Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – 17-Jan-2022

Time: Three Hours **Max. Marks: 100 Marks**

Introduction to Anaesthesia Technology (RS-3)

Q.P. CODE: 3268

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

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Define types of gas laws. Mention and explain its practical application in respiratory physiology.
2. Name intravenous agents used for induction of anaesthesia. Explain in detail about Thiopentone.
   OR
   Define hypoxemia. Explain the causes, responses and clinical signs of hypoxemia. Mention the hazards of oxygen therapy.

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Nitrous oxide.
4. Intraoperative Bronchospasm.
5. Regional anaesthetic
   OR
   Maintenance of vaporizers.
6. Sterilization of gastro scope.
7. Evaluation of a patient on oxygen therapy.
8. Non rebreathing valves.
9. Capnography.
10. Prone position.
    OR
    Classification of Mapelson's system.
11. Indications and use of artificial airways.
12. Joseph Priestley.

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Oxygen flush.
14. Types of resuscitation bags.
15. Cylinder storage.
    OR
    Gay Lussac's Law.
16. Mention any six safety mechanism of anaesthesia machines.
17. Informed consent.
18. Colour coding of cylinder.
19. Classify humidifiers.
20. Laryngospasm management.
    OR
    Ceiling mounted pendant.
21. Short note on Bourdon pressure gauge.
22. Suctioning steps prior to extubation.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Allied Health Sciences Degree Examination – 21-Jan-2022

Time: Three Hours **Max. Marks: 100 Marks**

Medicine Relevant to OT Technology (RS-3)
(Anaesthesia Technology and Operation Technology)
Q.P. CODE: 3270

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

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Discuss causes, complications treatment of Hypertension.
2. Common cause of Iron deficiency Anemia, Signs and Symptoms and treatment.
   OR
   Describe physiological changes in the elderly patients.

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Tests for Kidney function.
4. Electroencephalogram.
5. Partial seizures.
   OR
   Management of seizures.
6. Types of strokes.
7. Hemodialysis.
8. Pregnancy induced hypertension.
9. Causes of cirrhosis of liver and complications.
10. Milestones development of an infant.
    OR
    How pediatric airway is different from an adult airway.
11. Glucose tolerance Test.
12. Bronchial asthma causes and clinical features.

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Calculate body mass index for a weight of 75 kg and height of 60 inches.
14. Pulmonary Function Test.
15. List the types of shock.
    OR
    Management of haemoragic shock.
16. Diabetes in pregnancy.
17. Use of phenytoin sodium, Dose, route of administration.
18. Diet management of chronic kidney disease.
19. Tension Pneumothroax and Emergency Treatment.
20. Causes of diabetes ketoacidosis.
    OR
    Lung Function Test.
21. Acute pulmonary edema.
22. Jaundice definition and causes.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Allied Health Sciences) Degree Examination – 14-Jan-2022

Time: 3 Hours **Max. Marks: 50 Marks**

Microbiology – RS-2
Q.P. Code: 1235

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary

(Note : Both QP Codes 1234 and 1235 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Describe the layout of the Central Sterile Services Department with a special note on floor plan for instrument cleaning and sterilizing areas.
2. Define Sterilization. Classify sterilization methods and discuss in detail about the autoclave.
3. Write in detail about blood stream infections.

SHORT ESSAYS (Answer any Three) **3 x 5 = 15 Marks**

4. Gaseous sterilization.
5. Biomedical waste management in hospitals.
6. Air sampling in operation theatre.
7. Ventilator associated pneumonia.
8. Salmonella typhi.

SHORT ANSWERS (Answer any Five) **5 x 3 = 15 Marks**

9. Disinfection of the patient care unit.
10. Vancomycin Resistant Enterococci.
11. Personal Protective equipment.
12. Hot Air Oven.
13. Hospital infection control committee.
14. Catheter associated UTI.
15. Specimen collection for sterility checking of major OT.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Allied Health Sciences) Degree Examination - 17-Jan-2022

Time: Three Hours **Max. Marks: 80 Marks**

PHARMACOLOGY – (RS-2)
Q.P. CODE: 1236

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 the drugs used in bronchial asthma with examples. Write the pharmacology of β 2 adrenergic receptor agonist
2. Classify opioid analgesics with examples. Explain the analgesic effect and mention the therapeutic uses and contraindications of morphine.
3. Classify diuretics with examples. Explain the site and mechanism of action and mention the therapeutic uses and adverse effects of thiazide diuretics.

