

[LD 0212]

AUGUST 2013

Sub. Code: 1021

**B.SC. ACCIDENT AND EMERGENCY CARE TECHNOLOGY
THIRD YEAR**

PAPER I – EMERGENCY MEDICINE (EM) AND (EMS) - II

Q.P. Code: 801021

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

I. Elaborate on:

(3 x 10 = 30)

1. a) Define the term Poison.
b) Outline the clinical features and the general supportive management of Organo Phosphorus Compound Poisoning.
c) What parameters you monitor in such patients and mention the indication of Ventilatory Therapy in this Poisoning.
2. a) What is Acute Myocardial Infarction?
b) Discuss the clinical features and ECG changes in Myocardial Infarction.
c) Mention the important steps in immediate management.
3. a) What is Acute Renal Failure?
b) What are the common causes of Renal Failure presenting in Emergency Room (ER)?
c) What are the clinical features and the indications for Dialysis in Acute Renal Failure?

II. Write notes on:

(8 x 5 = 40)

1. Define Anaphylaxis, Immediate treatment for Anaphylactic reaction?
2. Elaborate Bronchial Hygiene Therapy
3. Treatment for Esophageal Varices.
4. Prophylaxis for DVT
5. Digoxin action, clinical sign of Digoxin Toxicity and treatment for Digoxin Toxicity.
6. Complication of Viper Bite
7. Define Triage and How to Triage the Disaster Victim?
8. Define Asphyxia Neonatorum and causes and treatment of Asphyxia Neonatorum

III. Short Answers on:

(10 x 3 = 30)

1. Treatment for Hypernatremia
2. Different modes of Mechanical Ventilator
3. Causes of Respiratory Acidosis
4. Describe Tonic-Clonic Seizure
5. Side effects of Atropine
6. Mode of transmission for Hepatitis –B
7. Notify anyone Poisonous plants and their adverse effects
8. Causes of Post Partum Hemorrhage
9. Define Meconium Aspiration Syndrome (MAS)
10. Prophylaxis for Hospital-Acquired Pneumonia (HAP)

[LE 0212]

FEBRUARY 2014

Sub. Code: 1021

**B.SC. ACCIDENT AND EMERGENCY CARE TECHNOLOGY
THIRD YEAR**

PAPER I – EMERGENCY MEDICINE (EM) AND (EMS) - II

Q.P. Code: 801021

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

I. Elaborate on:

(3 x 10 = 30)

1. a) Define Shock.
b) What are the types of Shock?
c) Describe the methods of management of Haemorrhagic Shock.
2. a) What is COPD?
b) Describe the clinical features of acute exacerbation of COPD.
c) What are the investigations you will carry out?
d) Mention the immediate management.
3. a) Define Heart Failure?
b) Enumerate the clinical features, investigations and immediate management of Heart Failure.

II. Write notes on:

(8 x 5 = 40)

1. Describe internal and external cooling methods for Hyperthermia patients?
2. Treatment guidelines for ST Segment Elevation MI and Non ST segment Elevation MI
3. List down four Antidotes and their uses
4. List down Anti Retro Viral Drugs
5. How to approach the Aggressive Patient in Emergency Department?
6. Enumerate Disaster Management Cycle
7. Define Anion Gap and Causes of Anion Gap Acidosis
8. Explain Different types of Seizure

III. Short Answers on:

(10 x 3 = 30)

1. ECG changes in Hyperkalemia
2. Diagnostic criteria for Acute Pancreatitis
3. Clinical Signs and Symptoms of Small Intestine Obstruction
4. Common causes of Hematuria
5. Pathological changes in Diabetic Ketoacidosis
6. Why Inj. Adrenaline (Epinephrine) is administered during the Cardiac Resuscitation?
7. Common causes of Thrombocytopenia
8. Treatment of Herpes Zoster
9. Components of Polyvalent Anti Snake Venom
10. Define Pre-Eclampsia

[LF 0212]

AUGUST 2014

Sub. Code: 1021

B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY

THIRD YEAR

PAPER I – EMERGENCY MEDICINE (EM) AND (EMS) - II

Q.P. Code: 801021

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

I. Elaborate on:

(3 x 10 = 30)

1. Describe the etiology, clinical features, diagnosis and management of pericardial effusion.
2. Classify poisoning. Discuss the four ways in which a poison may enter the body. Describe the signs, symptoms and treatment of acute organophosphates poisoning.
3. Describe the etiology, diagnosis and management of postpartum hemorrhage.

