

7/12/2017

Sem III (Choice based)

PR0D

Block - 02

Sub: ME-I

20+20+20+03+10
Q. P. Code: 22849

Duration: 3 hours

Max. Marks: 80

- N.B. (1) Question No. **ONE** is compulsory.
(2) Attempt any **THREE** Questions from remaining **FIVE** questions.
(3) Support your answer with sketch wherever necessary.
(4) All questions carry equal marks.
- Q1. Explain in brief :-
(a) Classification of manufacturing processes and machine tools. 20
(b) Nomenclature of single point cutting tool.
(c) Deep hole drilling.
(d) Gear finishing processes.
- Q2. (a) Explain with a neat sketch the gear hobbing process for spur and helical gear production. 10
(b) Explain trueing, dressing, shaping and balancing of grinding wheels. 10
- Q3. (a) Describe how shapers are classified? 10
(b) Briefly, explain the process of thread rolling with its advantages, limitations and applications. 10
- Q4. (a) Briefly describe various types of milling machines. 10
(b) Briefly explain different types of surface grinding machines. 10
- Q5. (a) Define the term 'cutting speed' and 'feed,' as applied to milling operations. How do you calculate the cutting speed of a milling cutter? Also explain how to estimate the machining time required in milling operations. 10
(b) Explain various methods of turning a taper on a lathe. 10
- Q6. (a) Enlist various advantages, limitations and applications of broaching. 10
(b) Describe various types of lathes. 10
