QUESTION BANK

COURSE:- TEN(22565) (ELECTIVE)

PROGRAME CODE:- ME5I

**Unit 1 Basics of tool engineering (CO1)**

Q no 1: Explain brief concept of tool engineering

Q no 2 :State the factor affect tool design.

Qno 3 : Discuss the duties of tool engineer.

Qno 4 : Explain with neat fig. Tool geometry of single point cutting tool

Q no 5 : Explain with neat fig. orthogonal and oblique cutting.

Q no 5 : State the difference between orthogonal and oblique cutting.

Q no 6 : Explain with neat fig. different types of chip formed during metal cutting.

Q no 7 : Explain each term of tool designated as 8,12,10,7,0,15,2mm.

Q no 8 : Explain with neat fig. Merchant circle diagram.

**Unit2 Cutting tool material and Holding devices (CO2)**

Q no 1: Explain brief composition and application of following materials required for tool.

* Carbon tool steel
* High speed steel
* Cemented carbides
* Ceremics
* Diamond.

Q no 2 : Explain requirements of tool material..

Qno 3 : Explain carbide tool inserts and nomenclature associated with it..

Qno 4 : Explain PCBN and CBN type inserts.

Q no 5 : Explain with neat fig. method of tool holding on milling machine .

Q no 5 : Explain with neat fig. Tapered tool holders and its type. .

Q no 6 : Explain each term of ISO designation of tool holder .

Q no 7 : Explain tool sharpening and methods of tool sharpening.

**Unit3 Locating and Clamping devices 6 hrs. (10 Marks) ( CO3)**

Q no 1: Explain concept of locating.

Q no 2 :Explain basic principal of locating on shop floor..

Qno 3 : Explain with neat fig. degrees of freedom.

Qno 4 : State the different types of locators (internal and external surface)

Q no 5 : Explain with neat fig. different types of locators ( any one)

Q no 5 : Explain with neat fig. 3-2-1 principal to restrict six degrees of freedom.

Q no 6 : Explain with neat fig. Locating a work piece from internal diameter.

Q no 7 : Explain concept of clamping.

Q no 8 : Explain basic principal of locating on shop floor.

Qno. 9 : State and Explain with neat fig. different types of clamping devices.