

2202E012

BACHELOR OF VOCATION
Mechanical Manufacturing
Subject: Measurement and Meteorology
Subject Code: ME-503
Semester: First
February 2022
Theory (External): 35 Marks
Time: 03 Hours

Instructions to the Students

1. This Question paper consists of two Sections. All sections are compulsory.
2. Section A comprises 10 questions of objective type in nature. All questions are compulsory. Each question carries 1 mark.
3. Section B comprises 8 essay type questions out of which students need to do any 5. Each question carries 5 marks.
4. Read the questions carefully and write the answers in the answer sheets provided.
5. Do not write anything on the question paper.
6. Wherever necessary, the diagram drawn should be neat and properly labelled

Roll Number									

SECTION –A (SHORT/OBJECTIVE TYPE QUESTIONS)
(10x1=10 Marks)

- A. What is Metrology
- B. Define unit of Measurement
- C. Differentiate between pressure and flow
- D. Define noise
- E. Define the function of vibration
- F. Define the concept of fitting
- G. What is computer aided tolerance
- H. Define surface microscopy
- I. Define interferometry
- J. Discuss the application of non contact profiling system

SECTION –B (ESSAY TYPE QUESTIONS)
(5x5=25 Marks)

1. Describe the concept of error and sources of errors with suitable example
2. What is Measurement? Explain the methods of measurement with suitable example
3. Describe the construction and working of Bevel protector with neat diagram along with applications related to industries.

4. What is calibration? Describe the process used for calibration of slip gauges with suitable example
5. Describe the working of different types of comparators with neat diagram and also mention their industrial applications
6. Explain gear terminology with neat and clean diagram and also describe different types of gear.
7. Differentiate between limit, Fit and tolerance with neat diagram.
8. What is surface roughness? Discuss the factors affecting the surface roughness with suitable example

END OF PAPER