

LIMITED POWER ENGINEER (FIREMAN) SAMPLE QUESTIONS

NOTE: *These questions represent the style of questions that may appear on examinations and are not intended as study material. Answer guide is included at the end of the questions.*

1. The person who is responsible for the operation of a boiler or boiler plant according to the Sask. Regulations is called the _____.
 - A. Boiler person
 - B. Caretaker
 - C. Chief engineer
 - D. Owner
2. A _____ license is the minimum requirement to operate as chief engineer of a low pressure boiler or plant with a capacity of not more than 1000 kilowatts.
 - A. 4th Class
 - B. 5th Class
 - C. First Class
 - D. Limited power engineer's (fireman)
3. A (n) _____ boiler consists of straight tubes through which the flue gas travels.
 - A. watertube
 - B. firetube
 - C. D type
 - D. Electric
4. If the safety relief valve on a steam boiler relieves at 103 kpa (15 psi), it is a _____ boiler.
 - A. Low pressure
 - B. Watertube
 - C. Firetube
 - D. High pressure
5. The _____ is a fitting in a hot water system which induces a flow of water through a radiator.
 - A. Vent
 - B. Diverter
 - C. Check valve
 - D. Steam trap
6. The operator will perform a (n) _____ to find out if the safety valve is free to operate.
 - A. blow down on the water column
 - B. try lever test
 - C. hardness water test
 - D. intermittent blowdown

7. The float chamber on a _____ should be blown down regularly.
- safety valve
 - gauge glass
 - blow down tank
 - low water cut-off
8. A combustion air system which keeps the furnace pressure above atmospheric pressure is a (n) _____ system.
- natural draft
 - induced draft
 - forced draft
 - steam induced
9. The _____ shuts off the burner in the event of a low water condition.
- low water cut-off
 - low level alarm
 - water level indicator
 - safety valve
10. The purpose of the low water cut-off is to _____.
- relieve excessive pressure in the boiler
 - prevent too high a water level
 - cut off the feedwater flow before it reaches a dangerously low level
 - shut off the burner in the event of a low water condition
11. Operating controls on a hot water boiler are actuated by _____.
- pressure
 - both pressure and temperature
 - temperature
 - the safety valve
12. A pilot burner that is manually ignited and burns at all times is called a (n) _____ pilot.
- interrupted
 - intermittent
 - unstable
 - continuous
13. Filtration will remove:
- suspended solids
 - dissolved solids
 - dissolved gases
 - all of the above
14. If the boiler water is acidic then _____ will occur:
- scaling
 - priming
 - alkalinity
 - corrosion

15. Amperes is defined as the:
- A. rate at which work is done
 - B. measure of resistance in a circuit
 - C. rate at which current flows
 - D. equivalent to water pressure in a water line
16. A Class B fire would be a:
- A. fuel oil leak which ignited
 - B. fire involving a combustible metal
 - C. pile of burning wood and old clothing
 - D. fire in a transformer
17. A fire extinguisher which features a funnel-shaped horn is a _____ extinguisher.
- A. foam
 - B. water stored pressure
 - C. carbon dioxide
 - D. dry chemical
18. Lubrication of the packing in the stuffing boxes of centrifugal pumps is provided by:
- A. slight leakage of fluid from the pump
 - B. oiling rings installed on the shaft
 - C. periodic use of an oil can
 - D. a grease gun
19. _____ is when a pump casing is filled with the fluid to be pumped.
- A. Venting
 - B. Priming
 - C. Flooding
 - D. Greasing
20. Gate valves:
- A. are not suitable for throttling service
 - B. have a high resistance to flow when fully opened
 - C. are not suitable as stop or isolating valves
 - D. are often installed on by-pass lines for control
21. A _____ valve allows flow in one direction only.
- A. gate
 - B. ball
 - C. globe
 - D. check
22. A thermostat:
- A. ensures that the temperature of the water in the heating system does not exceed the safe limit
 - B. maintains air temperature in the spaces to be heated at the desired level
 - C. ensures that both pressure and temperature in the system does not exceed the pre-set limits
 - D. controls pressure in the system

23. If people in your building were complaining about dry noses and throats you would:
- A. turn on the furnace
 - B. lower the relative humidity
 - C. turn the thermostat up higher
 - D. turn up the humidifier
24. When the normal flow of water into the distributing pipes of a potable water supply is reversed it is defined as _____.
- A. water hammer
 - B. backflow
 - C. flashing
 - D. thermal shock
25. _____ air ensures that the fuel you are burning comes completely in contact with oxygen.
- A. Excess
 - B. Tertiary
 - C. Theoretical
 - D. Primary

Answer Guide

1. C – Boiler & PV Regulations Part 1, Preliminary Matters, Subsection 2(1)(m)
2. D – Boiler & PV Regulations Part III, Division 2, Subsection 44(6)(a)(i)
3. B
4. A – Boiler & PV Act – Part I – Preliminary Matters, 2(l)
5. B
6. B
7. D
8. C
9. A
10. D
11. C
12. D
13. A
14. D
15. C
16. A
17. C
18. A
19. B
20. A
21. D
22. B
23. D
24. B
25. A