

**\*\*\* EXAMINATION \*\*\***

**THE EFFECT OF WEATHERING ON PILOTED IGNITION  
AND FLASH POINT OF A SLICK OF OIL**

1. **The convenient reference point for evaluating properties**
  - a) related to convective heat transfer is Boyle temperature
  - b) related to convective heat transfer is inverse temperature
  - c) related to convective heat transfer is bulk temperature
  - d) related to convective heat transfer is forging temperature
2. **The temperature at which the first flashes are observed**
  - a) is called flash point
  - b) is called boiling point
  - c) is called heating point
  - d) is called radiation point
3. **The release of a liquid petroleum hydrocarbon into the**
  - a) environment due to human activity is soil contamination
  - b) environment due to human activity is oil spill
  - c) environment due to human activity is ship pollution
  - d) environment due to human activity is marine debris
4. **The two systems with the same temperatures are in**
  - a) thermal radiation
  - b) thermal diffusion
  - c) thermal conduction
  - d) thermal equilibrium
5. **Piloted ignition and flash point are strong functions of**
  - a) the burning level
  - b) the heating level
  - c) the weathering level
  - d) the radiation level
6. **Pre-mature boiling of the water sub-layer inhibits**
  - a) ignition
  - b) the flash point
  - c) the boiling point
  - d) pollution

7. **The efficiency of the ignition and burning process is crucial**
- a) for the successful elimination of the ignition point
  - b) for the successful elimination of the crude oil
  - c) for the successful elimination of the heat flux
  - d) for the successful elimination of the water sub-layer
8. **The mixture of two or more immiscible liquids is called**
- a) expulsion
  - b) diffusion
  - c) pollution
  - d) emulsion
9. **The most accidental and deliberate burns of spilled oil at**
- a) sea suffer from the effects of oil and water
  - b) sea suffer from the effects of wind and waves
  - c) sea suffer from the effects of mass and heat transfer
  - d) sea suffer from the effects of animals and humans
10. **The alteration of the physical or chemical properties of the**
- a) oil can require additional energy for emulsion
  - b) oil can require additional energy for pollution
  - c) oil can require additional energy for ignition
  - d) oil can require additional energy for diffusion
11. **The flash point temperature is of importance**
- a) and sufficient to describe the ignition process
  - b) and sufficient to describe the emulsion process
  - c) but not sufficient to describe the ignition process
  - d) but not sufficient to describe the emulsion process
12. **In gas phase ignition, the flow and geometrical**
- a) characteristics determines the mixing time
  - b) characteristics determines the ignition time
  - c) characteristics determines the induction time
  - d) characteristics determines the heating time
13. **The proportionality coefficient between the heat flux and the**
- a) thermodynamic driving force is heat equation
  - b) thermodynamic driving force is heat transfer efficiency
  - c) thermodynamic driving force is heat exchanger
  - d) thermodynamic driving force is heat transfer coefficient
14. **The flame in which the oxidizer combines with the fuel by**
- a) diffusion is a premixed flame
  - b) diffusion is a diffusion flame
  - c) diffusion is an oxidized flame
  - d) diffusion is an eternal flame

15. **The dominant weathering process that affects the crude oils**
- a) in the marine environment is filtration
  - b) in the marine environment is hydrolization
  - c) in the marine environment is evaporation
  - d) in the marine environment is radiation
16. **The study of the adverse effects of chemicals on living**
- a) organisms is toxicology
  - b) organisms is chronology
  - c) organisms is hydrology
  - d) organisms is dermatology
17. **Crude oil can be altered by evaporation depending on the**
- a) physical properties of crude oil
  - b) chemical properties of crude oil
  - c) toxicological properties of crude oil
  - d) All of the above
18. **The most important fraction in any crude oil can be**
- a) constituted by hydroxides
  - b) constituted by hydrocarbons
  - c) constituted by oxocarbons
  - d) constituted by hypofluorous
19. **The light boiling fractions of standard crude oil can**
- a) contain up to 15 hydrocarbons
  - b) contain up to 50 hydrocarbons
  - c) contain up to 150 hydrocarbons
  - d) contain up to 500 hydrocarbons
20. **Weathering affects the heat flux for ignition and flash point**
- a) temperature but has no effect on the toxicological property
  - b) temperature but has no effect on the fire property
  - c) temperature but has no effect on the chemical property
  - d) temperature but has no effect on the physical property

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