

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	1	<p>Which of the following properties pertain to Cast Iron</p> <p>A1 : Resistance</p> <p>A2 : Ductility</p> <p>A3 : Wear Resistance</p> <p>A4 : Toughness</p>	4.0	1.00
Objective Question				
2	2	<p>Continuous chip is formed when machining speed is</p> <p>A1 : Low</p> <p>A2 : Medium</p> <p>A3 : High</p> <p>A4 : At 5 rpm</p>	4.0	1.00
Objective Question				
3	3	<p>In limits and Fits, the term “ Allowance” usually refer to</p> <p>A1 : Difference between maximum size and minimum size of the shaft</p> <p>A2 : Difference between maximum size and minimum size of a hole</p> <p>A3 : Maximum clearance between shaft and hole</p> <p>A4 : Minimum clearance between shaft and hole</p>	4.0	1.00
Objective Question				
4	4	<p>Numerically controlled machine tool is operated by</p> <p>A1 : Numerical controls</p>	4.0	1.00

		<p>A2 Output –Input modules :</p> <p>A3 Feedback system :</p> <p>A4 A series of coded instruction :</p>		
--	--	---	--	--

Objective Question

5	5	<p>The critical path in PERT/CPM chart is obtained by joining the events having</p> <p>A1 Inventory Control :</p> <p>A2 Productivity :</p> <p>A3 Production, Planning and Control :</p> <p>A4 All of these :</p>	4.0	1.00
---	---	--	-----	------

Objective Question

6	6	<p>The time taken by the bodies to regain original shape , after compression is known as</p> <p>A1 Time of Compression :</p> <p>A2 Time of Restitution :</p> <p>A3 Time of Collision :</p> <p>A4 Time of Expansion :</p>	4.0	1.00
---	---	--	-----	------

Objective Question

7	7	<p>The conditions of equilibrium for coplanar non-concurrent forces are</p> <p>A1 <math>\Sigma H = 0, \Sigma V = 0</math> :</p> <p>A2 <math>\Sigma H = 0, \Sigma M = 0</math> :</p> <p>A3 <math>\Sigma V = 0, \Sigma M = 0</math> :</p> <p>A4 <math>\Sigma H = 0, \Sigma V = 0, \Sigma M = 0</math> :</p>	4.0	1.00
---	---	---	-----	------

Objective Question

8	8	<p>Modulus of elasticity is defined as the ratio of</p> <p>A1 Shear stress to shear strain</p>	4.0	1.00
---	---	--	-----	------

		<p>:</p> <p>A2 Linear stress to linear strain :</p> <p>A3 Linear strain to lateral strain :</p> <p>A4 Lateral strain to lateral stress :</p>		
--	--	--	--	--

Objective Question

9	9	<p>The relation between E (modulus of elasticity), C (modulus of rigidity) and 1/ m, Poisson's ratio</p> <p>A1 <math>E = C \left[ 1 + \frac{1}{m} \right]</math> :</p> <p>A2 <math>E = 2C \left[ 1 + \frac{1}{m} \right]</math> :</p> <p>A3 <math>E = C \left[ 1 + \frac{2}{m} \right]</math> :</p> <p>A4 <math>E = 2C \left[ 1 + \frac{2}{m} \right]</math> :</p>	4.0	1.00
---	---	--	-----	------

Objective Question

10	10	<p>_____ governor is a dead weight governor</p> <p>A1 Watt :</p> <p>A2 Pickering :</p> <p>A3 Hartnell :</p> <p>A4 Porter :</p>	4.0	1.00
----	----	--	-----	------

Objective Question

11	11	<p>The power of a porter governor is</p> <p>A1 Proportional to square of the speed :</p> <p>A2 Inversely proportional to speed :</p> <p>A3 Inversely proportional to square of the speed :</p> <p>A4 Independent of speed :</p>	4.0	1.00
----	----	---	-----	------

Objective Question

--	--	--	--	--

12	12	<p>By which of the following the resistance to fatigue of a material is measured</p> <p>A1 : Endurance Limit</p> <p>A2 : Ultimate tensile strength</p> <p>A3 : Young's Modulus</p> <p>A4 : Elastic Limit</p>	4.0	1.00
----	----	--	-----	------

