

Institute of Engineering and Technology (IET-DAVV) Indore

II BE (Mechanical Engineering) Regular

MER3C4 Manufacturing Processes Assignment

Last Date of Submission: 08 April 2017

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 briefly the traverse grinding and plunge grinding using cylindrical centre type grinders. Also write the machining conditions.
 2. Write short notes on **any two** of the following : (i) External- internal centreless grinding (ii) Universal tool-cutter grinder and Cam Grinder (iii) Lapping and Honing (iv) Truing, dressing and Balancing of grinding wheels
 3. Briefly explain the selection criteria of grinding wheels.
 4. Compare the following : (i) Sensitive Drilling Machine (ii) Upright Drilling Machine (iii) Radial Drilling Machine.
 5. Give comparison of the various gear machining methods in terms of their application, accuracy and process.
 6. Write short notes on **any three** of the following: (i) Simple and Compound indexing using a dividing head (ii) Broaching and geometrical features of a broach (iii) Broaching methods and broaching machines (iv) Measurement of the screw thread profile.
 7. Briefly explain the ISO system of limits and Fits. Explain about the tolerance grades as standardised by ISO.
 8. (i) What are the differences in the vernier and micrometer as used for linear measurements?
(ii) Write a short note on gauge blocks.
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