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

4. Common salient features of aminoglycoside antibiotics.
5. Digoxin.
6. Fibrinolytics.
7. Intravenous anesthetics.
8. Classification of antiarrhythmic drugs with examples.
9. Drug antagonism.
10. Uses and adverse effects of glucocorticoids.
11. Neuromuscular blocking agents and their uses.

SHORT ANSWERS (Answer any Ten) **10 x 3 = 30 Marks**

12. Intravenous fluids.
13. Name two Antitussives and one mucolytic agent.
14. Write one therapeutic use and two adverse effects of Isoniazid.
15. Three clinical uses for Benzodiazepines.
16. Name three drugs used in anaphylactic shock.
17. Mention three angiotensin converting enzyme inhibitors and their three adverse effects.
18. First pass metabolism.
19. Cardioplegic drugs.
20. Name two CNS stimulants and mention one therapeutic use.
21. Mention three drugs used in dyslipidemia.
22. Name two alpha adrenergic receptors blockers and mention one therapeutic use.
23. Mention three uses for aspirin.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – 19-Jan-2022

Time: Three Hours **Max. Marks: 100 Marks**

INTRODUCTION TO ANAESTHESIA TECHNOLOGY (RS2)
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. Mention various anesthetic preparations for emergency surgery. Describe emergency intubation in detail.
2. Define Hypoxemia, causes of Hypoxemia and clinical signs. Describe oxygen delivery system.
3. Principle of Capnography, types of Capnogram and Capnograph in at least 5 clinical situation.

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

4. Brief history of inhalational agent
5. Cylinder storage
6. Diameter index safety system (DISS)
7. Pressure relief valve
8. Flow meter assembly in anesthesia machine
9. Ten golden rules of anaesthesia
10. Components of circle breathing system
11. Facemask types and principle
12. Venturi principle and important application in anesthesia
13. RAE tubes
14. Define Boyle's law and Charles law. Mention clinical applications of both.
15. Precision and Non-Precision vaporizers
16. Jackson Rees circuit
17. Color coding

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

18. Avogadro's hypothesis
19. Components of scavenging system
20. Soda lime indicator
21. Clinical formula for CO_2 abdorption by soda lime
22. Limitations of pinidex system
23. Dead space and clinical importance
24. Oxygen failure safety devices
25. Define latent heat of vaporization and specific heat.
26. What is scavenging system?
27. Unidirectional (Check) valve
28. Disadvantages of pulse oxymetry
29. Magills contribution to anesthesia equipment

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – 21-Jan-2022

Time: Three Hours **Max. Marks: 80 Marks**

MEDICINE RELEVANT TO ANAESTHESIA TECHNOLOGY (RS2)
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. Describe the causes of Obesity. What are the Anesthetic challenges of an Obese patient in the OT?
2. Intraoperative Arrhythmias, complications and management.
3. Systolic Hypertension. Causes and Management.

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

4. Deep Vein Thrombosis
5. Pregnancy lnduced Hypertension
6. Paediatric anaesthesia
7. Status Epilepticus
8. Myocardial lnfarction
9. Chronic Bronchitis
10. Iron Defiency
11. Name Liver Function Tests. (List ONLY)
12. Difficult lntubation
13. Co morbidities in the Elderly Patient.

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

14. Name any 3 Anti Hypertensive drugs
15. Bronchodilators
16. Defibrillation
17. Uses of Straight Blade Laryngoscope
18. Pulse oximetry
19. Hypothermia
20. Adrenaline
21. CVP
22. APGAR Score
23. Amiodarone
24. Emergency drugs
25. Laryngeal mask airways

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Operation Theatre Technology Degree Examination – 19-Jan-2022

Time: Three Hours **Max. Marks: 100 Marks**

INTRODUCTION TO OPERATION THEATRE TECHNOLOGY (RS2)
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. Blood transfusion and its complications.
2. Discuss about the general anaesthetic agents. Explain any one.
3. Discuss the principles of draping and uses in operation theatre.