Objective Question

13	13	<p>In sleeve and cotter joint, the length of cotter is taken as</p> <p>A1 : 2 d</p> <p>A2 : 3 d</p> <p>A3 : 4 d</p> <p>A4 : 4.5 d</p>	4.0	1.00
----	----	---	-----	------

Objective Question

14	14	<p>One Joule (J) is equal to</p> <p>A1 : 1 Nm</p> <p>A2 : 1 kNm</p> <p>A3 : 10 Nm/s</p> <p>A4 : 10 kNm/s</p>	4.0	1.00
----	----	--	-----	------

Objective Question

15	15	<p>The heating and expanding of a gas is called</p> <p>A1 : Thermodynamic System</p> <p>A2 : Thermodynamic Cycle</p> <p>A3 : Thermodynamic Process</p> <p>A4 : Thermodynamic Law</p>	4.0	1.00
----	----	--	-----	------

## Objective Question

16	16	<p>Thermal conductivity of solid metals _____ with rise in temperature</p> <p>A1 : Decreases</p> <p>A2 : Increases</p> <p>A3 : Remains same</p> <p>A4 : First increases to maximum values and then decreases to zero</p>	4.0	1.00
----	----	--	-----	------

## Objective Question

17	17	<p>An automobile radiator is _____ type of heat exchanger</p> <p>A1 : Cross Flow</p> <p>A2 : Regenerator</p> <p>A3 : Counter Flow</p> <p>A4 : Parallel Flow</p>	4.0	1.00
----	----	---	-----	------

## Objective Question

18	18	<p>The ratio of brake power to indicated power of an IC engine is called</p> <p>A1 : Mechanical Efficiency</p> <p>A2 : Thermal Efficiency</p> <p>A3 : Volumetric Efficiency</p> <p>A4 : Relative Efficiency</p>	4.0	1.00
----	----	---	-----	------

## Objective Question

19	19	<p>The printer's ink is an example of</p> <p>A1 : Newtonian Fluid</p> <p>A2 : Non-Newtonian Fluid</p> <p>A3 : Thixotropic Substances</p>	4.0	1.00
----	----	--	-----	------

		A4 Elastic Solid :		
Objective Question				
20	20	Inclined tube manometer is useful for the measurement of _____ pressure  A1 Small :  A2 Medium :  A3 High :  A4 Negative :	4.0	1.00
Objective Question				
21	21	With which of the following , is the phenomenon of “Weld Decay” is associated  A1 Brass :  A2 Stainless Steels :  A3 Aluminium Alloys :  A4 Manganese Alloys :	4.0	1.00
Objective Question				
22	22	Which of the following gases are used in Tungsten Inert Gas Welding  A1 Helium and Neon :  A2 Hydrogen and Oxygen :  A3 Argon and Helium :  A4 Carbondioxide and Hydrogen :	4.0	1.00
Objective Question				
23	23	Which of the following are measured by a “ Sine Bar”  A1 Gear Profiles :  A2 External Tapers :  A3 Internal Tapers	4.0	1.00

		: A4 Surface Roughness :		
--	--	--------------------------------	--	--

Objective Question

24	24	Numerical controlled can be applied to  A1 Milling Machines :  A2 Drilling and Boring Machines :  A3 Grinding and Sawing Machines :  A4 All of these :	4.0	1.00
----	----	--	-----	------

Objective Question

25	25	_____ activities are the activities for which total float is equal to zero  A1 Dummy :  A2 Sub critical :  A3 Critical :  A4 Supercritical :	4.0	1.00
----	----	--	-----	------

Objective Question

26	26	In a screw jack the effort (P) required to lift the load (W) is given by the relation $\alpha$ , angle of repose and $\phi$ , angle of friction  A1 $P=W \tan (\alpha - \phi)$ :  A2 $P=W \tan (\alpha + \phi)$ :  A3 $P=W \tan (\alpha^2 + \phi)$ :  A4 $P=W \tan (\alpha^2 - \phi)$ :	4.0	1.00
----	----	---	-----	------

Objective Question

27	27	In case of a string, the tension is maximum  A1 At Midway :	4.0	1.00
----	----	--	-----	------

		<p>A2 At left support :</p> <p>A3 At right support :</p> <p>A4 At Quarter span :</p>		
--	--	--	--	--

Objective Question

28	28	_____ has a non-linear stress-strain curve	4.0	1.00
		<p>A1 Aluminium :</p> <p>A2 Rubber :</p> <p>A3 Low Carbon Steel :</p> <p>A4 Copper :</p>		

