

- 1. An operating control switch for an on-off boiler:**
  - a) uses a differential spring to reduce cycling
  - b) can only have its cut-in setting adjusted
  - c) has an un-adjustable span between cut-in and cut-out
  - d) utilizes a resistance coil
  - e) operates in conjunction with a modutrol motor
- 2. Combustion air safety switches are commonly found:**
  - a) on natural draft boilers
  - b) on hot water boilers only
  - c) on boilers utilizing a forced draft fan
  - d) on gas fired boilers only
  - e) as non-interlocking devices and take no part in a startup
- 3. In view of heating boilers, a low fire switch:**
  - a) is a type of manual over-ride
  - b) takes no part in the start-up of an automatic boiler
  - c) is a normally closed switch
  - d) utilizes a thermal element for its operation
  - e) acts as an interlock to ensure minimum damper setting
- 4. Modulating burner controls operate by regulating:**
  - a) steam flow and fuel flow
  - b) fuel temperature and air flow
  - c) fuel flow, air flow, and feedwater pressure
  - d) fuel flow, and air flow
  - e) fuel flow, and atomizing steam flow
- 5. Modulating combustion controls:**
  - a) regulate the steam and feedwater supply
  - b) regulate fuel and air supply
  - c) control the oil atomizer
  - d) control the back draft damper
  - e) control the draft and feedwater temperature
- 6. On a multi-burner boiler the high fire nozzle will:**
  - a) be in operation on start-up
  - b) operate continuously when steam demand exceeds boiler capacity
  - c) be ignited by a pilot flame
  - d) respond to electrical resistance
  - e) operate regardless of where the manual over-ride switch is set

Answers 1=a, 2=c, 3=e, 4=d, 5=b, 6=b