

Register No.:

609

April 2024

Time - Three hours
(Maximum Marks: 100)

- [N.B. 1. Answer all questions under Part-A. Each question carries 3 marks.
2. Answer all the questions either (A) or (B) in Part-B. Each question carries 14 marks.]

PART - A

1. Write the uses of chip breaker.
2. Write any three properties of tool material.
3. Mention the nomenclature of a tap.
4. List the types of operations performed by broaching tool.
5. Why punch radius is necessary?
6. Define the term bend allowances.
7. What is the purpose of blank holder in draw die?
8. What is swaging?
9. List the uses of plate jig.
10. What is the purpose of tenon in a milling fixture?

[Turn over.....

PART – B

11. (a) Explain the nomenclature of single point cutting tool with neat sketch.
(Or)
(b) (i) Explain the various forces and power consumption during a cutting action of a milling cutter.
(ii) Describe the functions of chip breaker.
12. (a) Explain the nomenclature of twist drill with neat sketch.
(Or)
(b) (i) Explain any one type of broaches.
(ii) Explain the method of calculation of cutting forces and power consumption in broach design.
13. (a) What is stock feeding in blanking? Explain the stock feed mechanism with neat sketch.
(Or)
(b) Explain the construction and working principle of compound die with neat sketch.
14. (a) (i) Explain double action draw die with neat sketch.
(ii) Write the steps for Calculation of blank die for cylindrical shell.
(Or)
(b) Explain coining die and swaging die with neat sketch.
15. (a) (i) Write short notes on Principles of clamping.
(ii) Explain the process for design of milling fixture.
(Or)
(b) Explain the construction of a turning fixture and Grinding fixture.
