Register No.:

9008

October 2025

Time – Three hours
(Maximum Marks: 100)

N.B.
1. Answer any fifteen questions under Part-A. All questions carry equal marks. (15X2=30)
2. Answer all questions, choosing any two sub-divisions from each question under Part-B. All questions carry equal marks. (5X14=70) (7+7)

PART- A

1. Who is mechanical engineer?
2. Write the opportunities of mechanical engineer.
3. List the scopes for mechanical engineer.
4. What is meant by manufacturing?
5. Write the classification of materials.
6. Write any two mechanical properties of engineering materials.
7. What is the use of press?
8. Give the examples of temporary metal joints.
9. Write any four parts of lathe.
10. What is drilling?
11. What is the use of milling machine?
12. List any two work holding devices used in drilling machine.
13. Write any two applications of flat belt drive.
14. Write any two applications of chain drive.
15. What is the use of lubrication?
16. Where spur gear drive is used?
17. What is meant by CNC machine?
18. List any two applications of CNC.
19. Define additive manufacturing.
20. What is selective laser sintering(SLS) process?

[Turn over….

PART- B

21. (a) Write about the roles and responsibilities of mechanical engineer.

    (b) Explain any one method of power generation.

    (c) Write short notes on the following:
        (i) Quality
        (ii) Logistics.

22. (a) Differentiate the hot and cold working operations.

    (b) Explain the working of mechanical press.

    (c) Write about brazing and soldering process.

23. (a) Draw a neat sketch of a lathe and explain its functions.

    (b) Explain upright type drilling machine with neat sketch.

    (c) Explain vertical milling machine with neat sketch.

24. (a) Explain the spur and helical gear drives with neat sketch.

    (b) Explain about ring oiler lubrication method with a neat sketch.

    (c) What are the types of belt drive? Explain.

25. (a) Explain about CNC machine.

    (b) Explain the process of 3D printing.

    (c) Explain stereolithography with sketch.
