

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 different types of tolerance grades **5**
 B] Write short note on-Planning for quality. **5**
 C] Explain principle of interference. **5**
 D] Explain importance of surface conditions. **5**
- Q2 A] Explain following:- **10**
 1) Plug gauges and ring gauges
 2) Filler gauges
 B] Explain following parameters with respect to surface roughness measurement:- **10**
 1) R_a Value
 2) R_z Value
 3) R_y Value
 4) Roughness and Waviness
- Q3 A] Explain Construction and working of Pneumatic Comparators. State their advantages and limitations. **10**
 B] How will you set up policy and objectives of quality control? Explain concept of quality of design. **10**
- Q4 A] Explain construction and working of Tool makers microscope with the help of suitable sketch. **10**
 B] Explain following:- **10**
 1) Scatter diagrams
 2) Pareto Charts
- Q5 A] Explain construction and working of Profile Projector. State various applications of Profile projector **10**
 B] Explain following:- **10**
 1) X bar Charts
 2) R Charts
 3) P Charts
 4) Np Charts
- Q6 A] Explain Principle, Construction and working of Parkinson's Gear tester **10**
 B] Sketch OC curve and explain various elements of it. Also explain double sampling plans **10**