

HMT



Question No.	Question
1	Heat exchange between water and air in radiator takes place by: a) Conduction b) Convection c) a) & b) d) radiation
2	The fastest mode of heat transfer a) conduction b) Convection c) Radiation d) All the above
3	Surface condenser of a steam power plant is heat exchange of: a) Parallel flow type b) Cross flow type c) Counter flow type d) Mixed flow type
4	According to Newton's law of cooling, the heat transfer from a hot body to cold body is directly proportional to the: a) Surface area b) Difference of temperature between the bodies c) Either a or b d) Both a and b
5	Stefan Boltzmann law is applicable for heat and transfer by" a) Radiation b) Conduction c) Convection d) Expansion
6	According to Newton's law of cooling the heat transfer from a hot body to cold body is directly proportional to: a) Surface area b) Difference of temperature between the bodies c) Either A or B d) Both a and b
7	Surface condenser of a steam power plant is heat exchanger of: a) Parallel flow type b) Cross flow type c) Counter flow type d) Mixed flow type
8	The fastest mode of heat transfer is: a) Conduction b) Convection c) Radiation d) All of these
9	Define effectiveness depends on: a) Biot number

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	b) Nusselt number c) Reynolds number d) Prandlt number
10	Transfer Coefficient is forced Convection is calculated from the correlation: a) Nu, Pr, Re b) Nu, Pr, Gr c) Nu, Pr, Ma d) Nu, Re, Bi
11	The critical radius of insulation for a circular pipe is: a) Kh b) K/h c) 2K/h d) K-h
12	With usual notation the radiation heat emission from a grey surface is: a) $\sigma T^4 / \epsilon$ b) $\sigma T^3 \epsilon$ c) $\sigma T^4 \epsilon$ d) $\epsilon T^4 / \sigma$
13	With usual notation which of the following combination is true for black body radiation: a) $\alpha = 0, \rho = 0, \bar{c} = 1$ b) $\alpha = 0, \rho = 1, \bar{c} = 1$ c) $\alpha = 1, \rho = 0, \bar{c} = 0$ d) $\alpha = 0, \rho = 0, \bar{c} = 0$
14	In heat exchanger designs LMTD is defined with usual notations as: a) $\frac{\Delta t_0 - \Delta t_1}{\ln 1 \frac{\Delta t_1}{\Delta t_0}}$ b) $\frac{\Delta t_0 - \Delta t_1}{\ln 1 \frac{\Delta t_0}{\Delta t_1}}$ c) $\frac{\Delta t_0 - \Delta t_1}{\ln(\Delta t_1 - \Delta t_0)}$ d) $\frac{\Delta t_0 - \Delta t_1}{\ln(\Delta t_0 - \Delta t_1)}$