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

4. Principles and uses of hot air oven.
5. Crystalloids.
6. Sterilization of HIV patient instruments.
7. Isoflurane.
8. Monitoring of intraoperative patient.
9. Morphine.
10. Chemical sterilization.
11. Long acting muscle relaxant.
12. Pulse oximeter.
13. Waste disposal.
14. Lead apron.
15 Behaviour of an assistant during surgery.
16. Universal precautions.
17. Types and uses of spong holding forceps.

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

18. Xylocaine.
19. UV sterilization.
20. Betadine.
21. Vicryl.
22. Difference between toothed and non-toothed forceps.
23. HEPA filter.
24. Thoracotomy positions.
25. Uses of propofol.
26. Uses of CT scan.
27. Cataract.
28. ECG.
29. Parts of needle holders.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Operation Theatre Technology Degree Examination – 21-Jan-2022

Time: Three Hours **Max. Marks: 80 Marks**

MEDICINE RELEVANT TO OPERATION THEATRE TECHNOLOGY (RS2)
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. Discuss the disorders of pregnancy, investigations, clinical features and management associated with preclamsia.
2. Discuss clinical feature, investigations and management of myocardial infaction.
3. Discuss etiology, clinical features, investigation and management of bronchial asthma.

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

4. Type one diabetes mellitus.
5. Anesthesia problem in elderly patients.
6. Management of ARDS.
7. Write down all the complications of obesity.
8. What is Mannitol? Name all the conditions where it is used? What are its side effects?
9. How does theophylline act? What are its uses? Enumerate its toxic symptoms.
10. Which gland produces oxytocin? How is useful in initiating labour? What are its side effects?
11. What is anaphylaxis? Name the drugs that can produce such a reaction.
12. Name any five drugs consumed by pregnant women and illustrate their effects on fetus.
13. What is parkinsonism? Describe the drug used in Parkinsonism.

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

14. Three complications of hypertension.
15 Angina pectoris.
16. Cyanosis.
17. Causes of Iron deficiency anaemia.
18. Causes of proteinuria.
19. Three causes of Haematuria.
20. Clinical signs of Uremia.
21. Proton pump inhibitors.
22. Pneumothorax.
23. Three drugs used in management of diabetes.
24. Risk factors for stroke.
25. Causes of hypotension.

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Rajiv Gandhi University of Health Sciences, Karnataka

Second Year B.Sc. Allied Health Sciences Degree Examination - 14-Jan-2022

Time: Three Hours **Max. Marks: 50 Marks**

APPLIED PATHOLOGY (RS-3)

(Cardiac Care Technology and Perfusion Technology)

Q.P. CODE: 3266

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary

(Note: Both QP Codes 3266 and 3267 are to be answered within total duration of 3 hours)

LONG ESSAYS **1 x 10 = 10 Marks**

1. Define and list the types of Hypertension. Describe the pathogenesis and effects of Hypertension

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SHORT ESSAYS (Question No. 4 choice) **5 x 5 = 25 Marks**

2. Define and classify Haemolytic anaemia.
3. Briefly explain the various laboratory tests used to diagnose bleeding disorders.
4. Explain briefly the pathogenesis, morphology and clinical significance of Atherosclerosis.

   OR

   Describe estimation of Hemoglobin and its normal values.
5. Describe the various causes and diagnosis of pleural effusion.
6. Define CML. Describe peripheral blood smear findings in Chronic Myeloid Leukemia.

SHORT ANSWER (Question No.9 choice) **5 x 3 = 15 Marks**

7. Pulmonary edema.
8. Mention three causes for obstructive uropathy.
9. Mention three types of Anemia.

   O

   R

   Mention three types of Acute leukemias.
10. Bronchial asthma.
11. Types of cardiomyopathy.

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Rajiv Gandhi University of Health Sciences, Karnataka

Second Year B.Sc. Allied Health Sciences Degree Examination - 14-Jan-2022

Time: Three Hours **Max. Marks: 50 Marks**

APPLIED MICROBIOLOGY (RS-3)
(Cardiac Care Technology and Perfusion Technology)
Q.P. CODE: 3267

Your answers should be specific to the questions asked.
Draw neat labeled diagrams wherever necessary
(Note: Both QP Codes 3266 and 3267 are to be answered within total duration of 3 hours)

LONG ESSAYS **1 x 10 = 10 Marks**

1. Define sterilization. Describe in detail gaseous sterilization. Add a note on sterilization controls.

SHORT ESSAYS (Question No. 4 choice) **5 x 5 = 25 Marks**

2. MIRSA.
3. Laboratory diagnosis of Salmonella typhi.
4. Infection control measures in the intensive care units.
   OR
   Ventilator associated pneumonia.
5. Hand washing technique.
6. Hepatitis C virus morphology and mode of transmission.

