

Register No.:

306

April 2023

*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. What is meant by split pattern?
2. What is the function of core print?
3. How do you specify an electrode?
4. List out the types of flames in Gas welding.
5. Write short notes on press tools.
6. List out various applications of Heat treatment process.
7. What is meant by infiltration? Give its advantages.
8. What are the applications of atomization?
9. Distinguish between automatic and semi-automatic lathes.
10. Define feed.

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PART – B

11. (a) Explain the construction and working of top and bottom squeezer machine.

(Or)

- (b) Explain the different types of cores with neat sketch.

12. (a) Write short notes on the following welding processes: (i) Carbon arc welding (ii) Plasma arc welding.

(Or)

- (b) With a neat sketch describe the Oxy – acetylene gas welding process. List out the advantages and disadvantages.

13. (a) Explain induction hardening process with neat sketch.

(Or)

- (b) Explain the following operations with sketches. (i) Blanking (4)
(ii) Trimming (4) (iii) Cutting off (6)

14. (a) (i) Explain the various factors to be considered for the selection of plastic material.
(ii) Explain with a neat sketch, plunger type extrusion.

(Or)

- (b) (i) Describe the atomization process in the manufacture of metal powders.
(ii) What is meant by elastomers? Explain.

15. (a) What are the types of head stock used in lathe? Explain the working of all geared head stock in lathe.

(Or)

- (b) Explain the construction and working principle of single spindle automatic lathe.
