

B.TECH. DEGREE EXAMINATION, MAY 2012

Eighth Semester

Branch : Mechanical/Automobile Engineering

PRODUCTION ENGINEERING (MU)

(Regular/Supplementary)

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

Part A

Each question carries 4 marks.

1. What is the effect of back rake angle ?
2. Explain different types of chips.
3. Write a note on cutting fluids.
4. Explain cutting speed vs. energy propagation.
5. What is meant by sintering ?
6. Explain shape memory alloy.
7. What is thermopolymer ? Explain.
8. List any *four* engineering application of rubber.
9. Explain RPT.
10. Explain selective laser sintering.

(10 × 4 = 40 marks)

Part B

Each question carries 12 marks.

11. Sketch and explain tool geometry of single point cutting tool.
Or
12. Differentiate orthogonal and oblique cutting.
13. Explain the mechanism and types of tool wear.
Or
14. Write a note on various cutting tool materials.
15. Explain the different methods of powder preparation.
Or
16. Explain super alloys with structure, properties and applications.

Turn over

17. Explain polymers, polymerisation, structure and its thermal behaviour.

Or

18. Explain ceramics and glasses and its application in engineering.

19. Explain schematically LBM.

Or

20. Explain indirect fabrication of metals and ceramics.

[5 × 12 = 60 marks]

Time :

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