

Institute of Engineering and Technology (IET-DAVV) Indore

II BE (Regular & PTDC) (Mechanical Engineering)

Manufacturing Processes Assignment_Apr2018

Last Date of Submission: 10th May 2018

Total Number of questions: 08

Note: **Attempt all questions.** Answers should be brief and neatly written in your own handwriting & supplemented by diagrams/sketches/figures wherever required.

1. Explain the following processes: (i) Gear Milling (ii) Gear Hobbing. Describe the cutting tools used in the processes along with the advantages and disadvantages of the processes.
 2. Explain the constructional features of the following: (i) Radial Drilling Machine (ii) Gear Shaping Machine.
 3. Write short notes on the following : (i) Marking system for General Purpose and Special Abrasives Wheels (ii) Lapping and Honing (iii) Truing, dressing and Balancing of grinding wheels
 4. Briefly explain the selection criteria of grinding wheels. Also write the conditions for the external-internal cylindrical grinding and surface grinding operations.
 5. Explain the Taylor's principles for limit gauging. What is gauge tolerance? Describe briefly the Workshop type, Inspection and general purpose limit gauges.
 6. Write short notes on **any two** of the following: (i) Simple and Compound indexing using a dividing head (ii) Broaching and geometrical features of a External and Internal Broach (ii) Measurement of the screw thread profile (iii) Measurement of Gear Tooth Thickness.
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