

***** EXAMINATION *****

**CFD MODELING OPTIONS FOR TOTAL FLOODING
BEHAVIOR OF ULTA FINE WATER MIST**

1. **The phenomenon of small droplets suspended in air is**
 - a) a bubble
 - b) mist
 - c) dew
 - d) fog

2. **An integral part of a shell and tube heat exchanger is**
 - a) the baffle
 - b) the gasket
 - c) the valve
 - d) the cylinder

3. **An isomeric form of an organic chemical obtained from**
 - a) petroleum is isobutane
 - b) petroleum is methane
 - c) petroleum is heptane
 - d) petroleum is propane

4. **The device or signal intended to monitor a machine or**
 - a) system is a monitor poll
 - b) system is a agent push
 - c) system is a viscometer
 - d) system is a telltale

5. **A small volume of liquid, bounded completely by free**
 - a) surfaces is a droplet
 - b) surfaces is an inlet
 - c) surfaces is a mist
 - d) surfaces is a bubble

6. **The opening through which liquid or gas enters a machine or**
 - a) device is a junction
 - b) device is an inlet
 - c) device is a bubble
 - d) device is a valve

7. **A system in which particles are dispersed in a continuous**
- a) phase of a different composition is diffusion
 - b) phase of a different composition is conduction
 - c) phase of a different composition is dispersion
 - d) phase of a different composition is emission
8. **The colorless volatile poisonous water-soluble liquid used**
- a) as solvent in antifreeze for a car is a ethanol
 - b) as solvent in antifreeze for a car is a methanol
 - c) as solvent in antifreeze for a car is a butane
 - d) as solvent in antifreeze for a car is a hexane
9. **The dense gas model simulates the transport behavior of**
- a) mist as a cryogenic process
 - b) mist as a absorption process
 - c) mist as a two-phase gas
 - d) mist as a single-phase gas
10. **The dense gas model simulates the transport behavior and**
- a) provides a robust tool to predict mist suppression
 - b) provides a robust tool to predict mist leakage
 - c) provides a robust tool to predict mist distribution
 - d) provides a robust tool to predict mist filtration
11. **A proprietary ultra fine mist technology uses patented**
- a) techniques to generate extremely fine water mist
 - b) techniques to extract extremely fine water mist
 - c) techniques to deliver extremely fine water mist
 - d) All of the above
12. **Varying a carrier gas volumetric flow, the mass of water**
- a) water loading can be increased up to 15%
 - b) water loading can be increased up to 30%
 - c) water loading can be increased up to 45%
 - d) water loading can be increased up to 60%
13. **The fluent CFD program was used to model**
- a) flow
 - b) turbulence
 - c) energy
 - d) All of the above
14. **The peak mist concentration was attained in approximately**
- a) 7 minutes
 - b) 17 minutes
 - c) 27 minutes
 - d) 37 minutes

15. **Something that causes or forms a blockage or hindrance**
- a) is a checkpoint
 - b) is an obstruction
 - c) is a hitch
 - d) is a barrier
16. **The mass of many particles of a material divided by the**
- a) total volume they occupy is a bulk viscosity
 - b) total volume they occupy is a bulk velocity
 - c) total volume they occupy is a bulk density
 - d) total volume they occupy is a bulk energy
17. **The scattering or distribution of something within an area**
- a) or space is a dispersion
 - b) or space is a diffusion
 - c) or space is a transmission
 - d) or space is an interaction
18. **The force between particles that have an effect on each**
- a) other and work together is a dispersion
 - b) other and work together is a diffusion
 - c) other and work together is a dilution
 - d) other and work together is an interaction
19. **The degree to which a substance is able to damage an exposed**
- a) organism is radiation
 - b) organism is toxicity
 - c) organism is passivity
 - d) organism is declivity
20. **The dense gas model predicted water concentration acts as**
- a) a function of toxicity
 - b) a function of fire suppression
 - c) a function of velocity
 - d) a function of time

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