

## SNS COLLEGE OF TECHNOLOGY



# (An Autonomous Institution) COIMBATORE-35 DEPARTMENT OF MECHATRONICS

Staff In-Charge: Mr. Natraj Athreya A S, AP/MCT Semester: III

Course: 23MAT203 - Production Technology Class: II Year B.E. MCT

Academic Year: 2024-2025 Odd Semester

### **Question Bank for 23MAT203: Production Technology**

#### Unit I: Theory of Metal Cutting

#### **Short Answer Questions (2 Marks)**

1.	Define orthogonal cutting.	(Remembering)
2.	Differentiate between orthogonal and oblique cutting.	(Understanding)
3.	Define tool signature.	(Remembering)
4.	What is a single point cutting tool?	(Remembering)
5.	Explain the term 'machinability'.	(Understanding)
6.	What are chip breakers and why are they used?	(Understanding)
7.	List the types of cutting fluids used in metal cutting.	(Remembering)
8.	What is the role of tool wear in machining?	(Understanding)
9.	Define the mechanics of orthogonal cutting.	(Remembering)
10.	How does tool material affect the cutting process?	(Understanding)

#### **Long Answer Questions (13/14 Marks)**

- 1. Explain the classification of cutting tools with suitable examples. (Understanding)
- 2. Discuss the mechanics of orthogonal cutting with the help of diagrams. (Applying)
- 3. Describe the different types of chip formation and the role of chip breakers. (Understanding)
- 4. Explain the concept of tool wear and tool life, and discuss factors affecting them. (Analyzing)
- 5. Describe the various types of cutting fluids, their properties, and applications in metal cutting. (Evaluating)