

MANUFACTURING TECHNOLOGY

( Code : MET-402 )

*Full Marks : 70*

*Time : 3 hours*

**Answer any five questions**

*Figures in the right-hand margin indicate marks*

1. (a) Define abrasive. 2
- (b) What are the desirable characteristics of cutting tool materials? 5
- (c) Name various cutting tool material. Briefly describe one important tool material along with its characteristics and usability. 7
2. (a) What do you mean by Lathe? 2
- (b) Explain any one method of Taper-turning operation. 5

( Turn Over )

- (c) Differentiate between capstan and turret lathe. 7
3. (a) How do you specify a shaper machine tool? 2  
(b) State the function of ram in shaper. 5  
(c) Explain quick-return mechanism of a shaper machine. 7
4. (a) Define drilling and boring. 2  
(b) Explain the working of a radial drilling machine. 5  
(c) What is broaching? Explain different types of broaching. 7
5. (a) What is indexing? 2  
(b) Differentiate between up milling and down milling. 5  
(c) Explain compound indexing. 7
6. (a) What is super finishing? 2

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- (b) Explain working of a slotter. 5
- (c) State the criteria and specification of grinding wheels. 7
7. (a) How the size of a planer is specified? 2
- (b) Describe in brief the main parts of planer. 5
- (c) Describe table drive mechanism in planer. 7
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