SHORT ANSWER (Question No.9 choice) **5 x 3 = 15 Marks**

7. Haemophilus influenzae.
8. Ebola virus.
9. Exposure to blood and body fluids and the preventive measures.
   OR
   Role of aldehydes as disinfectants.
10. Name three high level disinfectants.
11. Name three infections transmitted by respiratory route.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – 17-Jan-2022

Time: Three Hours **Max. Marks: 100 Mark**

Introduction to Anaesthesia Technology (RS-3)

Q.P. CODE: 3268

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

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Define types of gas laws. Mention and explain its practical application in respiratory physiology.
2. Name intravenous agents used for induction of anaesthesia. Explain in detail about Thiopentone.
   OR
   Define hypoxemia. Explain the causes, responses and clinical signs of hypoxemia. Mention the hazards of oxygen therapy.

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Nitrous oxide.
4. Intraoperative Bronchospasm.
5. Regional anaesthetic
   OR
   Maintenance of vaporizers.
6. Sterilization of gastro scope.
7. Evaluation of a patient on oxygen therapy.
8. Non rebreathing valves.
9. Capnography.
10. Prone position.
    OR
    Classification of Mapelson's system.
11. Indications and use of artificial airways.
12. Joseph Priestley.

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Oxygen flush.
14. Types of resuscitation bags.
15. Cylinder storage.
    OR
    Gay Lussac's Law.
16. Mention any six safety mechanism of anaesthesia machines.
17. Informed consent.
18. Colour coding of cylinder.
19. Classify humidifiers.
20. Laryngospasm management.
    OR
    Ceiling mounted pendant.
21. Short note on Bourdon pressure gauge.
22. Suctioning steps prior to extubation.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Allied Health Sciences Degree Examination – 21-Jan-2022

Time: Three Hours **Max. Marks: 100 Marks**

Medicine Relevant to OT Technology (RS-3)
(Anaesthesia Technology and Operation Technology)
Q.P. CODE: 3270

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

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Discuss causes, complications treatment of Hypertension.
2. Common cause of Iron deficiency Anemia, Signs and Symptoms and treatment.
   OR
   Describe physiological changes in the elderly patients.

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Tests for Kidney function.
4. Electroencephalogram.
5. Partial seizures.
   OR
   Management of seizures.
6. Types of strokes.
7. Hemodialysis.
8. Pregnancy induced hypertension.
9. Causes of cirrhosis of liver and complications.
10. Milestones development of an infant.
    OR
    How pediatric airway is different from an adult airway.
11. Glucose tolerance Test.
12. Bronchial asthma causes and clinical features.

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Calculate body mass index for a weight of 75 kg and height of 60 inches.
14. Pulmonary Function Test.
15. List the types of shock.
    OR
    Management of haemoragic shock.
16. Diabetes in pregnancy.
17. Use of phenytoin sodium, Dose, route of administration.
18. Diet management of chronic kidney disease.
19. Tension Pneumothroax and Emergency Treatment.
20. Causes of diabetes ketoacidosis.
    OR
    Propofol
21. Acute pulmonary edema.
22. Jaundice definition and causes.