Objective Question

29	29	What is dedendum circle diameter equal to	4.0	1.00
		<p>A1 Base circle diameter <math>\times \cos\phi</math> :</p> <p>A2 Addendum circle diameter <math>\times \cos\phi</math> :</p> <p>A3 Length of arc of contact <math>\times \cos\phi</math> :</p> <p>A4 Pitch circle diameter <math>\times \cos\phi</math> :</p>		

Objective Question

30	30	Which of the following is used as a lubricant in a rope brake dynamometer	4.0	1.00
		<p>A1 Water :</p> <p>A2 Oil :</p> <p>A3 Grease :</p> <p>A4 No lubricant is used :</p>		

Objective Question

31	31	_____ spring is used to absorb shocks and vibrations	4.0	1.00
		A1 Torsion		

		:  A2 Leaf :  A3 Closely coiled helical :  A4 Open coiled helical :		
--	--	--	--	--

Objective Question

32	32	In Journal bearing, frictional power varies _____ journal diameter  A1 Directly as :  A2 Directly as square of :  A3 Directly as cube of :  A4 Inversely as cube of :	4.0	1.00
----	----	---	-----	------

Objective Question

33	33	Only Throttling calorimeter is used for measuring  A1 Very low dryness fraction upto 0.7 :  A2 Very high dryness fraction upto 0.98 :  A3 Dryness fraction of only low pressure steam :  A4 Dryness fraction of only high pressure steam :	4.0	1.00
----	----	--	-----	------

Objective Question

34	34	In the polytropic process equation $PV^n = \text{constant}$ , if 'n' is infinitely large, the process is termed as  A1 Constant Volume :  A2 Constant Pressure :  A3 Constant Temperature :  A4 Adiabatic :	4.0	1.00
----	----	---	-----	------

Objective Question

35	35	For solar collectors, what combinations of surface characteristics is required	4.0	1.00
----	----	--	-----	------

		<p>A1 High absorptivity and high reflectivity :</p> <p>A2 High reflectivity and high emissivity :</p> <p>A3 High emissivity and low absorptivity :</p> <p>A4 High absorptivity and low emissivity :</p>		
--	--	---	--	--

Objective Question

36	36	<p>In a shell and tube exchangers, the corrosive liquid is normally passed through</p> <p>A1 Tube Side :</p> <p>A2 Shell Side :</p> <p>A3 First Tube Side and then Shell Side :</p> <p>A4 Baffles :</p>	4.0	1.00
----	----	---	-----	------

Objective Question

37	37	<p>Normal heptane content in a fuel for SI engine</p> <p>A1 Retards auto ignition :</p> <p>A2 Accelerates auto ignition :</p> <p>A3 Does not affect auto ignition :</p> <p>A4 Reduce the size of the engine :</p>	4.0	1.00
----	----	---	-----	------

Objective Question

38	38	<p>Darcy-Weisbach equation is used to find loss of head due to</p> <p>A1 Sudden Enlargement :</p> <p>A2 Sudden Contraction :</p> <p>A3 Friction :</p> <p>A4 Bends :</p>	4.0	1.00
----	----	---	-----	------

Objective Question				
39	39	<p>Sonic velocity (C) for adiabatic process is given as</p> <p>A1 <math>C = \sqrt{\gamma RT^2}</math> :</p> <p>A2 <math>C = \sqrt{\gamma RT}</math> :</p> <p>A3 <math>C = \sqrt{\gamma^2 RT}</math> :</p> <p>A4 <math>C = \gamma RT</math> :</p>	4.0	1.00

Objective Question				
40	40	<p>In a single point turning operation with a cemented carbide and steel combination having a Taylor exponent of 0.25, if the cutting speed is halved, then the tool life will become</p> <p>A1 Half :</p> <p>A2 Two Times :</p> <p>A3 Eight Times :</p> <p>A4 Sixteen Times :</p>	4.0	1.00

Objective Question				
41	41	<p>On turning a corner, a motorist rushing at 15 m/s, find a child on the road 40 m ahead. He instantly stops the engine and applies brakes, so as to stop the car within 5 m of the child. Calculate, retardation and time required to stop the car</p> <p>A1 <math>-2.21 \text{ m/s}^2, 3.67 \text{ s}</math> :</p> <p>A2 <math>-3.21 \text{ m/s}^2, 4.67 \text{ s}</math> :</p> <p>A3 <math>-4.21 \text{ m/s}^2, 5.67 \text{ s}</math> :</p> <p>A4 <math>-5.21 \text{ m/s}^2, 6.67 \text{ s}</math> :</p>	4.0	1.00

