



ME 302 (AE 302)

**III Semester Diploma (Mechanical/Automobile) Examination, February 2011
MANUFACTURING TECHNOLOGY – I**

Time : 3 Hours

Max. Marks : 75

Instructions : 1) Answer *all* questions in Part – A and either (a) or (b) of *each* question in Part – B.

2) *Each* question carries **1 (one)** mark in Part – A and **12 (twelve)** marks in Part – B.

PART – A

(15×1=15)

1. What is Shrinkage allowance ?
2. What is the purpose of core ?
3. What is ‘Blow hole’ defect in casting ?
4. What is forging ?
5. What is welding ?
6. What is rolling ?
7. What is powder metallurgy ?
8. What is sintering ?
9. What is heat treatment ?
10. Define Lathe.
11. Define cutting speed.
12. What is facing ?
13. What is the least count of Vernier caliper ?
14. What is the purpose of sine bar ?
15. What is comparator ?

P.T.O.



PART – B

(12×5=60)

16. a) Sketch and explain arc furnaces.

OR

b) State the different types of patterns and explain any two with neat sketches.

17. a) Sketch and explain drop forging.

OR

b) Sketch and explain submerged arc welding process.

18. a) Explain the different processes used for production of metal powders.

OR

b) Explain :

a) Normalising

b) Annealing

19. a) What are the different types of operations to be performed on a lathe ? Explain Knurling operation.

OR

b) Draw a neat sketch of centre lathe and mark on it the important parts.

20. a) Draw a neat sketch of a vernier height gauge and describe its uses.

OR

b) With a neat sketch explain the construction and application of an outside micrometer.
