

Register No.:

140

April 2024

*Time - Three hours
(Maximum Marks: 75)*

- N.B.**
1. Q.No. 8 in PART - A and Q.No. 16 in PART - B are compulsory. Answer any FOUR questions from the remaining in each PART - A and PART - B.
 2. Answer division (a) or division (b) of each question in PART - C.
 3. Each question carries 2 marks in PART - A, 3 marks in Part - B and 10 marks in PART - C.

PART - A

1. What is meant by press working?
2. Name the components of die set.
3. State the functions of die cushion.
4. What are strippers?
5. Name the stresses developed during bending.
6. What is shear form die?
7. Write about CNC turret press.
8. Write down the purpose of curling.

PART - B

9. Give the classification of presses based on power supply.
10. Distinguish between blanking and piercing operation.
11. What are the functions of stripper plate?
12. Name the types of bending dies.
13. What is ironing?
14. Write about reverse drawing dies.
15. List out the factors affecting tool life.
16. What is the purpose of pilots?

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PART - C

17. (a) Compare mechanical, hydraulic and pneumatic press with simple sketch.

(Or)

- (b) Explain any five press operating parameters.

18. (a) Explain any three press feeding mechanisms for individual parts.

(Or)

- (b) Explain the construction and working of progressive tool with neat sketch.

19. (a) Explain the construction and working of V-bending die.

(Or)

- (b) Explain the following:
(i) Bend radius (ii) Neutral axis (iii) Spring back

20. (a) Explain the various stages of drawing with neat sketch.

(Or)

- (b) Explain about semi piercing die with neat sketch.

21. (a) Explain the working principle of fine blanking machine in mechanical drive.

(Or)

- (b) Explain about the seven steps to SMED.