Objective Question				
42	42	<p>A metal pipe of 1 m diameter contains a fluid having a pressure of <math>10 \text{ kgf/cm}^2</math>. If the permissible tensile stress in the metal is <math>200 \text{ kgf/cm}^2</math>, then the thickness of the metal required for making the pipe would be</p> <p>A1 5 mm :</p> <p>A2 10 mm :</p> <p>A3 20 mm :</p>	4.0	1.00

A4 25 mm  
:

Objective Question

43	43	<p>The shafts of same length and material are joined in series. If the ratio of their diameters is 2, then the ratio of their angles of twist will be</p> <p>A1 2 :</p> <p>A2 4 :</p> <p>A3 8 :</p> <p>A4 16 :</p>	4.0	1.00
----	----	--	-----	------

Objective Question

44	44	<p>A machine mounted on a single coil spring has a period of free vibration of T. If the spring is cut into four equal parts and placed in parallel and the machine is mounted on them, then the period of free vibrations of the new system will become</p> <p>A1 16T :</p> <p>A2 4T :</p> <p>A3 T/4 :</p> <p>A4 T/16 :</p>	4.0	1.00
----	----	--	-----	------

Objective Question

45	45	<p>Principal stresses at a point in a plane stressed element are <math>\sigma_x</math> and <math>\sigma_y = 500 \text{ kg/cm}^2</math>. Normal stress on the plane inclined at <math>45^\circ</math> to x-axis will be</p> <p>A1 0 :</p> <p>A2 <math>500 \text{ kg/cm}^2</math> :</p> <p>A3 <math>707 \text{ kg/cm}^2</math> :</p> <p>A4 <math>1000 \text{ kg/cm}^2</math> :</p>	4.0	1.00
----	----	--	-----	------

Objective Question

46	46	<p>When the helical compression spring is cut into two halves, the stiffness of the resulting spring will be</p> <p>A1 Same :</p>	4.0	1.00
----	----	---	-----	------

		A2 Double :		
		A3 One- Half :		
		A4 One -Fourth :		

Objective Question

47	47	The specific heat relation is	4.0	1.00
		A1 : $C_p - C_v = \frac{vT\beta^2}{K}$		
		A2 : $C_p - C_v = \frac{vTK}{\beta^2}$		
		A3 : $C_p - C_v = \frac{pTK}{\beta^2}$		
		A4 : $C_p - C_v = \frac{v^2 T\beta}{K}$		

Objective Question

48	48	A heat engine receives heat at the rate of 1500 kJ/min and gives an output of 8.2 kW. Its thermal efficiency is equal to	4.0	1.00
		A1 : 20.5%		
		A2 : 30.2%		
		A3 : 32.8%		
		A4 : 44.6%		

Objective Question

49	49	The ratio of hydrodynamic to thermal boundary layer thickness	4.0	1.00
		A1 : Varies as one-third power of Prandtl number		
		A2 : Varies as two-third power of Stanton number		
		A3 : Varies as four-fifth power of Nusselt number		
		A4 : Varies as root of Prandtl number		

Objective Question

50	50	A heat pump working on a reversed Carnot cycle has a COP of 5. If it works as a refrigerator taking 1 kW of work input, the refrigerating effect will be	4.0	1.00
----	----	--	-----	------

		<p>A1 1 kW :</p> <p>A2 2.2 kW :</p> <p>A3 3.3 kW :</p> <p>A4 4 kW :</p>		
--	--	---	--	--

Objective Question

51	51	<p>The reading of the pressure gauge fitted on a vessel is 25 bar. The atmospheric pressure is 1.03 bar and the value of <math>g</math> is <math>9.81 \text{ m/sec}^2</math>. The absolute pressure in the vessel is</p> <p>A1 23.97 bar :</p> <p>A2 25.00 bar :</p> <p>A3 26.03 bar :</p> <p>A4 34.84 bar :</p>	4.0	1.00
----	----	--	-----	------

