



DESIGN OF MACHINE ELEMENTS

Question No.	Question
1	In boiler plate riveting , the rivet head used usually are: a) Pan head b) Snap head c) Conical head d) Countersunk head
2	A journal bearing takes up loads ----- to the axis of the shaft a) parallel b) perpendicular c) inclined d) tangential
3	Two mating gear have 70 & 30teeth. If their common module is 5mm per tooth, the centre distance between their axis is: a) 200mm b) 250mm c) 150mm d) 100mm
4	If T_1 & T_2 are tensions in tight side and slack side of the belt respectively, then the initial tension t_0 is equal to a) $(T_1 - T_2)/2$ b) $(T_1 + T_2)$ c) $(T_1 + T_2)/2$ d) $(T_1 - T_2)$
5	A key made from cylindrical disc having segmental cross section is known as: a) Feather key b) Gib headed key c) Woodruff key d) Flat saddle key
6	Diameter of rivet for a plate thickness t is taken as: a) $6\sqrt{t}$ b) $6.05\sqrt{t}$ c) $5.5\sqrt{t}$ d) $7.05\sqrt{t}$
7	In case of thick cylinder the ratio of diameter to wall thickness is less than or equal to: a) 20 b) 30 c) 40 d) 50
8	Design of pulley key and shaft: a) All the three are designed for same b) Strength pulley my strongest c) Key is made strongest d) Key is made weakest
9	In a multi v belt transmission is one of the belt is broken we should change: a) All belt b) All weak belt c) Broken belt d) Adjacent belt



DESIGN OF MACHINE ELEMENTS

10	Centrifugal tension in belt: a) increase power transmission b) decrease power transmission c) does not affect the power transmission d) increase the certain limit
11	In oil less bearing : a) oil film pressure is generated only by rotation b) Only supplying under pressure c) do not require oil d) greasing is required
12	Bearing characteristic number: a) ZN/P b) Z/PN c) P/ZN d) ZP/N
13	Kennedy keys are used for applications like: a) Precision key b) light duty c) heavy duty d) all service
14	In a ball bearing which is not harder than the other part: a) inner race b) outer race c) ball d) all are equally hardened
15	Pivot and collars bearing are meant to carry: a) Vertical and axial loads respectively b) Axial and Vertical loads respectively c) Axial loads only d) Vertical loads only
16	In a ----- riveted joint the number of row decreases as we proceed from innermost outermost row: a) Diamond b) Chain c) Zigzag d) double



DESIGN OF MACHINE ELEMENTS

17	In a ----- welded joint the parent member are placed side by side : a) plug b) fillet c) TIG d) Butt
18	The most suitable theory of failure for ductile material is: a) The maximum normal stress theory b) Maximum distortion energy theory c) the maximum shear stress theory d) The Coulomb Mohr theory
19	A Cotter joint is used to connect two rods which are in: a) tension only b) compression only c) shear only d) tension and compression
20	Preloading of bolts: a) Improves factor of safety b) Reduces factor of safety c) Prevents leakage d) Secure the part tightly