II. Write notes on:

(8 x 5 = 40)

1. Discuss about the management of acute pulmonary edema.
2. Draw the diagram of laryngeal mask airway and label it parts.
3. Discuss the clinical features and treatment of Heat stroke.
4. Define flail chest. Write about the pathophysiology, clinical features and management.
5. Discuss the acute management of traumatic amputation of lower limb.
6. Classify blast injury and mention the radiological features of blast lung.
7. Factors predisposing to the development of pre-eclampsia and explain the magnesium sulphate regimen.
8. Mention the clinical features and treatment for acute Pancreatitis.

III. Short Answers on:

(10 x 3 = 30)

1. Criteria for acute respiratory distress syndrome (ARDS).
2. Describe the clinical features and management of Beta blocker Overdose.
3. Discuss the management of the delirium tremens.
4. Describe the usage of Naloxone Hydrochloride in icu and their side effects.
5. How will you recognize a patient with ongoing bleeding in causality?
6. Write six antifungal drugs
7. Antidote for a, Benzodiazepine overdose. b, Acetaminophen overdose. c. Cyanide.
8. Enumerate the features of upper airway obstruction
9. Mention the medical therapy for the treatment of status epilepticus.
10. Define inotropes and mention the three drugs used to improve the cardiac output.

[LG 0215]

FEBRUARY 2015

Sub. Code: 1021

B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY

THIRD YEAR

PAPER I – EMERGENCY MEDICINE (EM) AND (EMS) - II

Q.P. Code: 801021

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions.

I. Elaborate on:

(3 x 10 = 30)

1. Define shock. Classify different types of shock. Write briefly about the etiopathogenesis, clinical features, and management of anaphylactic shock.
2. Define causative organism, mode of transmission, signs and symptoms, prophylaxis, investigation and treatment of enteric fever.
3. What are the risk factors for the myocardial infarction? Enumerate the complications, investigation and management of acute myocardial infarction.

II. Write notes on:

(8 x 5 = 40)

1. Write in detail in regarding methyl alcohol poisoning and its management.
2. Discuss the management of acute febrile seizures in children.
3. Discuss the medical therapy for reducing raised intracranial pressure.
4. Write briefly about the Stevens - Johnson syndrome?
5. What are the complications of oxygen therapy?
6. Describe the various causes of Haematuria.
7. Mention five differences between crystalloids and colloids solution.
8. Discuss the clinical features and treatment of acetaminophen overdose.

III. Short Answers on:

(10 x 3 = 30)

1. Mention the nerve agents used in the chemical warfare. Describe the pathogenesis of its action.
2. Discuss the various modes of pain management of the patient who had fracture in upper limb.
3. Define synchronized cardioversion. Mention the indications.
4. Write about the clinical features and management of frost bite
5. Discuss the risk factors for developing amniotic fluid embolism.
6. Define the term poison. Write the four ways in which a poison enter the body.
7. Describe the clinical features and management of scorpion stings.
8. Write any six indication for the invasive ventilator supports and mention the modes of ventilator.
9. What are the causes for upper GI bleeding?
10. Discuss the ECG manifestation of Hyperkalemia.