Objective Question

52	52	<p>Discharge through a double - acting reciprocating pump is given as</p> <p>A1 <math>ALN / 60</math> :</p> <p>A2 <math>ALN / 120</math> :</p> <p>A3 <math>2ALN / 60</math> :</p> <p>A4 <math>3ALN/120</math> :</p>	4.0	1.00
----	----	---	-----	------

Objective Question

53	53	<p>During adiabatic saturation process on unsaturated air _____ remains constant</p> <p>A1 Wet bulb temperature :</p> <p>A2 Dry bulb temperature :</p> <p>A3 Dew point temperature :</p> <p>A4 Relative humidity :</p>	4.0	1.00
----	----	--	-----	------

Objective Question				
54	54	In a two stage compressor what is the optimum intermediate pressure	4.0	1.00
		A1 : Average of suction and delivery		
		A2 : Geometric Mean		
		A3 : Only 40% of difference of suction and delivery		
		A4 : Difference of suction and delivery		

Objective Question				
55	55	A jet of water issues from a nozzle with a velocity of 20 m/s and it impinges normally on a flat plate moving away from it at 10 m/s. If the cross-sectional area of the jet is $0.02 \text{ m}^2$ and density of water is taken as $1000 \text{ kg/m}^3$ , then the force developed on the plate will be	4.0	1.00
		A1 : 10 N		
		A2 : 100 N		
		A3 : 1000 N		
		A4 : 2000 N		

Objective Question				
56	56	A composite slab has two layers of different materials with thermal conductivities $k_1$ and $k_2$ . If each layer had the same thickness the equivalent thermal conductivity of the slab would be	4.0	1.00
		A1 : $k_1+k_2$		
		A2 : $(k_1+k_2) / (k_1k_2)$		
		A3 : $(2 k_1k_2) / (k_1+k_2)$		
		A4 : $k_1k_2$		

Objective Question				
57	57	In a boiler, feed water supplied per hour is 220 kg while coal fired per hour is 20 kg, Net enthalpy rise per kg of water is 141 kg for conversion to steam. If the calorific value of coal is 2060 kJ/kg then the boiler efficiency will be	4.0	1.00
		A1 : 75.29%		
		A2 : 65.79%		
		A3 : 63.89%		

		: A4 59.66% :		
--	--	---------------------	--	--

Objective Question

58	58	A reversible engine has ideal thermal efficiency of 30%. When it is used as a refrigerating machine with all other conditions unchanged, the coefficient of performance will be  A1 3.33 : A2 3.00 : A3 2.33 : A4 1.33 :	4.0	1.00
----	----	---	-----	------

Objective Question

59	59	_____ materials show direction dependent properties  A1 Orthotropic : A2 Isotropic : A3 Anisotropic : A4 Heterogeneous :	4.0	1.00
----	----	---	-----	------

Objective Question

60	60	Weld Spatter is a  A1 Catalyst : A2 Welding Defect : A3 Flux : A4 Welding Technique :	4.0	1.00
----	----	--	-----	------

Objective Question

61	61	Expressing a dimension as $15.2^{+0.00}_{-0.01}$ mm is the case of  A1 Limiting Dimension :	4.0	1.00
----	----	--	-----	------

		A2 Unilateral Dimension :		
		A3 Bilateral Dimension :		
		A4 Multi Dimension :		

Objective Question

62	62	Which of the following name is generally associated with NC machines	4.0	1.00
		A1 Machining Centre :		
		A2 Group Technology :		
		A3 Mass Production :		
		A4 Precision :		

Objective Question

63	63	_____ float is the time by which an activity can be delayed without affecting the earliest start time of any other activity in a project	4.0	1.00
		A1 Independent :		
		A2 Free :		
		A3 Interfering :		
		A4 Total :		

Objective Question

64	64	Frictional force has the following relation with the normal reaction between the connecting surfaces	4.0	1.00
		A1 $F = \mu N$ :		
		A2 $F = \mu^2 N$ :		
		A3 $F = \mu / N$ :		
		A4 $F = \mu N^2$ :		

Objective Question

65	65	Impulse can be obtained from	4.0	1.00
----	----	------------------------------	-----	------

		<p>A1 Velocity –Displacement diagram :</p> <p>A2 Velocity-Time diagram :</p> <p>A3 Force – Time diagram :</p> <p>A4 Force-Displacement diagram :</p>		
--	--	--	--	--

