An ice block submerged in the water, if the ice melts level of water (increase, decrease, remains same, none)

*** Simply supported beam with w point load at the middle, max. bending moment? (wl/4)**

*** Simply supported beam with UDL ,max.deflection (wl4/384EI)**

*** Cantilevel beam point load at tip,max.bending momemt comes at (end)**

*** When bearing life L10 represents (bearings 10%survive,bearings 10% fails, none)**

*** For welding high carbon steels which type of flame is used (oxidizing, carburizing, neutral, none)**

*** Arrange the following cutting tools in decreasing order of machining hardness...Ceramics**

*** When P1 and P2 are the loads acting on bearings with life L1 and L2 then L1/L2=? L1/L2={P2/P1}10/3**

*** Product simplification does not mean? (Product characterization)**

*** Which of the following process has the most scope in manufacturing? CAD/CAM, CAM, CIM, All the above.**

*** Concurrent engineering means? (Manufacturing, designing, both, none)**

*** Which manufacturing process yields higher output and increases worker productivity- (process layout, line+process, functional layout)**

*** 18-4-1 represents-, Tungsten-Cr-Vn**

*** For which material is negative allowance rovided- (Graphite,steel,bronze,cast iron)**

*** What is the recrystallisation temperature of tin- (60,300,1000,none)**

*** What is the purpose of borax in soldering-**

*** Top gates are provided in which type of casting-(Shallow casting,simple,complex,none)**

**** Which statement is true regarding simple gear trains-(i/p and o/p shafts r fixed, each shaft has 2 gears, i/p & o/p shafts r moving)***

** What is the purpose of normalizing- (Refining of grain structure)*

** As the grain size is decreased-(Hardness increases,corrosion resistance decreases,both)*

** Isothermal gas is filled in a vessel at a pressure P and temperature T then considering the compressible forces as the height increases pressure ??(linearly increases linearly decreases exponentially increase)*

** A bottle is filled with water and air and is tied to a string and is rotated in horizontal direction. Then in which direction will air bubble travel? (bottom,neck,uniformly spread)*

** A empty bottle(in vaccum) filled with a gas at temp T and press P when the pressure of bottle reaches P temperature of the gas is _? (T,T/K,TK)*

** Bearing somerfield number _ with load on bearing? (increases,decreases,no change)*

** Critical radius for a sphere is-(2k/h)*

** Critical radius exist for_ (spherical,cylindrical,both,slab)*

** Convectional resistance/internal resistance is called (biot number)*

** Nusselt no. is? (hl/k)*

** EOQ=?*

** Which statement is true regarding critical path method? (i only one critical path exists for a network, more than one with same duration,)*

** Shipment cost,inspection cost,storage cost comes under_ (carrying cost ,holding cost,)*

** Ischronous governers sensitivity is- (zero,infinite)*

** Self energized brakes are-(friction moment acts in the direction of application of force,opposite to the direction of force, does not need a force to act ,)*

** The ratio of heat capacities for evaporator and condenser is_ (Zero,infinity)*

** When steam and air mixture with partial pressure 0.06 and 0.07 enters a condenser what is the condenser pressure? (0.06,0.07,0.53,0.03)*

**** In pulverized burning of coal heat transfer from boiler to water occurs through_(predominant radiation, convection, conduction, conduction+convection)***

**** Rankine cycle efficiency for same parameters increases mostly with_(reheat, regeneration, super heating)***

**** Ericson cycle with all reversible processes assume_(carnot cycle,stirling,brayton***

**** Air delivery tank at outlet of reciprocating compressor is provided for_ (provide constant pressure, avoid cavitation,)***

**** High speed centrifugal pump has _? (vanes faces in forward direction side,backward,radial vanes)***

**** Thermal efficiency in decreasing order_? (Otto cycle>dual cycle>diesel cycle)***

**** When a 1000 K body comes in contact with atmosphere at 300K a loss of 9000 KJ heat is transferred. The net available energy transferred is_***

**** When entropy of a system increases_? (unavailable energy increases)***

**** Rolling is a process widely used for_?***

**** Tool nomenclature_?***

**** In francis turbine movement of steam?***

**** For low power consumption _? (rake angle should be increased / decreased, nose angle increased/ decreased)***

**** Continuous chips occur in_? (High speeds,low speeds,both,none)***

**** Primary forces in a reciprocating engine_? (fully balanced, partially balanced, completely unbalanced, none)***

In proximate analysis pyrogallol is used for analysis of which element_? (nitrogen,oxygen)

**** Sulphur content in fuel greatly affects_? (corrosion)***

**** Heat transfer through radiation can be increased by_? (decreasing emissivity and increases temperature of hot body)***

** Which theory of failure clearly explains the failure in case of ductile material? (Maximun shear stress theory or Guests or trescas theory)*

When a material is subjected to continuous cycles which limit is being verified? (Endurance limit)

Where is stress concentration maximum? (notches, stress reducing through cuts)

** Power transmitted through a belt drive_? P(T2-T1)*

** According to Eulers theory crippling or buckling load is ____ (Wcr = $C\pi^2EI/l^2$)*

** During sensible heating, specific humidity_? (remains constant)*

** COP of a refrigerator is _? (greater than 1)*

** The maximum temperature in a refrigeration cycle is_? (less than/greater than/equal to critical temperature)*

** The pressure at the throat of the nozzle_? (maximum,min)*

** For a statically determinate set of forces for equilibrium_? ($\sum f(X), f(Y), f(Z)=0, \sum M=o$)*

** For a statically determinate set of forces- (there r as many equations as the no. of unknowns)*

** 1-2-3 analysis is used for_? (1.break even analysis, ??)*

** A problem on mean time of service something like a salesman has a rating of 120. considering 10% allowance time calculate the time required to serve 120?*

** A problem n determining time in a queue?*

** Energy equation for a laminar flow is _? (Uniform and steady ,non uniform and unsteady)*

** Undercuts in welding occurs due to_? (low welding current, high welding current)*

** Work holding equipment in shearing?*

** At the centre of a nozzle _? (Mach no<1 >=1;=1)*