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Rajiv Gandhi University of Health Sciences, Karnataka

Medicine Relevant to OT Technology (RS-3)
(Anaesthesia Technology and Operation Technology)
Q.P. CODE: 3270
CORRECTIONS

Read Question No. 20 as follows:

20. Causes of diabetes ketoacidosis.
OR
Propofol

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II Year B.Sc. Allied Health Sciences Degree Examination – 21-Jan-2022

Medicine Relevant to OT Technology (RS-3)
(Anaesthesia Technology and Operation Technology)
Q.P. CODE: 3270
CORRECTIONS

Read Question No. 20 as follows:

20. Causes of diabetes ketoacidosis.
OR
Propofol

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Allied Health Sciences Degree Examination – 14-Jan-2022

Time: Three Hours **Max. Marks: 50 Marks**

Applied Pathology – (Sec A) - (RS-3)
(Anaesthesia Technology and Operation Technology)
Q.P. CODE: 3404

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

(Note: Both QP Codes 3404 and 3405 are to be answered within total duration of 3 hours)

LONG ESSAYS **1 x 10 = 10 Marks**

1. Define ischemic heart disease. Describe the pathophysiology and complications of myocardial infarction.

SHORT ESSAYS (Question No. 4 choice) **5 x 5 = 25 Marks**

2. Etiopathogenesis and complications of chronic pyelonephritis.
3. List the difference between obstructive versus Restrictive pulmonary diseases.
4. Laboratory tests to diagnose bleeding disorders.
   OR
   Describe the types and causes of cardiomyopathy.
5. Enumerate the cause and clinical consequences of Hypertension.
6. Laboratory findings of Iron Deficiency Anemia.

SHORT ANSWER (Question No.9 choice) **5 x 3 = 15 Marks**

7. List three causes of Eosinophilia.
8. Mention three causes of left side heart failure.
9. Three causes of End stage of Renal disease.
   OR
   List three causes of pulmonary edema.
10. Classify anemia morphologically
11. Mention three causes of pleural effusion.

II Year B.Sc. Allied Health Sciences Degree Examination – 14-Jan-2022

Applied Pathology – (Sec A) - (RS-3)
(Anaesthesia Technology and Operation Technology)
Q.P. CODE: 3404

CORRECTIONS

Replace Question No.10 as follows:

10. Classify anemia morphologically

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Allied Health Sciences Degree Examination – 14-Jan-2022

Time: Three Hours **Max. Marks: 50 Marks**

Applied Microbiology – (Sec B) (RS-3)
(Anaesthesia Technology and Operation Technology)
Q.P. CODE: 3405

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

(Note: Both QP Codes 3404 and 3405 are to be answered within total duration of 3 hours)

LONG ESSAYS **1 x 10 = 10 Marks**

1. Define Sterilization. Classify the methods of sterilization. Discuss gaseous sterilization.

SHORT ESSAYS (Question No. 4 choice) **5 x 5 = 25 Marks**

2. Vancomycin Resistant Enterococci – pathogenicity and lab diagnosis.
3. Infection control measures for ICU's.
4. Air sampling techniques.
   OR
   Enumerate organisms causing Ventilator Associated Pneumonia. Discuss diagnosis and its prevention.
5. Lab diagnosis of Hepatitis B Virus infection.
6. Discuss the management and prevention of Catheter Related Blood Stream Infection.

SHORT ANSWER (Question No.9 choice) **5 x 3 = 15 Marks**

7. Prophylaxis of Enteric Fever.
8. Name three multidrug resistant organisms.
9. Name any three organisms transmitted by oro-fecal route.
   OR
   Name three bacteria causing catheter associated urinary tract infection.
10. Clinical manifestation of infection caused by clostridium difficle.
11. Name three infections spread via contact.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Allied Health Sciences Degree Examination – 19-Jan-2022

Time: Three Hours **Max. Marks: 100 Marks**

APPLIED PHARMACOLOGY (RS-3)
(Anaesthesia Technology and Operation Technology)
Q.P. CODE: 3406

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

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Classify antihypertensive drugs. Discuss the pharmacological actions, uses and adverse effects of beta blockers.
2. Classify NSAIDS. Discuss the pharmacological actions, adverse reactions and uses of aspirin.
   OR
   Classify general anaesthetics. Write a note on various pre anaesthetic medications.

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Anti anginal drugs.
4. Heparin.
5. Diazepam.
   OR
   Morphine.
6. Succinyl choline.
7. Name any four antihistamines and mention uses.
8. Broad spectrum antibiotics.
9. Digoxin.
10. Nitroglycerin.
    OR
    Adrenaline.
11. Drugs used in heart failure.
12. Classify diuretics with examples.

