## Paper: ESSAR PLACEMENT PAPER 2006 - 2

- 1. In an ideal gas compared to a real gas at very high pressure occupies?
- 2. Kinetic theory of gases assumes that collisions between the molecules are?
- 3. The condition of perfect vacuum that is at absolute zero pressure can be attained at?
- 4. Specific heat of air?
- 5. Which law states that internal energy is function of Temperature?
- 6. Minimum work done for an adiabatic process the value of n?
- 7. Air Refrigerator works on?

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1 \text{ watt} = 1 \text{Nm/S}
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1 h.p = ?kw

- 8. When crude oil heated Which Hydro carbon comes first?
- 9. What is the purpose of Supercharger?
- 10. 1Kg of carbon to CO, Amount oxygen required?
- 11. Horse power per tones of refrigeration?
- 12. Scale formation on the surface of the boile tubes due to?
- 13. Axial shift in steam turbine occurs due to?
- 14. Latent heat of vaporization at low pressure and temperature?
- 15. Shaft revolving in a bearing vaich pair?
- 16. Difference between dede dum and addendum?
- 17. The fatique life of a par can be improved by ?
- 18. Rotational tendency of force?
- 19. Acetylene dissolved in ?
- 20. The frequency of transverse vibration is 3hz then critical speed?
- 21. More viscous lub oil?
- 22. Example for Non destructive test?
- 23. Advantage of V belt?
- 24. In gear boxes Which type of key is used
- 25. A structural member subjected to an axial compressive force is called?
- 26. Pig iron is produced in which furnace?
- 27. Heat generation of arc welding is due to?

- 28. In what angle does an object thrown height will travel the longest distance?
- 29. Angle of contact between the journal and bearing?
- 30. The coupling is required to connect two parallel shaft distance between the shaft is small and variable?
- 31. Carbon is added to steel to increase its hardness-True/False
- 32. Wings of airplane are made by---
- 33. To protect from thrust which type of follower is used?
- 34. With increase in temperature--- Viscosity of liquid---
- 35. Heavy machine beds are made of CI for-----
- 36. For shock resistance and vibrations we use ----
- 37. Rupture strength====?
- 38. Washer is used for-----
- 39. Surface endurance limit depends on (toughness/surface ension/yield strength/surface finish)
- 40. In a uniformly distributed load of 6n/m over 25 meter length simply supported beam, the value of B.M at the point where thear force is zero (17.5/22.5/55/75)
- 41. Cam size depends on (base circle/pitch circle/prime circle/none)
- 42. Poisons ratio is higher in (rubber eteel/wood)
- 43. In drill tool carbon % is (<0.4 %, 0.8% -1.6%, 1-2.5%)
- 44. finishing operation in lathe is done at(low speed/high speed)
- 45. degree of freedom is super structure (1/positive/negative/zero)
- 46. axial compressors follow the process in ideal conditions (adiabatic/isotropic/isothermal)
- 47. forced draft has negative pressure drop(true or false)
- 48. advantage of v-belt?
- 49. The key used in the gears for transmitting power(flat/saddle/spline/square)
- 50. dye penetration test is (pouring/surface tension/capillary/none)
- 51. poisson ratio?
- 52. endurance limit is depend uponâ€'1.toughness 2.elasticity 3.britleness?
- 53. in which furnace ,pig iron is made?
- 54. corrosion resistant material?

- 55. centipoises is unit of?
- 56. broaching is made to produce?
- 57. steady rest is used for?
- 58. drill angle?
- 59. In parson's turbine ,relation between angles?
- 60. v-belt angle?
- 61. Refrigerant used in refrigerator?
- 62. Composition of Babbitt metal?
- 63. Cantilever beam failure of surface finish is represented by?
- 64. At what angle in the valve timing, Diesel engine injection occurs?
- 65. Name any one non destructive test?
- 66. Clutch is located between?
- 67. What is the Melting pt of iron?
- 68. Name any one Gear material?
- 69. Drill material composition?
- 70. Which mechanism is used to hold the gear?
- 71. Reynolds number range for laminar tow â€"?
- 72. Nusselt (for natural) number is function of which number?
- 73. Angle of contact between journal and bearing?
- 74. What is the function of cutting fluid?
- 75. Dual cycle combination of which two cycles?
- 77. ACME thread angle?
- 78. Frequency of a system is 3 Hz then find the speed in rpm?
- 79. For which gear shafts are co-axial?

## **GD** topics:

- Democracy is the only way to sustain economy growth
- Should Indian youth involving Politics

- Foreign investment should allow directly to India
- Foods come first ethics come later
- TV channels can be regional, International

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