

1ST ROUND - Written Test - 53 questions in 1 hour.
25 technical + 28 aptitude (0.5 marks negative for all questions)

TECHNICAL

1. What is the material of Crank Shaft?
2. Standard time=
a. normal time minus allowance b. reliability time
3. Energy stored in the spring when it is fully compressed without any deformation is ----- ans.
Resilience or proof resilience
4. Question on the relation $\sigma = PL/AE$. What is e (strain)? Ans. P/AE
5. Lower spindle speed is necessary for?
if diameter of w/p is large
when depth of cut is high
6. For which of the following material machinability is high? Ans. Aluminium
7. 24 & 2 in M24X2 represent which of the following two parameters respectively?
8. What is the equation governing kinematic links and pairs?
a. $L=2p-3$ b. $L=2p-4$ c. $L=3p-5$
9. Pick out the wrong statement
Joule cycle consists of 2 constant volume processes and 2 adiabatic processes
Otto cycle consists of 2 constant volume processes and 2 adiabatic processes
Ericsson cycle consists of 2 constant volume processes and 2 adiabatic processes
None of the above
10. For same compression ratio which of the following cycles is more efficient?
a. otto b. diesel
11. The angle between face of the tool and plane parallel to the base of the tool is
a. rake angle b. clearance angle c. cutting edge angle d. lip angle
12. Bevel gears are used for transmitting torque between
Intersecting & coplanar shafts
Non-intersecting & non-coplanar shafts
Non-parallel & non-coplanar shafts
None of the above
13. Expansion process in Otto cycle lasts from TDC to BDC
30 degrees before TDC till 50 degrees before BDC
30 degrees after TDC till 50 degrees after BDC
none of the above
14. Which type of thread is more effective for power transmission in one direction?
a. square b. acme c. buttress
15. The state of a liquid during evaporation is
a. vapour b. steam c. water vapour

16. Throttle valve is used in steam engines to
control pressure of steam
control volume of steam
control temperature of steam
none of the above

APTITUDE

12 members to be allotted for line and staff function (4 questions)

6 members to be allotted for shifts on 6 consecutive days (4 questions)

Passage on general statements regarding preventive medicine was given. Then some statements were given. We have to find out whether they are definitely true or probably true or probably false or definitely false (4 questions)

Questions like--- All radios are electric goods. All electric goods are table lamps. Then which of the following is true?

One more question similar to previous one. Answers were Statement 1 follows or Statement 2 follows or both follows or none follows.

Passage was given on investment of Tata Motors. Then a statement was given. We have to tell whether the decision is correct or not correct.

Question on data interpretation. Table was given on per capita expenditure for oil, minerals, food, milk, etc. (4 questions)

Question on data interpretation. Chart and table on rural and urban area consumption, expenditure for 1973,1978,1983 was given. (4 questions)

2ND ROUND - GD Topics

1. How to improve quality of chapathi?
2. Case study on how to introduce artificial chapathi into market?

Duration of both GDs was 30 minutes out of which first 10 minutes are compulsory preparation time.

GD alone was not shortlisting round.

3RD ROUND - Personal interview