

5. (a) Explain with an example, graphical method of designing form tool.
(b) A workpiece of 38 mm diameter is being turned on a lathe with a tool having rake angle of 33° and a feed of 0.15 mm/rev. The length of chip over one revolution of workpiece is 72 mm. The cutting speed is 12.5 m/min the tangential force is 410 N and feed force is 170 N

Calculate :-

- (i) Coefficient of friction on a rake face
- (ii) Thickness of chip
- (iii) Velocity of shear
- (iv) Velocity of chip along the tool face.

6. Write short notes on (any four) :-

- (a) Lapping and honing
- (b) Dressing and truing of grinding wheel
- (c) Co-ordinate measuring machine
- (d) Nomenclature of drilling tool
- (e) Geometry of Milling cutter.

GN-Con. 10554-14.