QUIZ 1   2018 – 2019

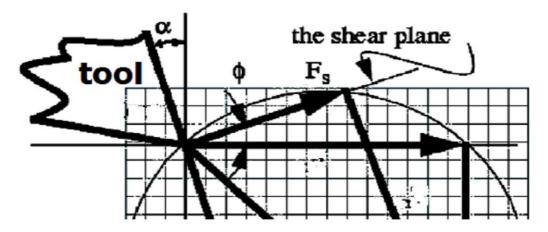**Q 1: A: Draw overall MERCHANT circle.** (MARKS)

Q 2: B: Use operating condition of depth, feed and speed; 2mm, 0.12mm/rev and 150m/min respectively. (1) Calculate the shear force, for DRILLING operation of steel (Shear Strength 260N/mm^2). (2) Calculate the power required for operation.

HINT: $F_{shear}= A_{chip}$ X Shear Strength. AND use the Merchant circle in Fig. power=F X V

Q2: Write the number and the correct letter.

A- WALL CONTACT

B- CONE OFFSET

C- BIT ROTATION