B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY

THIRD YEAR

PAPER I – EMERGENCY MEDICINE (EM) AND EMS - II

Q.P. Code: 801021

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Anaphylaxis.
 - a. Definition.
 - b. Describe the Clinical features, Pathophysiology, Investigations.
 - c. Describe the immediate management of Anaphylactic Shock.
2. a. Define the Term poison.
 - b. Write in detail about Organo Phosphorous Compound Poisoning.
3. a. Define Myocardial Infarction.
 - b. Discuss the clinical features and Cardiac Biomarkers in Acute Myocardial Infarction.
 - c. Discuss the immediate Management of Myocardial Infarction in Emergency Room.

II. Write notes on:

(8 x 5 = 40)

1. Write in detail about Assaults.
2. Treatment for Esophageal Varices.
3. Mention the complications of Snake Bite.
4. a. Glasgow come scale.
 - b. Revised Trauma Score.
5. Write in detail about Oxygen Therapy.
6. Write in detail about 12 lead ECG.
7. Discuss the Clinical Features and Management of Bacterial Food Poisoning.
8. Atropine action, Clinical sign of atropine toxicity and treatment for Atropine Toxicity.

III. Short answers on:

(10 x 3 = 30)

1. Treatment for Hyperkalemia.
2. Different modes of Mechanical Ventilator.
3. What are the causes for lower GI bleeding?
4. Mention the Haemodynamic Criteria for Cardiogenic Shock.
5. Mention the causes for Left Ventricular Failure.
6. Write some details about Urinary Tract infection.
7. Syncope.
 - a. Definition.
 - b. What is the immediate management?
8. Define Seizure
9. What is Kernig sign?
10. What is the circle of willis?

B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY

THIRD YEAR

PAPER I – EMERGENCY MEDICINE (EM) AND EMS - II

Q.P. Code: 801021

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Acute Renal Failure
 - a) Definition.
 - b) Enumerate the Causes, Clinical Features, Diagnostic Evaluation and Management of Renal Failure.
 - c) Discuss the Immediate Management of Hypoglycemia in emergency Room.
2. Describe the Etiology, Clinical Features, Diagnosis and Management of Head Injury.
3.
 - a) What is Status Epilepticus?
 - b) Describe the Clinical features of Status Epilepticus.
 - c) What are the investigations you will carry out?
 - d) Mention the Management of Status Epilepticus.

II. Write notes on:

(8 x 5 = 40)

1. How to approach an aggressive patient in Emergency Department?
2. Discuss the Clinical features and management of Dengue Fever.
3. Discuss the Management of Acute Abdominal Pain.
4. Draw and label parts of an Endotracheal Tube.
5. Mention in detail the Complication of Status Epilepticus.
6. Discuss the management of Diabetic Ketoacidosis.
7.
 - a) Drugs used in the Thrombolytic Therapy.
 - b) Mention the steps of Thrombolysis.
8. Discuss the Clinical features and management of Angina Pectoris.

III. Short answers on:

(10 x 3 = 30)

1. Complications of Status Epilepticus.
2. What is the definition of Chronic Renal failure?
3. What are important complications of Pacemaker Transplantation?
4. What are Characteristics of Pleural Effusion?
5. Discuss the management of Pancreatitis.
6. Mention the Clinical features of Appendicitis.
7. Hepatitis.
 - a) Definition
 - b) Mention the types
8. Enumerate any two (calculation) formulas in Fluid Therapy.
9.
 - a) What is the initial step of management in Shock?
 - b) What are the four categories of Shock?
10. What are the seven Ps consider for Rapid Sequence Intubation (RSI)?

B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY**THIRD YEAR****PAPER I – EMERGENCY MEDICINE (EM) AND EMS - II****Q.P. Code: 801021****Time: Three Hours****Maximum: 100 Marks****Answer all questions****I. Elaborate on:****(3 x 10 = 30)**

1. Define Heart failure :
Clinical features, investigation and immediate management of Heart failure.
2. 25 years male; Alleged H/o high velocity motor vehicle collision brought to ED,
On arrival, his GCS - 5/15; Vitals - BP - 100/70mmHg, PR - 110/min, RR - 20/min; SpO2 - 94% on RA
 - a) How will you approach regarding initial resuscitation and management of head injury patients?
 - b) Types of traumatic brain injury.
 - c) How will you approach for managing airway in this patient?
3. Classify poisoning :
 - a) Four ways through which a poison enters the body.
 - b) Signs, Symptoms and immediate treatment of acute organo phosphorous poisoning.