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Drugs used in hypertensive emergency.
14. Potassium sparing diuretics.
15. Thrombolytics.
    OR
    Anti fibrinolytics.
16. Name any two corticosteroids and mention two uses.
17. Statins.
18. Name any three antiarrhythmic drugs.
19. Mucolytics.
20. Two uses and two side effects of tetracyclines.
    OR
    Two uses and two side effects of aminoglycoside antibiotics.
21. Medical uses of alcohols.
22. Name three drugs used in medical emergencies.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Operation Theatre Technology Degree Examination – 17-Jan-2022

Time: Three Hours **Max. Marks: 100 Mark**

Introduction to OT Technology (RS-3)

Q.P. CODE: 3407

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Enlist the blood components and describe in detail about compliance of blood transfusion.
2. Discuss various methods of sterilization.
   OR
   What is shock? Types of shock and explain its management.

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. W.T.G Morton.
4. Pin index system.
5. Flow meter.
   OR
   Epidural set.
6. Entonox and its uses.
7. Role of assistant during surgery.
8. Jack knife position.
9. Nitrous oxide.
10. Closed method of gloving.
    OR
    Disposal of radioactive products.
11. Fumigation of OT.
12. Types and uses of cautery.

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Head light.
14. Laryngoscope.
15. Complications of local anaesthetics.
    OR
    Types of regional anaesthesia.
16. Chemical sterilization.
17. What does operating suite consist of?
18. Use of defibrillator.
19. Name any three natural absorbable sutures.
20. Use of Foley's self retaining catheter.
    OR
    Bacteriostatic agents.
21. Name the types of regional anaesthesia.
22. Lignocaine.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Allied Health Sciences) Degree Examination – 18-Jul-2022

Time: 3 Hours **Max. Marks: 50 Marks**

Applied Pathology – (RS-2)

Q.P. Code: 1234

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary

(Note: Both QP Codes 1234 and 1235 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Name valvular heart diseases and describe briefly its etiopathogenesis. Add a note on complications associated with Valvular heart diseases.
2. Define anemia. Classify hemolytic anemias with note on their diagnosis.
3. Define end Stage Renal disease and enumerate the Causes. Briefly discuss role of dialysis in the management.

SHORT ESSAYS (Answer any Three) **3 x 5 = 15 Marks**

4. Acute Glomerulonephritis.
5. Laboratory diagnosis of pleural effusion.
6. Laboratory diagnosis of bleeding disorders.
7. Broncheictasis.
8. Risk factors of atherosclerosis

SHORT ANSWERS (Answer any Five) **5 x 3 = 15 Marks**

9. Define Cardiomyopathy.
10. Define neutrophilia and mention any two causes of neutrophilia.
11. Gross morphology of chronic pyelonephritis.
12. Complications of aneurysms.
13. Types of Hypertension
14. Types of Chronic obstructive Pulmonary Disease.
15. Laboratory findings in Polycythemia.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Allied Health Sciences) Degree Examination - 20-Jul-2022

Time: Three Hours **Max. Marks: 80 Marks**

PHARMACOLOGY – (RS-2)

Q.P. CODE: 1236

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. Enumerate various routes of drug administration with suitable examples. Mention the advantages and disadvantages of oral route.
2. Classify Antihypertensives. Write the mechanisms of action, therapeutic uses and adverse effects of angiotensin converting enzyme inhibitors (ACE –I).
3. Classify penicillins. Explain the mechanism of action, therapeutic uses, and adverse effects of amoxicillin.

SHORT ESSAYS (Answer any Six) **6 x 5 = 30 Marks**

4. Therapeutic uses and side effects of Thiazide diuretics.
5. Importance side effects of phenytoin sodium.
6. Transdermal drug delivery system.
7. Complications of spinal anesthesia.
8. Therapeutic uses of beta blockers.
9. Side effects of Glucorticoids.
10. Cardioplegic solutions.
11. Pharmacological management in shock.

SHORT ANSWERS (Answer any Ten) **10 x 3 = 30 Marks**

12. List three common toxicities of aminoglycosides.
13. Name three commonly used Mucolytics.
14. Name three Antihistamines.
15. Name three uses of Adrenaline.
16. Mention three drugs used in status epilepticus.
17. Rational for the use of Atropine in organ phosphorous poisoning.
18. Name two antiemetics. Write two uses.
19. Name three lipid lowering drugs.
20. Mention three intravenous anesthetic agents.
21. Name three centrally acting skeletal muscle relaxants.
22. Name three antiseptics and disinfectants.

