Listed below are a number of items and subjects which make up the mechanic certification test identified above. An individual’s ability to pass the certification test will depend upon the amount of knowledge the person has concerning these items.

**System Diagnosis - 20%**
- Load sensing proportioning valves
- Brake pedal pulsation
- Grabbing brakes
- Brake lock-up
- Dragging brakes
- Combination valve
- Gear lube in drums
- Brake booster

**Master Cylinder Diagnosis & Repair - 9%**
- Low fluid level
- Rebuilding
- Swollen diaphragm
- Sinking pedal

**ABS Diagnosis & Repair - 20%**
- Pump/motor operation
- Safety precautions
- Speed sensors
- Wheel speed readings
- 3 way circuits
- 4 way circuits
- Hose replacement

**Drum Brake Diagnosis & Repair - 22%**
- Drum finish
- Single anchor Bendix type
- Self adjuster diagnosis
- Noise diagnosis
- Measuring
- Primary v.s. secondary shoes

**Disc Brake Diagnosis & Repair - 16%**
- Rotor thickness variation
- Rotor surface finish
- Caliper overhaul
- Brake noise
- Brake adjustment
- Measuring, lateral run-out

**Repair Procedures - 13%**
- Brake line bleeding
- Brake fluid diagnosis
- Replacing wheel bearings/races
- Brake adjustments

**SAMPLE QUESTION:**
A car has a spongy pedal. Which of the following could be the cause?

A. Air in the system.
B. An internal master cylinder leak.
C. Worn brake pads.
D. Warped brake disc.

**ANSWER:** A