

Total Marks: 80

Duration: 3 Hours

N.B.:-

1. Question No.1 is compulsory
2. Solve any three out of remaining questions
3. Assume suitable data if required and mention it clearly
4. Figures to right indicate full marks



- Q1 A] Explain surface roughness symbols in brief. 5
B] Explain concept of flatness with suitable example. 5
C] Differentiate between precision and accuracy. 5
D] Write short note on-Planning for quality 5
- Q2 A] Explain Taylors Principle of Gauge design with suitable examples 10
B] Explain construction and working of laser interferometer in detail 10
- Q3 A] Explain following parameters with respect to surface roughness measurement:- 10
1) R_a Value
2) R_z Value
3) R_y Value
4) RMS value
B] Explain different types of quality costs in detail. How will you maintain compromise between quality and cost? 10
- Q4 A] Explain following:- 10
1) GANT charts
2) Pareto Chart
B] Explain three wire method used in screw thread measurements 10
- Q5 A] Explain construction, working and applications of 3D coordinate measuring machine 10
B] "Statistically Controlled Process is always a capable process". 10
Do you agree with above statement? Justify your agreement or disagreement in detail.
- Q6 A] Explain construction, working Parkinson's tester used in gear measurement. 10
B] Explain Single sampling and double sampling plans in detail 10