

## Essar Technical - Other

ESSAR PAPER ON 1st JULY

### Technical Questions:

- 1) Composition of gunmetal?.
- 2) What is the fuel used in airplanes?.
- 3) Specific heat capacity of air?.
- 4) Melting point of Aluminum?.
- 5) If a ball is kept at a height of  $x$ (m), from that position it is dropped. Does the p.e is equal to the K.e if the ball goes inside the earth as same distance where it is relieved?.
- 6) Viscosity of the lubricant ----- with increase in temperature?.
- 7) What amount of power required to make the 2-stroke petrol engine to 4-stroke diesel engine?.
- 8) Which engine is the most efficient in terms of compression ratio?.
- 9) for the same compression ratio heat removed in each cycle is efficient in otto or diesel cycle?.
- 10) Use of draft tube in turbine ? a) to increase work o/p of runner b) To increase turbine output.
- 11) Percentage of carbon in toolsteel?.
- 12) Introduction of sulphur in mild steel increases or decreases the machinability?.
- 13) Is Bernoulli's theorem applicable for steady or unsteady flow?.
- 14) Axial turbine is of which type? a) high head b) low head.
- 15) corrosion is inhibited due to oxidation or reduction?.
- 16) Binary power cycle uses ----- as working fluid?.
- 17) the purpose of runner in casting -----
- 18) shape of a u.d.l. of cantilever beam is?.
- 19) which has high coefficient of friction ? disc or band brakes
- 20) Engine valve seat is cooled at ----- temperature in liquid nitrogen (-180C)
- 21) Buckling is high in bar which is greater or smaller in length?.
- 22) Formula for deflection of beam? Ans;  $PL/AE$
- 23) Which law says that pressure can be transferred from one point to another in an undiminished form?.
- 24) Is Vane pump is Positive or non-positive displacement pump?.
- 25) As the altitude why density of the decreases?.
- 26) In the reversible adiabatic process entropy is constant or not?
- 27) In which process the temperature of the system changes but there is no heat transfer to the surroundings?.

### In Technical cum HR Interview:

- a) I explained my miniproject
- b) Asked question in my area of specialization?
- c) Asked my name details?.
- d) What is ur future plan about ur career?