

***** EXAMINATION *****

POTENTIAL BENEFITS OF SMART REFRIGERANT DISTRIBUTORS

1. **A heat cycle compound undergoing a phase change**
 - a) from a gas to a liquid and back is a refrigerant
 - b) from a gas to a liquid and back is a desiccant
 - c) from a gas to a liquid and back is a disinfectant
 - d) from a gas to a liquid and back is a octahedral
2. **A device widely used in space heating and natural gas**
 - a) processing is a pressure exchanger
 - b) processing is a heat exchanger
 - c) processing is a liquid exchanger
 - d) processing is a gas exchanger
3. **The most common type of refrigerant mixture is**
 - a) eutectic
 - b) dendritic
 - c) geotropic
 - d) zeotropic
4. **A device used for measuring wind speed**
 - a) is a nanometre
 - b) is a speedometer
 - c) is a anemometer
 - d) is a thermometer
5. **A series of loops is a**
 - a) coil
 - b) warp
 - c) boil
 - d) flux
6. **A quantity in physics which is related to speed is**
 - a) density
 - b) mortality
 - c) velocity
 - d) emissitivity

7. **A volume of fluid passing through a given surface per unit**
- a) time in cubic feet per second is the mass flux controller
 - b) time in cubic feet per second is the volumetric flow rate
 - c) time in cubic feet per second is the mass flow meter
 - d) time in cubic feet per second is the fluid dynamics
8. **A junction between two different metals that produce a**
- a) voltage is a thermocouple
 - b) voltage is a thermostat
 - c) voltage is a thermal inertia
 - d) voltage is a thermodynamics
9. **The measure of the variability or probability distribution**
- a) is a confidence interval
 - b) is a standard score
 - c) is a standard error
 - d) is a standard deviation
10. **An interface that facilitates the preparation of simulation**
- a) input data is the touch user interface
 - b) input data is the voice user interface
 - c) input data is the graphical user interface
 - d) input data is the zooming user interface
11. **The act of repeating a process with the aim of**
- a) approaching a desired result is an repetition
 - b) approaching a desired result is an iteration
 - c) approaching a desired result is an equation
 - d) approaching a desired result is an incrimination
12. **A successful simulation run requires several passes**
- a) through the refrigerant circuitry
 - b) through the refrigerant path
 - c) through the refrigerant parameter
 - d) through the refrigerant tube
13. **Correlations for calculating heat transfer in the air side**
- a) includes the heat-transfer coefficient for flat fins
 - b) includes the heat-transfer coefficient for wavy fins
 - c) includes the heat-transfer coefficient for slit fins
 - d) All of the above
14. **Correlations for calculating heat transfer in the refrigerant**
- a) side includes the single-phase pressure drop, smooth tube
 - b) side includes the heat-transfer coefficient for wavy fins
 - c) side includes the heat-transfer coefficient for flat fins
 - d) side includes the heat-transfer coefficient for slit fins

15. **The study of the conversion of energy into work and heat**
- a) is geodynamics
 - b) is aerodynamics
 - c) is hydrodynamics
 - d) is thermodynamics
16. **When the refrigerant enters the evaporator by a single tube**
- a) the first split will exist within the suction line
 - b) the first split will exist within the coil assembly
 - c) the first split will exist within the refrigerant steam
 - d) the first split will exist within the condenser
17. **A significant part of heat transfer resistance between the**
- a) air and refrigerant is on the air-side of heat exchanger
 - b) air and refrigerant is on the refrigerant side
 - c) air and refrigerant is on the middle side of heat exchanger
 - d) air and refrigerant is not on any side of heat exchanger
18. **The process of constructing new data points outside a**
- a) discrete set of known data points is interpolation
 - b) discrete set of known data points is extrapolation
 - c) discrete set of known data points is conduction
 - d) discrete set of known data points is distribution
19. **The quantity of heat that passes in unit time through a**
- a) plate of thickness is a thermal resistance
 - b) plate of thickness is a thermal transmittance
 - c) plate of thickness is a thermal conductance
 - d) plate of thickness is a thermal insurance
20. **A transfer of thermal energy between molecules in a substance**
- a) due to a temperature gradient is heat conduction
 - b) due to a temperature gradient is heat convection
 - c) due to a temperature gradient is heat radiation
 - d) due to a temperature gradient is heat diffusion

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