. Testing of disinfectants
23. Second gas effect
24. Treatment of malignant hyperthermia
25. Absorbable suture materials
26. Types of laryngeal mask airways



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B.Sc. Allied Health Sciences Second Year (Semester-III)
March 2021 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 × 10 = 10 Marks

1. a. Classify opioids analgesics-----4
- b. Explain mechanism of action, uses and adverse effects of morphine----- 1+3+2

Short essay (Answer any three)

3 × 5 = 15 Marks

2. Write the differences between crystalloids and colloids (5)
3. Mention **five** routes of drug administration with examples (5)
4. Explain mechanism of action, uses and adverse effects of atropine (1+3+1)
5. Explain mechanism of action, uses and contraindications to propranolol (1+2.5+1.5)

Short answer (Answer any five)

5 × 3 = 15 Marks

6. Mention **three** routes of drug excretion with **one** example for each
7. Write **three** uses of prazosin
8. Mention **three** skeletal muscle relaxants and write **three** uses
9. Mention **three** inhalational anaesthetic agents
10. Mention **three** local anaesthetic agents
11. Mention **three** uses of diazepam



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March 2021 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

2X10=20 Marks

1. Define and classify obesity. Describe its risk factors, etiopathogenesis and complications of obesity.
2. Define bronchial asthma. Describe perioperative complications and management.

Short Essay (Any Six)

6X5=30 Marks

3. Define diabetes mellitus. Describe its etiopathogenesis.
4. Define hypertension. Describe its treatment.
5. Perioperative complications and treatment of ischemic heart disease
6. Perioperative complications anticipated in elderly patients and how do you manage.
7. Define emphysema. Describe its pathophysiology
8. Physiological changes in pregnancy
9. Etiopathogenesis of pregnancy induced hypertension
10. Perioperative complications and management of anemia

Short Answers (Any ten)

10X3=30 Marks

11. Oral hypoglycemic agents
12. Complications of diabetes mellitus
13. Treatment of diabetic ketoacidosis
14. Risk factors of hypertension
15. Hypertensive crisis
16. Perioperative complications in elderly
17. Define and classify COPD
18. Risk factors of bronchial asthma
19. Clinical features of PIH
20. Classification of anemia
21. ACE inhibitors
22. Treatment of hypoglycemia

