



St. Michael Polytechnic College

St. Santhiyagappar Nagar
Kalayarkoil-630 551.



DEPT: MECHANICAL

YEAR/SEMESTER: III / V

SUB.NAME: MANUFACTURING TECHNOLOGY II

Each question carries 1(one) mark in PART-A and 12(twelve) marks in PART-B

UNIT-1 THEORY OF METAL CUTTING, DRILLING MACHINES AND BORING MACHINES

PART-A

1. Specify % of carbon content of carbon steel?
2. What do you mean by 18-4-1 high speed steel?
3. Define clearance angle?
4. Define tool-life?
5. State any two factors that influence tool life?
6. How to life can be measured?
7. What is drilling?
8. What are the different types of drill?
9. Define cutting speed in drilling?
10. State any two drill holding device?
11. State the purpose of spot facing?
12. What is “trepanning”?
13. What is “tapping”?
14. What is boring?
15. Mention the various operations done on a horizontal boring machine?
16. What are the types of boring machine?

PART-B

1. Explain the nomenclature of single point cutting tool neat sketch.
2. Explain the principle of operation of a radial drilling machine.
3. Explain the principle of operation of the horizontal and vertical boring machines with neat sketch.

4. Explain the different operations which are performed on a drilling machine with neat sketch
5. Draw a neat sketch of a twist drill bit and explain the various parts of the same.
6. Mention the different methods used for holding tools in a drilling machine spindle explain.
7. Explain a jig boring machine with the help of a neat sketch.