Objective Question

66	66	<p>Poisson's ratio for aluminum is</p> <p>A1 0.13 :</p> <p>A2 0.23 :</p> <p>A3 0.33 :</p> <p>A4 0.43 :</p>	4.0	1.00
----	----	--	-----	------

Objective Question

67	67	<p>The materials having the same elastic properties in all directions are called _____ materials</p> <p>A1 Elastic :</p> <p>A2 Isotropic :</p> <p>A3 Ideal :</p> <p>A4 Uniform :</p>	4.0	1.00
----	----	--	-----	------

Objective Question

68	68	<p>_____ mechanism produces mathematically an exact straight line motion</p> <p>A1 Ackermann :</p> <p>A2 Peaucellier's :</p> <p>A3 Watt :</p> <p>A4 Grasshopper :</p>	4.0	1.00
----	----	---	-----	------

Objective Question

69	69	For a vibrating system, if the damping factor is unity, then the system is ____ damped	4.0	1.00
		A1 Under :		
		A2 Over :		
		A3 Critically :		
		A4 Zero :		

Objective Question

70	70	_____ is a permanent fastening	4.0	1.00
		A1 Screw :		
		A2 Rivet :		
		A3 Bolt :		
		A4 Key :		

Objective Question

71	71	Rankine's theory is used for ____ materials	4.0	1.00
		A1 Plastic :		
		A2 Ductile :		
		A3 Elastic :		
		A4 Brittle :		

Objective Question

72	72	In an irreversible process, there is a	4.0	1.00
		A1 Loss of Heat :		
		A2 No Loss of Heat :		
		A3 Gain of Heat :		
		A4 No gain of Heat :		



		A4 Unpredictable :		
Objective Question				
77	77	The coefficient of Discharge ( $C_d$ ) of venturimeter lies within the limits of  A1 0.95 to 0.99 : A2 0.8 to 0.85 : A3 0.7 to 0.8 : A4 0.6 to 0.7 :	4.0	1.00
Objective Question				
78	78	In case of laminar flow, the loss of pressure head is proportional to  A1 Velocity : A2 Velocity <sup>2</sup> : A3 Velocity <sup>3</sup> : A4 Velocity <sup>0.5</sup> :	4.0	1.00
Objective Question				
79	79	Eutectic reaction for Iron –Carbon system occurs at  A1 600°C : A2 723°C : A3 1147°C : A4 1493°C :	4.0	1.00
Objective Question				
80	80	_____ are the cutting edges of a standard twist drill  A1 Wedges : A2 Lips : A3 Flanks	4.0	1.00

		: A4 Flutes :		
--	--	---------------------	--	--

Objective Question

81	81	On which of the following tools negative rake is usually provided  A1 Cemented Carbide Tools :  A2 HSS Tools :  A3 High Carbon Steel Tools :  A4 Single point Tool :	4.0	1.00
----	----	--	-----	------

Objective Question

82	82	Taylor's principle is concerned with _____ measurements  A1 Roundness :  A2 Gauging :  A3 Interferometers :  A4 Angular :	4.0	1.00
----	----	---	-----	------

Objective Question

83	83	Which of the following is independent of Sales Forecast  A1 Inventory Control :  A2 Productivity :  A3 Production, Planning and Control :  A4 All of these :	4.0	1.00
----	----	--	-----	------

Objective Question

84	84	Why is crashing of project network carried out  A1 To find optimum project duration :  A2 To find maximum project duration :	4.0	1.00
----	----	--	-----	------

A3  
: To find normal project duration

A4  
: To find the exact cost spent for man hours

Objective Question

85	85	The properties of bodies by virtue of which they rebound after impact is called	4.0	1.00
		A1 : Plasticity		
		A2 : Elasticity		
		A3 : Hardness		
		A4 : Strength		

Objective Question

86	86	If period of simple pendulum will be doubled if	4.0	1.00
		A1 : Its length is doubled		
		A2 : Its length is quadrupled		
		A3 : The mass of its bob is doubled		
		A4 : Its length is halved		

Objective Question

87	87	The bending equation is written as	4.0	1.00
		A1 : $\frac{I}{M} = \frac{f}{y} = \frac{E}{R}$		
		A2 : $\frac{M}{I} = \frac{f^2}{y} = \frac{E^2}{R}$		
		A3 : $\frac{M}{I} = \frac{f}{y} = \frac{E}{R}$		
		A4 : $\frac{M^2}{I} = \frac{f^2}{y} = \frac{E^2}{R}$		

