

#### **EXAM INFORMATION**

#### **Items**

100

#### **Points**

100

#### **Prerequisites**

NONE

#### **Grade Level**

11-12

#### **Course Length**

**Career Cluster** 

ONE YEAR

HEALTH SCIENCE
LAW, PUBLIC SAFETY, CORRECTIONS
AND SECURITY
HOSPITALITY AND TOURISM

#### **Performance Standards**

INCLUDED

#### **Certificate Available**

YES

#### **DESCRIPTION**

The Emergency Medical Technician (EMT) course emphasizes emergency medical care skills and teaches these skills in a job-related context based on the U.S. Department of Transportation (DOT) National Standard Curriculum. The course content includes the care of individuals with various traumatic/emergent medical conditions, as well as training in the use of medical equipment and materials.

### **EXAM BLUEPRINT**

STANDARD	PERCENTAGE OF EXAM
1- Preparatory	16%
2- Airway	14%
3- Patient Assessment	15%
4- Medical	23%
5- Respiratory System	16%
6- Infants & Children	10%
7- Operations	6%

#### STANDARD I

#### **PREPARATORY**

### Objective I Introduction to Emergency Medical Care

1. Define medical direction and discuss the EMT-Basic's role in the process.

#### Objective 2 Well-being of the EMT-Basic.

- I. Explain the need to determine scene safety.
- 2. List the personal protective equipment necessary for each of the following situations:
  - I. Hazardous materials
  - 2. Rescue operations
  - 3. Violent scenes
  - 4. Crime scenes
  - 5. Exposure to bloodborne pathogens
  - 6. Exposure to airborne pathogens
- 3. Given a scenario with potential infectious exposure, the EMT-Basic will use appropriate personal protective equipment. At the completion of the scenario, the EMT-Basic will properly remove and discard the protective garments.
- 4. Given a scenario, the EMT-Basic will explain disinfection/cleaning and all reporting documentation.

#### Objective 3 Medical/Lega and Ethical Issues

- I. Define the EMT-Basic scope of practice.
- 2. Discuss the implications for the EMT-Basic in patient refusal of transport.
- 3. Discuss the issue of negligence and the implications to the EMT-Basic.
- 4. State the conditions necessary for the EMT-Basic to have a duty to act.

#### Objective 4 The Human Body.

- 1. Describe the anatomy and physiology of the following major body systems:
  - I. Respiratory
  - 2. Circulatory
  - 3. Musculoskeletal
  - 4. Nervous
  - 5. Endocrine

#### Objective 5 Baseline Vital Signs and Sample History.

- 1. Identify and explain each of the components of a patient's vital signs.
- 2. Identify and explain the components of the SAMPLE history.
- 3. Differentiate between a sign and a symptom.
- 4. Explain the skills associated in the assessment of a complete set of vital signs.

#### Objective 6 Body mechanics.

- 1. Explain the guidelines, safety precautions, and rationale for the proper lifting and moving of
- patients
- 2. Working with a partner, prepare each of the following devices for use, transfer a patient to the
- 3. device, properly position the patient on the device, move the device to the ambulance and load the patient into the ambulance:
  - I. Wheeled ambulance stretcher

- 2. Stair chair
- 3. Scoop stretcher
- 4. Long spine board

#### **STANDARD 2**

#### **AIRWAY**

#### Objective I Airway

- 1. Relate mechanism of injury to opening the airway.
- 2. State the importance of having a suction unit ready for immediate use when providing emergency care.
- 3. Describe the signs of adequate artificial ventilation using the bag-valvemask.
- 4. Describe the signs of inadequate artificial ventilation using the bag-valvemask.
- 5. Explain the rationale for basic life support artificial ventilation and airway protective skills taking priority over most other basic life support skills.
- 6. Identify the steps in performing the head-tilt chin-lift.
- 7. Identify the steps in performing the jaw thrust.
- 8. Identify the techniques of suctioning.
- 9. Identify the steps in performing the skill of artificially ventilating a patient with a bag-valve-mask for one and two rescuers.
- 10. Identify the steps in performing the skill of artificially ventilating a patient with a bag-valve-mask while using the jaw thrust.
- 11. Explain how to artificially ventilate a patient with a flow restricted, oxygen-powered ventilation device.
- 12. Identify how to artificially ventilate a patient with a stoma.
- 13. Identify how to insert an oropharyngeal (oral) airway.
- 14. Identify how to insert a nasopharyngeal (nasal) airway.
- 15. Identify how to artificially ventilate the infant and child patient.
- 16. Explain oxygen administration for the infant and child patient.