2 Name three antiviral drugs.
3

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. (Allied Health Sciences) Degree Examination – 18-Jul-2022

Time: 3 Hours **Max. Marks: 50 Marks**

Microbiology – RS-2

Q.P. Code : 1235

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

(Note : Both QP Codes 1234 and 1235 are to be answered within total duration of 3 hours)

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Define Nosocomial infections. Describe in detail etiology and diagnosis of catheter related UTI. What measures would you employ to prevent them?
2. What is microbiological surveillance? What surveillance would you employ in the Operation theater to prevent infections?
3. Define sterilization. List the gases that can be used for sterilization. What are the controls that can be used to check the efficacy of sterilization?

SHORT ESSAYS (Answer any Three) **3 x 5 = 15 Marks**

4. Classify with suitable examples disinfectants used in hospitals.
5. Antibiotic susceptibility testing
6. Salmonella gastroenteritis
7. Care of ventilated patients.
8. Autoclave

SHORT ANSWERS (Answer any Five) **5 x 3 = 15 Marks**

9. MRSA
10. Hepatitis C virus
11. Screening of blood and blood products
12. Use of Disposable needles in health care
13. Samples to be sent in cases of suspected catheter related Blood stream infections.
14. Steps of Hand washing
15. 3 agents causing UTI in hospitalized patients

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – 22-Jul-2022

Time: Three Hours **Max. Marks: 100 Mark**

INTRODUCTION TO ANAESTHESIA TECHNOLOGY
(REVISED SCHEME-2)
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. Classify Breathing Systems. Explain briefly Bain Circuit.
2. Intra-Operative patient Monitoring.
3. Larygoscopy and Intubation. Explain the complications of intubation.

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

4. WTG MORTON.
5. Clinical sings of Hypoxia.
6. Care of patient with tracheostomy tube.
7. Gas pipeline system with colour coding.
8. Safety features of Anaesthesia Machine.
9. Describe any two types of face mask and mention advantages and disadvantages of each.
10. Oxygen failure Alarm.
11. Sterilization of Anesthesia Equipments.
12. Compressed gas Cylinders used in Anaesthesia.
13. Patient preparation for Anaesthesia.
14. Capnography.
15 Spinal Anaesthesia.
16. Pin Index System.
17. Enumerate gas laws.

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

18. Soda lime canister.
19. Entonox.
20. Hazards of manual resuscitators.
21. Suction Apparatus.
22. Mention 5 golden rules of anaesthesia.
23. Venturi Principle.
24. Pre-historic era.
25. Formaldehyde.
26. Thorpe’s tube.
27. Complication of endotracheal Intubation.
28. I.V Cannulation.
29. Ether.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Operation Theatre Technology Degree Examination – 22-Jul-2022

Time: Three Hours **Max. Marks: 100 Marks**

INTRODUCTION TO OPERATION THEATRE TECHNOLOGY (RS2)
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. Counting of instruments in operating room.
2. Explain principles of draping the patient in operation theatre.
3. Classify sterilization methods and discuss about the indicators to verify sterilization process.

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

4. Describe Extubation, drugs given and complications seen during the procedure.
5. What are the possible complications of spinal anaesthesia? How are they prevented?
6. Surgical diathermy.
7. Theatre clothing.
8. Various measures taken to reduce the infections in operating room.
9. Urinary catheterization.
10. Ambu bag.
11. Mention various injuries associated with positioning of the patient for surgery.
12. Explain stages of general anaesthesia and complications of GA.
13. Explain in detail about moist heat sterilization with its advantages and disadvantages.
14. Describe the general functions of operation theatre.
15 Mention the personal protective equipment and describe the role in infection control.
16. ETO sterilization.
17. Describe about postoperative care of the patient.

