

***** EXAMINATION *****

PROTECTION OF DATA PROCESSING EQUIPMENT FOR FINE WATER SPRAYS

1. **The drop diameters for the low pressure nozzles**
 - a) range from 100 to 200 micrometers
 - b) range from 200 to 300 micrometers
 - c) range from 300 to 400 micrometers
 - d) range from 400 to 500 micrometers

2. **High pressure nozzles produce droplets whose mean**
 - a) diameters range from 30 to 100 micrometers
 - b) diameters range from 200 to 300 micrometers
 - c) diameters range from 300 to 400 micrometers
 - d) diameters range from 400 to 500 micrometers

3. **An air atomization nozzle generates droplets in the**
 - a) range of 30 to 100 micrometers at low pressure
 - b) range of 50 to 150 micrometers at low pressure
 - c) range of 100 to 200 micrometers at low pressure
 - d) range of 200 to 300 micrometers at low pressure

4. **Low pressure single fluid nozzles operate at**
 - a) pressures of 0.3 to 0.7 MPa
 - b) pressures of 0.4 to 0.8 MPa
 - c) pressures of 0.5 to 0.9 MPa
 - d) pressures of 0.6 to 1 MPa

5. **Halon 1301 is stored as a liquid at high pressure but**
 - a) boils at -8 degrees Celsius at atmospheric conditions
 - b) boils at -28 degrees Celsius at atmospheric conditions
 - c) boils at -38 degrees Celsius at atmospheric conditions
 - d) boils at -58 degrees Celsius at atmospheric conditions

6. **The Halon 1211 boils at**
 - a) -4 degrees Celsius
 - b) -8 degrees Celsius
 - c) -48 degrees Celsius
 - d) -58 degrees Celsius

7. **Losses from a computer fire causing service interruption**
- a) can be devastating to transportation systems
 - b) can be devastating to communication networks
 - c) can be devastating to security operations
 - d) Any of the above
8. **A solenoid valve is controlled by an electric current**
- a) through a solenoid bolt
 - b) through a solenoid coil
 - c) through a solenoid brake
 - d) through a solenoid voltmeter
9. **High pressure nozzles generally operate at**
- a) pressures of 1 MPa and up
 - b) pressures of 10 MPa and up
 - c) pressures of 100 MPa and up
 - d) pressures of 1000 MPa and up
10. **The focal length of an optical system is a measure of**
- a) how strongly it converges or diverges light
 - b) how strongly it converges or diverges signal
 - c) how strongly it converges or diverges color
 - d) how strongly it converges or diverges current
11. **An aperture is a hole or an opening**
- a) through which light decreases
 - b) through which light increases
 - c) through which light vanishes
 - d) through which light travels
12. **The effective diameter for fixed receiving optics**
- a) varies with particle size
 - b) varies with laser power and obscuration
 - c) varies with signal amplification
 - d) All of the above
13. **The transit time of particles passing through the fixed**
- a) probe volume generates the number density
 - b) probe volume generates the number flow
 - c) probe volume generates the number space
 - d) probe volume generates the number velocity

14. **Scattered light amplitude, signal period and phase**
- a) can be measured by the signal capacitor
 - b) can be measured by the signal processor
 - c) can be measured by the signal booster
 - d) can be measured by the signal transmitter
15. **A bias towards one particular size class over another**
- a) can occur if the signal is set improperly
 - b) can occur if the signal is set properly
 - c) can occur if the voltage is set improperly
 - d) can occur if the voltage is set properly
16. **A geometric mean is a type of average that indicates**
- a) the typical value of a set of directions
 - b) the typical value of a set of parameters
 - c) the typical value of a set of processes
 - d) the typical value of a set of numbers
17. **Sauter mean diameter is a common measure in fluid dynamics**
- a) to estimate the initial particle size
 - b) to estimate the final particle size
 - c) to estimate the discrete particle size
 - d) to estimate the average particle size
18. **Photomultiplier tubes are sensitive detectors of light in**
- a) the ultraviolet ranges of the electromagnetic induction
 - b) the visible ranges of the electromagnetic spectrum
 - c) the near-infrared ranges of the electromagnetic pulse
 - d) the infrared ranges of the electromagnetic force
19. **The square grid is a regular tiling of**
- a) the Euclidean plane
 - b) the Euclidean vector
 - c) the Euclidean distance
 - d) the Euclidean zoning
20. **A trifluoromethane referred to as HFC-23 or FE-23**
- a) has a molecular weight of 50 kg/kmol
 - b) has a molecular weight of 60 kg/kmol
 - c) has a molecular weight of 70 kg/kmol
 - d) has a molecular weight of 80 kg/kmol

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