Standard 2 Performance Evaluation included below (Optional)

#### **STANDARD 3**

#### PATIENT ASSESSMENT

Objective I Scene Size-Up.

1. Discuss common mechanisms of injury/nature of illness.

Objective 2 Initial Assessment.

- 1. Summarize the reasons for forming a general impression of the patient.
- 2. Discuss methods of assessing altered mental status.
- 3. Differentiate between assessing the altered mental status in the adult, child and infant patient.
- 4. Explain the techniques for assessing mental status.



#### Objective 3

- Focused History and Physical Exam (Trauma Patients).
- 1. State the reasons for performing a rapid trauma assessment.
- 2. Describe the areas included in the rapid trauma assessment and discuss what should be evaluated using DCAP-BTLS.
- 3. Discuss the reason for performing a focused history and physical exam.
- 4. Identify the rapid trauma assessment that should be used to assess a patient based on mechanism of injury.

#### Objective 4

Focused History and Physical Exam (Medical).

- 1. Describe the unique needs for assessing an individual with a specific chief complaint with no known prior history.
- 2. Differentiate between the history and physical exam that are performed for responsive patients with no known prior history and responsive patients with a known prior history.
- 3. Describe the needs for assessing an individual who is unresponsive.
- 4. Differentiate between the assessment that is performed for a patient who is unresponsive or has an altered mental status and other medical patients requiring assessment
- 5. Explain the patient assessment skills that should be used to assist a patient who is responsive with no known history.
- 6. Explain the patient assessment skills that should be used to assist a patient who is unresponsive or has an altered metal status.

#### Objective 5

Focused History and Physical Exam (Medical).

- 1. Discuss the components of the detailed physical exam.
- 2. Identify the skills involved in performing the detailed physical exam.

#### Objective 6

On-Going Assessment.

1. Describe trending of assessment components.

#### Objective 7

Communications.

I. Summarize an organized, concise patient report that would be given to the staff at a receiving facility.

#### Objective 8

Documentation.

 Describe what information is required in each section of the prehospital care report and how it should be entered.

Standard 3 Performance Evaluation included below (Optional)

#### **STANDARD 4**

#### **MEDICAL**

#### Objective I

General Pharmacology.

I. Identify and explain the rational of the administration of the medications carried on an EMS unit and those that an EMT-Basic may assist the patient with administering.

#### Objective 2

Respiratory Emergencies.

1. Describe the emergency medical care of the patient with breathing difficulty.

#### Objective 3

Cardiac Emergencies.

1. Describe the emergency medical care of the patient experiencing chest pain/discomfort.

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2. List the indications and contraindications for automated external defibrillation (AED) use.

#### Objective 4 Diabetic Emergencies/Altered Mental Status.

1. Describe the emergency medical care of a patient with an altered mental status that may have a medical history of diabetes.

#### Objective 5 Allergies.

I. Describe the signs, symptoms and emergency medical care of the patient having an allergic reaction.

#### Objective 6 Poisoning/Overdose.

1. Describe the signs, symptoms and emergency medical care of the patient of a poisoning or overdose.

#### Objective 7 Environmental Emergencies.

- I. Describe the signs, symptoms and emergency medical care of the patient exposed to heat and cold extremes.
- 2. Describe the signs, symptoms and emergency medical care of the patient involved in a water related emergency.

