

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE –

RAIGAD -402 103

Winter Semester Examination – December - 2019

Branch:- Mechanical

Subject:- :- Metrology and Quality Control (BTMEC505)

Date:- 18/12/2019

Sem.:- V

Marks: 60

Time:- 3 Hr.

Instructions to the Students

1. Each question carries 12 marks.
2. Attempt **any five** questions of the following.
3. Illustrate your answers with neat sketches, diagram etc., wherever necessary.
4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly

- | | (Marks) |
|---|----------------|
| Q.1. a) Explain the phenomenon involved in 'wringing' of slip gauges. | (06) |
| b) Comparison between Systematic Errors and Random Errors. | (06) |
| Q.2. a) Define fit and with the help of neat sketches, explain in short the different types of fits. | (06) |
| b) Explain the working principle of a laser interferometer with the help of neat sketches. | (06) |
| Q.3. a) What is the radial runout of a gear? How is it measured? | (06) |
| b) With the help of a sketch, discuss screw thread terminologies. | (06) |
| Q.4. a) What is Quality Statements | (06) |
| b) Briefly discuss on 'Seven Quality Tools'. | (06) |
| Q.5. a) State the significance of 'Zero defects' | (06) |
| b) Describe a Quality function deployment. | (06) |
| Q.6. a) Write a note on 'JIT' | (06) |
| b) Write a short note on ISO 9000 standards? | (06) |

Paper End