II. Write notes on:**(8 x 5 = 40)**

1. Define flail chest - pathophysiology, clinical features and management.
2. Management of status epilepticus in ED.
3. Initial resuscitation and management of spinal injury.
4. Define Anaphylaxis and its immediate management in ED.
5. Advanced airway management and its advantages.
6. Define triage and how to triage the disaster victim?
7. Management of acute pulmonary edema.
8. Define transcutaneous pacing and its indication.

III. Short answers on:**(10 x 3 = 30)**

1. Drugs given through ET tube.
2. Mode of transmission of AIDS (HIV).
3. Poisonous snakes and types of snake bite poison.
4. ECG changes in Acute MI.
5. Common causes of thrombocytopenia.
6. Features of upper airway obstruction.
7. Clinical feature and management of Scorpion stings.
8. Signs and Symptoms of Acute appendicitis.
9. Indications for inter-costal drainage.
10. Oxygen therapy.

B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY

THIRD YEAR

PAPER I – EMERGENCY MEDICINE (EM) AND EMS - II

Q.P. Code: 801021

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

- 60 years male brought to ED with C/o chest pain for the past 2 hours; H/o Vomiting and Profuse sweating (+). He is a known case of DM and HTN on irregular treatment
 - What is the most probable diagnosis?
 - Differential diagnosis of chest pain.
 - Immediate management of myocardial infarction in ED.
- 20 years male Alleged H/o RTA, on arrival to ED, he is conscious, oriented and obeying commands; He C/o pain right side of chest and right side of abdomen. His vitals:- BP - 60/40mmHg; PR - 140/min; RR - 30/min. His respiratory system examination reveals Asymmetric chest wall movements; Tracheal deviation to left side and absent breath sounds on right side
 - What is most likely life threatening injury he sustained?
 - Initial management and Resuscitation of the condition.
 - Types of Blunt injury to chest and Explain briefly about ICD insertion.
- Explain Etiology, Diagnosis and management of post partum hemorrhage.

II. Write notes on:

(8 x 5 = 40)

- Causes of upper GI bleed and its initial management.
- Clinical features, Etiology and management of acute Gastro enteritis (Bacterial food poisoning).
- Five differences between Crystalloids and Colloids.
- Etiology, Clinical features and management of acute pancreatitis.
- Short notes on Basic Airway management.
- Short notes on Diabetic ketoacidosis and its complications.
- Note on Disaster management cycle.
- Treatment and Complication of snake bite.

III. Short answers on:

(10 x 3 = 30)

- Management of Pre- Eclampsia.
- Define Inotropes and mention 3 drugs.
- Clinical features and management of hemorrhagic shock.
- ECG changes and treatment of Hyperkalemia.
- How will you recognise Hypoglycemia and Write on its management?
- Prophylaxis and prevention of DVT in Post - operative patient.
- Note on Blood pressure assessment.
- Medical Gases.
- Mechanism of Metered Dose Inhaler.
- Uses of Intraosseous line.

**B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY
THIRD YEAR**

PAPER I – EMERGENCY MEDICINE (EM) AND EMS - II

Q.P. Code: 801021

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Define shock. Mention about types of shock. How will you grade hypovolemic shock. Management of hypovolemic shock.
2. Mention 3 special situations in resuscitation. Write about the changes in resuscitation of a pregnant women.
3. Define hospital acquired infections. Write a note on 5 moments hand hygiene. Write a note bio-medical waste disposal.

