

GOVERNMENT ENGINEERING COLLEGE – BHUJ

Mechanical Engineering Department

Subject: Manufacturing Processes – 1

Date: 03-09-2012

ASSIGNMENT

1. Why lathe beds are made of cast iron?
2. Why back gears are used?
3. Described the working principle of feed mechanism.
4. What are the accessories and attachments used on an engine lathe?
5. What is a face plate? Where will you prefer its use? Why?
6. What are mandrels? Why are they used?
7. What factors govern the classification of lathe? Describe in brief the various types of lathe you know?
8. Give a neat diagram of an engine lathe. Describe and mark its main parts & controls.
9. By taking a numerical example, explain how the spindle speed is effected by the application of back gears.
10. What is the lathe carriage? Explain its various parts with the help of a sketch.
11. What machining operations can be performed on a centre lathe? Explain each in brief.
12. Explain in detail: Cutting speed, Feed, MRR, Depth of Cut, and Machining Time
13. What are the differences between capstan & turret lathe and centre lathe?
14. What are the differences between capstan and turret lathe?
15. What are the differences between shaper, planer and slotter?

Sign of Faculty

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(Mech. Engg. Dept.)