Objective Question

88	88	Which of the following gears should be recommended for a speed reduction of 50: 1	4.0	1.00
		A1 : Spur		

		<p>A2 Differential :</p> <p>A3 Worm and Worm Wheel :</p> <p>A4 Bevel :</p>		
--	--	--	--	--

Objective Question

89	89	<p>If the number of idle gears in a simple gear train is odd, then the motion of the driven gear will be _____ as that of the driving gear</p> <p>A1 Opposite :</p> <p>A2 Same :</p> <p>A3 Twice the speed :</p> <p>A4 Half of the speed :</p>	4.0	1.00
----	----	--	-----	------

Objective Question

90	90	<p>The power transmitted by a belt drive is maximum when the maximum tension in the belt is _____ the centrifugal tension.</p> <p>A1 One -Third :</p> <p>A2 One -Half :</p> <p>A3 Equal to :</p> <p>A4 Three times :</p>	4.0	1.00
----	----	--	-----	------

Objective Question

91	91	<p>In which of the following bearings lubricant is not required.</p> <p>A1 Foil Bearing :</p> <p>A2 Gas Bearing :</p> <p>A3 Hydrostatic Bearing :</p> <p>A4 Electromagnetic Bearing :</p>	4.0	1.00
----	----	---	-----	------

Objective Question

92	92	<p>If the temperature of the source is increased , the efficiency of the Carnot Engine</p>	4.0	1.00
----	----	--	-----	------

		<p>A1 Decreases :</p> <p>A2 Increases :</p> <p>A3 Does not Change :</p> <p>A4 Will be equal to the efficiency of a practical engine :</p>		
--	--	---	--	--

Objective Question

93	93	<p>Joule's law states that the specific internal energy of a gas depends only on</p> <p>A1 The pressure of the gas :</p> <p>A2 The Volume of the gas :</p> <p>A3 The temperature of the gas :</p> <p>A4 Molecular properties :</p>	4.0	1.00
----	----	--	-----	------

Objective Question

94	94	<p>_____ number is the ratio of heat transfer coefficient to the flow of heat per unit temperature rise due to the velocity of the fluid</p> <p>A1 Grashoff :</p> <p>A2 Weber :</p> <p>A3 Stanton :</p> <p>A4 Prandtl :</p>	4.0	1.00
----	----	---	-----	------

Objective Question

95	95	<p>The steady state temperature distribution in the very thin plate with uniform surface temperature will be</p> <p>A1 Logarithmic :</p> <p>A2 Parabolic :</p> <p>A3 Hyperbolic :</p> <p>A4 Linear :</p>	4.0	1.00
----	----	--	-----	------

Objective Question				
96	96	<p>Accumulation of carbon deposits on the cylinder head of an IC engine leads to increase in</p> <p>A1 : Piston Displacement</p> <p>A2 : Clearance Volume</p> <p>A3 : Compression Ratio</p> <p>A4 : Swept Volume</p>	4.0	1.00
Objective Question				
97	97	<p>Across a normal shock</p> <p>A1 : The Entropy remains constant</p> <p>A2 : The Pressure and Temperature rise</p> <p>A3 : The Velocity and Pressure decrease</p> <p>A4 : The Density and Temperature decrease</p>	4.0	1.00
Objective Question				
98	98	<p>When Froude's number is equal to unity, the flow in an open channel is called</p> <p>A1 : Critical Flow</p> <p>A2 : Tranquil Flow</p> <p>A3 : Streaming Flow</p> <p>A4 : Shooting Flow</p>	4.0	1.00
Objective Question				
99	99	<p>In a blanking operation to produce steel washer, the maximum punch load used is <math>2 \times 10^5</math> N. The plate thickness is 4 mm and percentage penetration is 25. The work done during the shearing operation is</p> <p>A1 : 200 J</p> <p>A2 : 400 J</p> <p>A3 : 600 J</p>	4.0	1.00

A4 800 J  
:

Objective Question

100	100	<p>A spring of stiffness 1000 N/m is stretched initially by 10 cm from the undeformed position. The work required to stretch it by another 10 cm is</p> <p>A1 5 Nm :</p> <p>A2 7 Nm :</p> <p>A3 10 Nm :</p> <p>A4 15 Nm :</p>	4.0	1.00
-----	-----	---	-----	------