II. Write notes on:

(8 x 5 = 40)

1. Write above the steps of endotracheal intubation.
2. Mention the life threatening chest traumas and management of any one.
3. How will you transport injured victim.
4. Write a note on ATLS.
5. Mention the causes and types of disaster. Write a note on disaster preparedness.
6. Write a note on management of femur fracture.
7. Expand: AMBU draw and mention the parts of AMBU. Write about the technique of bag valve mask ventilation.
8. Write note on revised trauma score.

III. Short answers on:

(10 x 3 = 30)

1. Mention three supraglottic airways.
2. Draw a normal PQRST of an ECG and mention the significance.
3. Mention the areas scanned in E-FAST.
4. Mention the components of GCS.
5. What is log roll? Indication, contraindication and precaution.
6. Amiodarone dose and usage in ED.
7. Mention of the ratio of crystalloid: Blood loss / colloid: Blood loss / Blood products: Blood Loss.
8. Mention the various color coding in IV cannula and its infusion rate.
9. Steps of epistaxis management.
10. Write about manual inline stabilization.

B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY**THIRD YEAR****PAPER I – EMERGENCY MEDICINE (EM) AND EMS - II****Q.P. Code: 801021****Time: Three Hours****Maximum: 100 Marks****Answer all questions****I. Elaborate on:****(3 x 10 = 30)**

1. 15 years old boy driving a two-wheeler hit against a tree. His vitals PR – 158/min, BP – 80/60mmHg, GCS – 8/15, RR – 48/min.
 - a) Write the components of primary survey.
 - b) Mention 5 life threatening chest trauma in primary survey.
 - c) How will you manage the above patient?
2. Define anaphylaxis and write the criteria for anaphylaxis. Mention the management of anaphylaxis.
3. What is synchronized cardio version? Mention the 4 conditions with joules where synchronized cardio version is performed? Write the steps of synchronized cardio version.

II. Write notes on:**(8 x 5 = 40)**

1. ATLS.
2. Cricothyroidotomy: Indication, contraindication and its steps.
3. Define: Cardiac Tamponade: Mention the clinical features and its management.
4. ACLS tachycardia algorithm.
5. Write a note on hospital waste disposal.
6. Write a note revised trauma score.
7. Mention causes and types of disaster and a note on disaster preparedness.
8. How will you transport an injured victim?

III. Short answers on:**(10 x 3 = 30)**

1. Write three methods of confirmation of endotracheal tube placement.
2. Write about Mallampati assessment of airway.
3. Define compartment syndrome.
4. Write about different methods of autoclaving.
5. Draw oropharyngeal airway mention its parts.
6. How will you calculate endotracheal tube size and length in children?
7. Define nosocomial infection.
8. Define triage and color coding in triage.
9. Draw endotracheal tube and mention its parts.
10. Mention the shockable rhythms and joules needed to shock.

[LO 0219]

FEBRUARY 2019

Sub. Code: 1021

**B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY
THIRD YEAR**

PAPER I – EMERGENCY MEDICINE (EM) AND EMS - II

Q.P. Code: 801021

Time: Three Hours

Maximum: 100 Marks

Answer all questions

I. Elaborate on:

(3 x 10 = 30)

1. Classify poisoning. Discuss the four ways in which a poison may enter the body? Describe the signs, symptoms and treatment of acute organophosphates poisoning.
2. Describe the etiology, diagnosis and management of postpartum hemorrhage.
3. Define causative organism, mode of transmission, signs and symptoms, prophylaxis, investigation and treatment of enteric fever.

II. Write notes on:

(8 x 5 = 40)

1. Mention the clinical features and treatment for acute Pancreatitis.
2. Discuss the management of acute febrile seizures in children.
3. Discuss the medical therapy for reducing raised intracranial pressure.
4. Write briefly about the Stevens – Johnson syndrome.
5. What are the complications of oxygen therapy?
6. Describe the various causes of Haematuria.
7. Mention five differences between crystalloids and colloids solution.
8. Discuss the clinical features and treatment of acetaminophen overdose.

