

B.Sc. Anesthesia & Operation Theatre Technology

Second Year Semester-III

February 2020 Examination

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. Describe etiopathogenesis, clinical features and laboratory investigation of macrocytic anemia
2. Define pneumoconiosis. Describe etiopathogenesis of silicosis

SHORT ESSAY (Answer any three)

3 X 5 = 15 Marks

3. Classify leucocytes. Describe microscopic morphology of leucocytes with a diagram
4. Differences between transudate and exudate
5. Describe classification of hemolytic anemia
6. Write the steps in coagulation cascade
7. Write etiopathogenesis of emphysema

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

8. Write three causes for agranulocytosis
9. What three test used to evaluate bleeding disorder
10. Write three causes for eosinophilia
11. Write three causes for pulmonary congestion
12. Leukemoid reaction
13. Write three causes for pleural effusion
14. List three clinical features of thalassemia

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 methods. Describe in detail the working principle of autoclave with a diagram. List the sterilization controls used in the autoclave. (3+5+2)
2. Discuss briefly the measures taken to control the infections in health care setting.

SHORT ESSAY. (Answer any three)

3 X 5 = 15Marks

3. Enumerate alcohols used in disinfection. Describe the mechanism of action and uses of alcohols.
4. OT sterilization
5. Methicillin Resistant Staphylococcus Aureus. (MRSA)
6. Biomedical waste management
7. Methods of testing disinfectants.

SHORT ANSWERS (Answer any five)

5 X 3 = 15 Marks

8. What is Flash Sterilization?
9. Mention the types of filters
10. Needle Stick injury and its implications
11. How do you disinfect bed pans, thermometers, and cystoscopes
12. Name 3 sporicidal agents
13. Steps of hand washing
14. Surface active agents

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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. Define sterilization. Describe in detail about sterilization by heat
2. Mention intravenous induction agents. Describe in detail about ketamine.

Short Essay (Answer Any ten)

10 X 5 = 50 Marks

3. Isoflurane
4. Describe steam sterilization and it's monitoring
5. Tourniquet
6. Glutaraldehyde
7. Halothane
8. Nitrous oxide cylinder
9. Ropivacaine
10. Spinal Anaesthesia
11. Draw neat a labelled diagram of ET Tube? Mention it's sterilization technique?
12. Thiopentone sodium
13. Autoclave
14. ETO Gas Sterilization

Short Answers (Answer Any ten)

10 X 3 = 30 Marks

15. Sterilization by radiation
16. Methods used in sterilizing critically contaminated equipments
17. Vacuum filters
18. Mention types of disinfection
19. Indicators of sterilization
20. Diffusion hypoxia
21. Sterilization of an endoscope
22. Silk suture materials
23. Classic LMA
24. Biomedical wastes discarded in yellow bag
25. Types of laryngoscopes
26. Treatment of malignant hyperthermia

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

B.Sc. Anesthesia & Operation Theatre Technology
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Time : 2 Hrs.

[Max. Marks : 40]

Paper-III

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 anticholinergic drugs 4
b. Explain mechanism of action, uses and adverse effects of atropine 1+3+2

Short essay (Answer any three)

3 × 5 = 15 Marks

2. Explain mechanism of action, uses and contraindications to propranolol. (1+2.5+1.5)
3. List the advantages and disadvantages of intravenous route. (2.5+2.5)
4. Explain mechanism of action, uses and adverse effects of ketamine. (1.5+2.5+1)
5. Explain mechanism of action, uses and adverse effects of morphine. (1+2.5+1.5)

Short answer (Answer any five)

5 × 3 = 15 Marks

6. Mention **three** uses of aspirin.
7. Explain mechanism of action and write **two** uses of pancuronium.
8. Mention **three** techniques of lignocaine administration with type of surgery done.
9. Mention **three** colloids.
10. Explain the mechanism of action and write **two** uses of diazepam.
11. Mention **three** alpha receptor blockers.

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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 hypertension. How do you diagnose and manage perioperative myocardial ischemia
2. Pregnancy induced hypertension –definition, classification, etiopathogenesis and clinical features

Short Essay (Answer Any Six)

6 X 5 = 30 Marks

3. Treatment of Diabetes mellitus
4. Classification of hypertension
5. Classification of obesity. Describe positioning of obese patient for spine surgery
6. Perioperative complications anticipated and their management in elderly patients
7. Define emphysema. Describe its pathophysiology
8. Etiopathogenesis and risk factors of bronchial asthma
9. Anaesthetic management of elective cesarean section
10. Perioperative complications and management of anemia

Short Answers (Answer Any ten)

10 X 3 = 30 Marks

11. Oral hypoglycemic agents
12. Complications of Diabetes mellitus
13. Causes of perioperative hypertension
14. Risk factors of obesity
15. Clinical features of anemia
16. β -blockers
17. Blue bloaters in COPD
18. Treatment of hypertension
19. Treatment of hypoglycemia
20. Body mass index
21. Treatment of bronchial asthma
22. Long acting insulin.