#### Objective 8 Behavioral Emergencies.

I. Explain the assessment and emergency medical care of the patient experiencing a behavioral emergency.

#### Objective 9 Obstetrics/Gynecology.

- 1. Identify and explain physiological changes during pregnancy for the following structures:
  - I. Uterus
  - 2. Vagina
  - 3. Fetus
  - 4. Placenta
  - 5. Umbilical cord
  - 6. Amniotic sac
  - 7. Perineum
- 2. Differentiate the emergency

Standard 4 Performance Evaluation included below (Optional)

#### **STANDARD 5**

#### RESPIRATORY SYSTEM

#### Objective I Bleeding and Shock.

- 1. Define arterial, venous and capillary bleeding.
- 2. Explain the sense of urgency to transport patients that are bleeding and show signs of shock (hypoperfusion).
- 3. Identify methods of emergency medical care for external bleeding.
- 4. Identify the care of a patient exhibiting signs and symptoms of shock (hypoperfusion).

#### Objective 2 Soft Tissue Injuries.

- I. Explain the classifications and treatment of burns.
  - 1. Superficial burn
  - 2. Partial thickness burn

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- 3. Full thickness burn
- 4. Identify the steps of the proper dressing and bandaging of burns and wounds.

#### Objective 3 M

- Musculoskeletal Car.
- 1. Differentiate between an open and a closed painful, swollen, deformed extremity.
- 2. State the reasons, general rules and complications for splinting.
- 3. Demonstrate the emergency medical care of a patient with a painful, swollen, deformed extremity.

#### Objective 4

Injuries to Head and Spine.

- I. Relate mechanism of injury to potential injuries of the head and spine and explain the rational of the proper treatment.
- 2. Explain the four-person log roll on to a long board for a patient with a suspected spinal cord injury.

Standard 5 Performance Evaluation included below (Optional)

#### **STANDARD 6**

#### INFANTS AND CHILDREN

#### Objective I

Infants and Children.

- 1. Indicate various causes of respiratory emergencies.
- 2. Differentiate between respiratory distress and respiratory failure.
- 3. Summarize emergency medical care strategies for respiratory distress and respiratory failure.
- 4. Identify the signs and symptoms of shock (hypoperfusion) in the infant and child patient.
- 5. Describe the methods of determining end organ perfusion in the infant and child patient.
- 6. State the usual cause of cardiac arrest in infants and children versus adults.
- 7. List the common causes of seizures in the infant and child patient.
- 8. Describe the management of seizures in the infant and child patient.
- 9. Differentiate between the injury patterns in adults, infants, and children.
- 10. Discuss the field management of the infant and child trauma patient.
- 11. Identify the techniques of foreign body airway obstruction removal in the infant.
- 12. Identify the techniques of foreign body airway obstruction removal in the child.
- 13. Identify the assessment of the infant and child.

#### **STANDARD 7**

#### **OPERATIONS**

### Objective I

Ambulance Operations.

1. List the phases of an ambulance call.

#### Objective 2

Gaining Access.

- I. Discuss the role of the EMT-Basic in extrication.
- 2. Define the fundamental components of extrication.
- 3. State the steps that should be taken to protect the patient during extrication.

#### Objective 3

Overviews.

1. Given a scenario of a mass casualty incident, explain ho to perform triage.



### **Emergency Medical Technician Performance Standards (Optional)**

Performance assessments may be completed and evaluated at any time during the course. The following performance skills are to be used in connection with the associated standards and exam. To pass the performance standard the student must attain a performance standard average of **8 or higher** on the rating scale. Students may be encouraged to repeat the objectives until they average **8 or higher**.

St	uden	ts Name	
C	lass_		
		PERFORMANCE RATING SCALE	
	0	Limited Skills 2 4 Moderate Skills 6 8 High Skills	10
S	TAN	IDARD 2 Airway Score:	
		Students will be able to insert an oral airway and nasal airway.	
S	TAN	IDARD 3 Initial Assessment Score:	
		Students will be able to recognize pupil response. Students will be able to complete a prehospital care report.	
S	TAN	IDARD 4 Medical Score:	
		Students will understand and perform mediation administration via handheld nebulizer.	
S	TAN	IDARD 5 Respiratory System Score:	
		Students will demonstrate the steps for the proper dressing and bandaging of burns and wounds.	
		Students will demonstrate the application of a sling and swath.	
		Students will demonstrate the application of a splint.	
		Students will demonstrate the application of a cervical collar.	

#### **PERFORMANCE STANDARD AVERAGE SCORE:**