Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Emergency & Trauma Care Technology Degree Examination – 08-May-2025

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

EMERGENCY DEPARTMENT EQUIPMENT

Q.P. CODE: 3365

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

LONG ESSAYS **2 x 10 = 20 Marks**

1. Describe the functioning of a multi parameter monitor and its maintenance
2. Write a labelled diagram of crash cart. What are the equipments and drugs kept on a crash cart?

SHORT ESSAYS **10 x 5 = 50 Marks**

3. Supraglottic airway devices
4. Anaesthesia work station – usage and maintenance
5. Non invasive ventilation
6. Write a short note on point of care investigations in emergency
7. Write a labelled diagram of normal ECG and describe the waveforms
8. Splints and immobilization devices
9. Write a short note on wound management in emergency
10. AMBU Bag – draw and label its parts, list out indications for its usage
11. Sizes of ET tubes and explain its usage
12. Write a short note on medical gas supply

SHORT ANSWER **10 x 3 = 30 Marks**

13. C-collar indications
14. Automated external defibrillator
15. List 6 indications for usage of a ventilator
16. Complete blood count in emergency
17. Interpretation of oxygen saturation
18. List three indications for doing an ABG
19. Normal range of capillary blood glucose, interpretation of abnormality
20. Types of bandaging
21. **Oropharyngeal airway**
22. FAST scan in a trauma victim

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Emergency and Trauma Care Technology Degree Examination – 13-May-2025

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

EMERGENCY DEPARTMENT PHARMACOLOGY

Q.P. CODE: 3366

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

LONG ESSAYS **2 x 10 = 20 Marks**

1. **Write the pharmacology of adrenaline as an emergency drug in terms of its mechanism of action, dose, route of administration, uses, adverse effects and contraindications**
2. **Write a note on medication errors and strategies e to prevent it**

SHORT ESSAYS **10 x 5 = 50 Marks**

3. Naloxone – Mechanism of action, emergency use, dose, route of administration and adverse effects
4. Sodium nitroprusside - Mechanism of action, emergency use, dose, route of administration and adverse effects
5. Advantages and disadvantages of intravenous and intramuscular routes
6. Calculate the percentage of mannitol present in 60 ml of 20% mannitol. (20% of mannitol is 20 gm in 100 ml)
7. Succinylcholine – Mechanism of action, uses, dose, route of administration and adverse effects
8. **Frusemide (furosemide) mechanisms of action, emergency use, dose route of administration and adverse effects**
9. Write in brief about anti-snake venom
10. What is the rationale of combining Adrenaline with local anaesthetic (e.g. Lignocaine)
11. Inhalational steroids – Advantages, Disadvantages and Precautions
12. Explain emergency management of status epilepticus in the form of flowchart presentation

SHORT ANSWER **10 x 3 = 30 Marks**

13. Write antagonist for heparin, atropine and iron toxicity
14. Three uses of pantoprazole
15. Three contrainidcations of morphine
16. **Transdermal patch -3 advantages and 3 disadvantages with one example**
17. Name any three vasopressors
18. Name any three non-benzodiazepines
19. **Write any three differences between barbiturates and benzodiazepines**
20. Name any three inhalational anaesthetics
21. Low dose aspirin
22. Rule of three in dose calculation

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Emergency & Trauma Care Technology Degree Examination – 23-May-2025

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

INTRODUCTION TO EMERGENCY MEDICAL SERVICES

Q.P. CODE: 3364

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

LONG ESSAYS **2 x 10 = 20 Marks**

1. **Describe the role of emergency medical services in pre-hospital scenario. Write a short note on ambulance services**
2. Principles of resuscitation. Explain ACLS algorithm

SHORT ESSAYS **10 x 5 = 50 Marks**

3. What is the role of AED's outside the hospital?
4. Secondary survey
5. Types of ambulances
6. **Write a note on hemorrhage control techniques**
7. Spinal immobilization
8. Sudden cardiac death
9. Police intimation
10. **Uses of stomach wash in poisoned victims**
11. Consent
12. Documentation in EMS

SHORT ANSWER **10 x 3 = 30 Marks**

13. Code blue
14. Mass casualties
15. Vital signs and normal values
16. Define Triage
17. Types of stroke
18. Radiation hazards
19. GCS
20. Log-roll
21. Areas of auscultation
22. Confidentiality

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Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Emergency and Trauma Care Technology Degree Examination – 28-Oct-2025

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

Introduction to Emergency Medical Services

Q.P. CODE: 3364

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

LONG ESSAYS **2 x 10 = 20 Marks**

1. **Explain in detail about the structure and organization of a hospital and its departments.**
2. What are the different types of ambulance services and their significance?

SHORT ESSAYS **10 x 5 = 50 Marks**

3. What is a medicolegal case (MLC)? Name eight examples of MLCs.
4. What is mass casuality? How do you manage mass causalities in EMS?
5. Guidelines for the preservation of Medical-Legal Evidence.
6. What is consent? What are the types of consent?
7. What is the importance of EMS documentation?
8. What are the steps to take in a Medical Emergency?
9. Advanced cardiac life support protocol.
10. **Write a note on triage used in ED and disasters**
11. Write a short essay on pre-hospital assessment.
12. **How do you transport a injured patient in a mass casualty**

SHORT ANSWER **10 x 3 = 30 Marks**

13. What is a pre-hospital environment?
14. Basic life support protocol.
15. Air ambulance.
16. **Demobilization of patients in mass casualty incident**
17. Why is pre-hospital care necessary?
18. **Write the steps of using AED**
19. What are the steps in the trauma chain of survival?
20. Name three causes of cardiac arrest.
21. **Contraindication to head tilt and chin lift maneuver**
22. What do the color green and black indicate in triage?

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Sc. Emergency & Trauma Care Technology Degree Examination – 30-Oct-2025

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

EMERGENCY DEPARTMENT EQUIPMENT

Q.P. CODE: 3365

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

LONG ESSAYS **2 x 10 = 20 Marks**

1. Describe difficult airway management. Write a short note on supraglottic airway device
2. Write in detail regarding anaesthesia work station setup and its uses

SHORT ESSAYS **10 x 5 = 50 Marks**

3. Ryles tube
4. Ventilators
5. Crash cart
6. **Different between AED and defibrillator**
7. Indications and contraindications of stomach wash
8. Trolleys and stretchers
9. Capillary blood glucose
10. **Write a note on E-FAST**
11. Bladder catheterization
12. **Write a note on LMA**

SHORT ANSWER **10 x 3 = 30 Marks**

13. ECG
14. Thomas splint
15. IV cannula and its colour
16. **Oropharyngeal Airway (OPA)**
17. AMBU bag
18. **Pulse Oximeter**
19. Expand NIV and NIBP
20. Spine board
21. Colour coding of medical gases
22. Two indications of ryles tube