III. Short answers on:

(10 x 3 = 30)

1. ECG changes in Hyperkalemia.
2. Clinical Signs and Symptoms of Small Intestine Obstruction.
3. Pathological changes in Diabetic Ketoacidosis.
4. Why Inj. Adrenaline (Epinephrine) is administered during the Cardiac Resuscitation?
5. Common causes of Thrombocytopenia.
6. Treatment of Herpes Zoster.
7. Components of Polyvalent Anti Snake Venom.
8. Define Pre-Eclampsia.
9. Mode of transmission for Hepatitis – B.
10. Define Meconium Aspiration Syndrome (MAS).

B.Sc. ACCIDENT AND EMERGENCY CARE TECHNOLOGY
THIRD YEAR
PAPER I – EMERGENCY MEDICINE (EM) AND EMS - II

Q.P. Code: 801021

Time: Three Hours**Maximum: 100 Marks**

Answer all questions

I. Elaborate on:**(3 x 10 = 30)**

1. a) Define Myocardial Infarction.
b) Discuss the clinical features and Cardiac Biomarkers in Acute Myocardial Infarction.
c) Discuss the immediate Management of Myocardial Infarction in Emergency Room.
2. a) What is COPD?
b) Describe the clinical features of acute exacerbation of COPD.
c) What are the investigations you will carry out?
d) Mention the immediate management.
3. Define triage. How will you manage a victim with 50% burns?

II. Write notes on:**(8 x 5 = 40)**

1. Discuss the clinical features of Heat stroke.
2. Classify blast injury and mention the radiological features of blast lung.
3. Define flail chest. Write about the pathophysiology, clinical features and management.
4. Explain Different types of Seizure.
5. List down Anti Retro Viral Drugs.
6. How to approach the Aggressive Patient in Emergency Department?
7. Write in detail in regarding methyl alcohol poisoning and its management.
8. What are the complications of oxygen therapy?

III. Short answers on:**(10 x 3 = 30)**

1. Discuss the ECG manifestation of Hyperkalemia.
2. What are the causes for lower GI bleeding?
3. What is the definition of Chronic Renal failure?
4. What are Characteristics of Pleural Effusion?
5. What are the seven Ps considered for Rapid Sequence Intubation (RSI)?
6. Mode of transmission of AIDS (HIV).
7. Signs and Symptoms of Acute appendicitis.
8. Indications for inter-costal drainage.
9. Five differences between Crystalloids and Colloids.
10. Mechanism of Metered Dose Inhaler.

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LR 1220]

**DECEMBER 2020
(AUGUST 2020 EXAM SESSION)**

Sub. Code: 1021

**BACHELOR IN ACCIDENT AND EMERGENCY CARE TECHNOLOGY
THIRD YEAR – (Regulation from 2010-2011)
PAPER I – EMERGENCY MEDICINE (EM) AND EMS - II
Q.P. Code: 801021**

Time: Three Hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Myocardial infarction
 - a) Definition , Causes , Risk factors, Diagnostic findings and clinical manifestation of MI.
 - b) Medical and surgical Management of MI.
2. Urinary Tract Infection.
3. Anemias.
 - a) Definition, Types and Classification of Anemia
 - b) Dietary management for Anemia

II. Write notes on:

(8 x 5 = 40)

1. Pulmonary Edema.
2. Diarrhoea.
3. Dermatitis Venenata.
4. Organophosphate Poisoning.
5. Bites and Stings.
6. Natural Disaster.
7. Pediatric Emergencies.
8. Digoxin Toxicity.

III. Short answers on:

(10 x 3 = 30)

1. List out 4 management for Dehydration.
2. Hyperglycemia.
3. List out the 4 management for Asthma.
4. Define Status Epilepticus.
5. Difference between Diabetes Mellitus and Diabetes Insipidus.
6. Pemphigus Vulgaris.
7. Scabies.
8. Industrial Hazards.
9. Arrhythmias.
10. Acetaminophen Overdose.