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

18. Name four inhalational anaesthetic agents.
19. Differentiate between sterilization and disinfection.
20. Contraindications for spinal anaesthesia.
21. What are the biological indicators of effective sterilization?
22. Describe about the special care for sharp instruments.
23. How will you sterilize syringes and glassware?
24. Flash sterilization.
25. Define pasteurization.
26. Classify disinfectants.
27. Any three preventive measures to avoid Nosocomial infection.
28. Types of spinal needles with diagram.
29. Needle holder.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – 22-Jul-2022

Time: Three Hours **Max. Marks: 100 Marks**

Introduction to Anaesthesia Technology (RS-3)

Q.P. CODE: 3268

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

LONG ESSAYS (Question No.2 Choice) **2 x 10 = 20 Marks**

1. Discuss in detail about medical gas pipeline system and station outlet. Write a not eon Diameter Index safety system.
2. Explain areas of care for a patient with a tracheostomy tube. What are the anticipated complications?
   OR
   Draw a diagram of an oral airway. Mention various sizes available. Describe in detail the preparations needed for an emergency intubation.

SHORT ESSAYS (Question No.5 & 10 choice) **10 x 5 = 50 Marks**

3. Reservoir bag.
4. Resistance and its significance.
5. Unidirectional valves.
   OR
   Double lumen tube.
6. Local anaesthesia.
7. Principle of laminar air flow.
8. Hand scrubbing.
9. Hydrogen peroxide and its applications.
10. Define Boyle's law and Charles law.
    OR
    Master slave mechanism.
11. Laryngeal mask airway.
12. Ether.

SHORT ANSWER (Question No. 15 & 20 choice) **10 x 3 = 30 Marks**

13. Venturi principle.
14. Pulse oximetry.
15. Sodabicarb.
    OR
    Combitube.
16. Limitations and disadvantages of pulse oximetry.
17. Alarms in anaesthesia machine.
18. Hypercarbia.
19. What is dead space and shunt in relation to respiratory physiology?
20. Endotracheal tube.
    OR
    What is tare weight of cylinders? Define filling density ratio.
21. Low pressure system.
22. Nasal airways.

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Operation Theatre Technology Degree Examination – 25-Jul-2022

Time: Three Hours **Max. Marks: 80 Marks**

MEDICINE RELEVANT TO OPERATION THEATRE TECHNOLOGY (RS2)

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. Discuss the indications and complication of blood transfusions.
2. What are the causes of Chronic Renal failure? Write a note an renal transplantation.
3. What is shock? Enumerate the various causes of shock. Write in detail the management of shock.

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

4. Cardiac Arrest and CPR.
5. Cor pulmonale.
6. Hemo dialysis.
7. Total parenteral nutrition.
8. Grand mal epilepsy.
9. Risk factors of coronary artery disease.
10. Write down the complication of obesity.
11. How does theophylline act? What are its uses? Enumerate its Toxic symptoms.
12. What is anaphylaxis? Name the drugs that can produce such a reaction.
13. What is congestive cardiac failure (CCF)? Name all the causes that produce CCF.

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

14. Three complications of hypertension.
15 Angina pectoris.
16. Cyanosis.
17. Causes of megaloblastic anaemia.
18. Three clinical features of chronic renal failure.
19. Three causes of Haematuria.
20. Clinical signs of uremia.
21. Proton pump inhibitors.
22. Pneumothorax.
23. Signs of cardiac failure.
24. Risk factors for Stroke.
25. Causes of hypotension.

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Anaesthesia Technology Degree Examination – 25-Jul-2022

Time: Three Hours **Max. Marks: 80 Marks**

MEDICINE RELEVANT TO ANAESTHESIA TECHNOLOGY (RS-2)

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. Define and classify Chronic Obstructive Pulmonary Disease (COPD)
2. Define obesity. Describe the Perioperative management of obese patient scheduled for elective surgery
3. What is the etiology and management of chronic renal failure?

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

4. Types of epilepsy
5. Physiological changes in elderly patient
6. Obesity
7. Oral hypoglycemic agents
8. What is trachea esophageal fistula? Describe its management
9. Pulmonary function tests
10. Define shock and enumerate its causes
11. Antihypertensive drugs
12. Complications of blood transfusion
13. Fluid management in paediatric patients

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

14. Cor pulmonale
15. Anemia of pregnancy
16. Phenytoin sodium
17. Respiratory changes in pregnancy
18. Bronchodilator drugs
19. Mention three differences between paediatric and adult airway
20. Universal precautions
21. Diabetic ketoacidosis
22. APGAR score
23. ECG changes in myocardial infarction
24. Colloids
25. Oliguria and Anuria

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