# STUDY GUIDE FOR THE EMT WRITTEN ENTRANCE EXAMINATION

#### THE PRE-HOSPITAL ENVIRONMENT

- A. EMT Roles and Responsibilities
  - 1. Physical traits
  - 2. EMT well being
  - 3. Personal protective equipment
  - 4. Critical Incident Stress Debriefing
  - 5. Transportation / destination to appropriate hospital

## B. Medical / Legal Concerns

- 1. All types of consent
- 2. Guidelines of the Good Samaritan Act
- 3. Requirements for a patient to refuse care
- 4. Methods for reducing liability for the EMT
- 5. Components and actions to be taken concerning a DNR
- 6. Types of cases which require reporting to authorities

## C. IV Monitoring

- 1. Complications of IV therapy
- 2. Actions to correct complications
- 3. Causes of change in drip rates
- 4. Care of the IV site
- 5. Drip calculations using micro and macro tubing

## MEDICAL TERMINOLOGY, BODY SYSTEMS, ANATOMY

### A. Definitions

- 1. Medial
- 2. Superior
- 3. Lateral
- 4. Inferior
- 5. Anatomical position
- 6. Pneumothorax
- 7. Ventricles
- 8. Hypothermia
- 9. Tachycardia
- 10. Dyspnea

#### **B.** Functions and Parts

- 1. Divisions of the vertebrae
- 2. Body cavities
- 3. Actions of the musculoskeletal system

- 4. Names of facial, leg, arm, hand and feet bones
- 5. Types of muscle
- 6. Parts of the lungs, including where oxygen exchange takes Place
- 7. Circulatory system of the heart and lungs
- 8. Actions of the red and white blood cells and platelets

#### PATIENT ASSESSMENT

- A. Components of scene size-up
- B. Determination of mechanism of injury
- C. AVPU, SAMPLE, OPQRST
- D. Components of initial assessment
- E. Level of oxygen delivery based on patient condition
- F. Components of a rapid trauma assessment
- G. Determination of pulse and respiration rate and quality
- H. Indication for orthostatic vital signs
- I. Indication of skin signs
- J. Range of pulse and respiration in adult patients
- K. Components of blood pressure
- L. Differences in focused history and physical in the conscious and unconscious patient
- M. Components of a rapid physical exam
- N. Components of an ongoing assessment
- O. Proper radio behaviors
- P. Proper lifting postures
- Q. Procedure for log rolling a patient
- R. Indication for emergency moves
- S. Patient position / shock
- T. Rules regarding documentation

#### **SHOCK**

- A. Define shock
- B. Define each type of shock and give the cause(s)
- C. Signs / symptoms of early and late shock in the adult and pediatric patient
- D. Oxygen delivery to a patient in shock
- E. EMT role in assisting with anti-shock trousers
- F. Monitoring changes in the level of shock

#### AIRWAY AND OXYGEN ADJUNCTS

- A. Methods for opening the airway
- B. Sequence of A, B, C's
- C. Placement of an OPA in adults and children
- D. Use of suction while ventilating with a BVM
- E. Common causes of airway obstruction
- F. Oxygen liter flow with mask and cannula
- G. Rules for suctioning
- H. Potential hazards during the use of oxygen
- I. EMT role in ventilating a patient with an endotracheal tube or an esophageal obturator airway in place

#### **TRAUMA**

- A. Define laceration, abrasion, contusion, and avulsion
- B. Principles of proper bandaging
- C. Use of specific pressure points to control bleeding
- D. Care of amputated parts for transport
- E. Care of patients with open chest wounds
- F. Stabilizing impaled objects in the eye
- G. Signs / symptoms of a fractured hip
- H. Field treatment of a femur fracture
- I. Complications of penetrating wounds to the abdomen
- J. Principles of basic splinting
- K. Signs / symptoms of a flail chest
- L. Complications of a fractured clavicle
- M. Field treatment for abdominal evisceration
- N. Vital sign changes in head injuries

#### MEDICAL EMERGENCIES

- A. Definitions
  - 1. Emphysema
  - 2. Asthma
  - 3. Angina Pectoris
  - 4. Myocardial infarction
  - 5. Pedal edema
  - 6. Hypoglycemia
  - 7. Hyperglycemia
  - 8. Diabetes
  - 9. Status Epilepticus
  - 10. Stroke
  - 11. Anaphylaxis
  - 12. Radiation
  - 13. Convection
  - 14. Evaporation

- 15. Heat Cramps
- 16. Heat exhaustion
- 17. Hypothermia
- 18. Heat stroke
- 19. Tripod position

#### **B.** Medications

- 1. Types of typical container and / or forms for the medications an EMT may assist a patient with
- 2. Reasons for assisting a patient with each medication
- 3. Possible side effects of each medication
- C. Delivery of oxygen to a patient with emphysema
- D. Signs for determining the effectiveness of ventilation
- E. Treatment of pediatric asthma
- F. Anatomical causes of cardiovascular emergencies
- G. Treatment for patients with chest pain
- H. Signs / symptoms for hypoglycemia and hyperglycemia
- I. Causes of adult and pediatric seizures
- J. Field treatment for anaphylaxis
- K. Signs / symptoms for a stroke
- L. Field treatment for a patient with seizures
- M. Specific history for a poisoning patient
- N. Patient position in the overdose patient
- O. Routes for poisons to enter the body
- P. Field treatment of the poisoned patient
- O. Signs / symptoms of heat exhaustion and heat stroke
- R. Field treatment for heat related problems
- S. Field treatment of a drowning victim
- T. Field treatment for a patient with a bee sting or insect bite
- U. Special body areas of consideration with burns
- V. Determine body surface areas considered with burns
- W. Complications of the field treatment of burns
- X. Field treatment of chemical burns
- Y. Field concerns with a patient who has been electrocuted

#### OBSTETRICS AND GYNECOLOGY

#### A. Definitions

- 1. Placenta
- 2. Stages of labor
- 3. Placenta previa
- 4. Abruptio placenta
- 5. Ectopic pregnancy
- 6. APGAR

- 7. Prolapsed cord
- 8. Crowning
- B. Field treatment for a patient having a miscarriage
- C. Transport position for a pregnant patient
- D. Signs / symptoms of pre-eclampsia
- E. Signs / symptoms of ectopic pregnancy
- F. Field management of a rape scene
- G. Feelings inhibited by a sexual assault victim
- H. Timing of the APGAR
- I. Signs / symptoms of placenta previa and abruption placenta
- J. Field treatment for prolapsed cord
- K. Field treatment for the patient who exhibits crowning
- L. Care of the newborn

#### **PEDIATRICS**

- A. Definitions
  - 1. Bronchitis
  - 2. Croup
  - 3. Epiglottis
  - 4. Meningitis
- B. Guidelines for care of the pediatric patient and the parents
- C. Transport position for a pediatric patient in respiratory distress
- D. Cause of cardiac arrest in children
- E. Recognition of possible child abuse
- F. Field treatment for a febrile seizure
- G. Pediatric developmental differences in relation to trauma

## BEHAVIORAL PATIENTS WITH SPECIAL PROBLEMS

- A. Management of a patient with aggressive behavior
- B. Management of a hostile family member
- C. Guidelines for restraints
- D. Management of the patient in restraints
- E. Guidelines for assessing a geriatric patient
- F. Guidelines for assessing a hearing impaired patient
- G. Guidelines for assessing a vision impaired patient
- H. Guidelines for assessing a non-English speaking patient