Chapter 9: Understand the basic principles of emergency medical services (EMS), and dispatch processes

1. List and define ten (10) commonly used terms in EMS. (9.01)

   Airway Obstruction: A partial or full blocking of the airway.  -  Automated External Defibrillator (AED): A portable device which has the ability to analyze the heart rhythm and deliver an electrical shock (when necessary) to restore the heart to a normal rhythm.  -  Blood pressure (BP): Pressure exerted by the blood on the walls of the blood vessels.  -  Cardiac or Cardio: Of or pertaining to the heart.  -  Cardiac Arrest: The abrupt loss of effective heart function.  -  Cardiopulmonary Resuscitation (CPR): A technique which utilizes rescue breathing and chest compressions when a patient has suffered from cardiac arrest.  -  Cerebrovascular Accident (CVA): An interruption or severe reduction of oxygen-rich blood supply to a part of the brain. The interruption may be caused by a clot, plaque fragments, or a ruptured or leaking vessel. A CVA is commonly referred to as a stroke.  -  Dead on Arrival (DOA)  -  Diabetic: A person whose body is unable to regulate blood sugar.  -  Do Not Resuscitate (DNR)  -  Edema: Swelling  -  Estimated Time of Arrival (ETA): Estimation of the time a responder or person may arrive at their destination.  -  ETOH: Intoxication from ethyl alcohol  -  Gun Shot Wound (GSW): Wound caused by a gun shot.  -  Heimlich Maneuver: An emergency technique that utilizes upward thrusts just below the rib cage, to force air from the lungs and up through the trachea in an attempt to dislodge a foreign body from a choking person’s airway.  -  Hypertension: High blood pressure  -  Hypotension: Low blood pressure  -  Hyperthermia: A state of abnormally high internal body temperature  -  Hypothermia: A state of abnormally low internal body temperature  -  Intravenous (IV): An apparatus used to administer a fluid into a vein.  -  Laceration: A cut or tear of the skin or flesh.  -  Landing Zone (LZ): A secured area for landing emergency aircraft.  -  Level of and Consciousness (LOC): The measure of a person’s responsiveness to stimuli arousability. Also used to reference loss of consciousness (e.g., “patient denies LOC”).  -  Overdose (OD): an excessive and/or dangerous dose of a drug, whether intentional or accidental.  -  Rescue Breathing -  Respiratory: relating to or affecting respiration or the organs of respiration.  -  Respiratory Arrest: Cessation of breathing due to a failure of the lungs to
effectively function. – **Seizure**: A sudden surge of electrical activity in the brain that typically affects how a person acts or feels for a short time. – **Syncope**: Fainting – **Vital Signs**: Measurements of the body's most basic functions. Blood pressure, heart rate (pulse), respiratory rate, and body temperature are the four main vital signs routinely obtained by responders.

2. List the basic functions of the EMT & paramedic. (9.02)

**Emergency Medical Technician (EMT)**: Provides non-invasive basic life support, such as immobilization, splinting, CPR, and more.

**Paramedic**: Paramedics can also perform the duties of the EMT and provide advanced life support, including cardiac monitoring, establishing IVs, advanced airway techniques, and more.

3. What does BLS and ALS stand for and who provides this type of medical care? (9.03)

- **Basic Life Support** – provided by EMT or paramedics
- **Advance Life Support** – provided by paramedics only

4. List four (4) examples of MCIs. (9.06)

- **Terrorist Attacks** – **Mass Shootings** – **Natural Disasters** – **Vehicle crashes with numerous patients**

5. What is a trauma center? (9.08)

A trauma center is a hospital unit equipped and staffed to provide care to patients with acute and life-threatening traumatic injuries.

6. Give examples of conditions which could rise to the level of trauma. (9.08)

Examples of conditions which could rise to the level of trauma are falls greater than ten feet, severe injuries to the head, neck, or torso, airway assistance required beyond oxygen, paralysis, and other life threatening conditions.
7. What is the PST’s responsibilities during an air rescue incident? (9.09)

   The PST’s responsibility may be to send additional field resources to secure a landing zone for the transport unit. Resources may include fire-rescue apparatus or law enforcement personnel. The PST also notifies the trauma center, generally known as a pre-alert or a trauma alert.

8. List the various types of emergency response mode for EMS units. (9.05)

   Emergency - with lights and sirens
   Non-emergency - no lights/sirens, routine calls

9. What are some examples for requiring fire service to respond on with EMS on an incident? (9.10)

   Any call as defined by local policy - Haz-Mat incidents - To gain entry into a structure, if necessary - To extinguish fires

10. List five (5) ways PST’s can contribute to EMS safety. (9.11)

    Obtaining and relaying pertinent information in a timely manner –
    Reproducing pertinent information during crisis calls – Maintaining radio
    Entering correct CAD notes - Dispatching additional resources - Anticipating responder needs – Fulfilling requests – Regular updates – Being aware of weapons on scene – Following up on EMS responders who do not answer the radio or key the mic without verbally transmitting – Utilizing resources to find units who do not respond the radio (cell phone, GPS/AVL, alert tones, dispatch of units to last known location, etc.)