

B.TECH DEGREE EXAMINATION, DECEMBER 2013

Seventh Semester

Branch: Production Engineering

PE 010 705 – ADVANCED MANUFACTURING PROCESS (PE)

MODEL QUESTION PAPER

(Regular-New Scheme)

Time: Three Hours

Maximum: 100 Marks

Part A

Answer all questions.

Each question carries 3 marks.

1. What is reamer wear and re sharpening?
2. How does super finishing differ from honing?
3. Define the principle of hobbing
4. Write down the application of tapered gear
5. Name all the thread production methods

(5 X 3 = 15 marks)

Part B

Answer all questions

Each question carries 5 marks

6. Explain boring and counter boring operation with a neat sketch
7. Explain the cycles involved in hobbing
8. Briefly explain generating action of gear shaper
9. Explain the difference between thread rolling and thread grinding
10. Explain lapping process

(5 X 5 = 25 marks)

Part C

Answer all questions.

Each question carries 12 marks.

11. Explain the drilling operations and all cutting forces acting on the drill with the help of a neat sketch

Or

12. What is reaming? Explain nomenclature of reamer with a neat sketch

Turn Over

13. (a). How does shaping differ from planing? (4 marks)

(b). Explain the planar machine with the help of a neat sketch (8 marks)

Or

14. Explain all types of hobbing processes.

15. (a). Explain thread chasing and thread milling (8 marks)

(b). How does the screw cutting operation performed on a lathe machine? (4 marks)

Or

16. Write the principle and features of

(a). Thread whirling

(b). Die threading

(c). Tapping

17. Explain the principle of gear shaping? Write down its advantages and limitations

Or

18. Describe bevel gear cutting and gear finishing process

19. Define honing process? Write and explain all the methods of honing

Or

20. (a). Explain the principle of super finishing process (8 marks)

(b). Write down the cutting conditions of super finishing (4 marks)
