

TED (10)–3003

(REVISION—2010)

Reg. No.

Signature

SECOND SEMESTER DIPLOMA EXAMINATION IN MECHANICAL
ENGINEERING—MARCH, 2013

MANUFACTURING PROCESS

[Time : 3 hours

(Maximum marks : 100)

Marks

PART—A

I Answer *all* questions in one or two sentences. Each question carries 2 marks.

1. List out any four mechanical properties of materials.
2. What is the use of radius gauge ?
3. Distinguish fullers and flatters.
4. List the equipments required for oxy-acetylene welding.
5. How does a rip saw differ from crosscut saw ?

(5x2=10)

PART—B

II Answer *any five* questions. Each question carries 6 marks.

1. Explain the terms thermal resistance and thermal diffusivity.
2. List the various instruments used for linear measurements. Explain the use of calipers.
3. State the precautions to be taken while using a micrometer.
4. Illustrate punching and drifting.
5. Compare arc and gas welding.
6. What is mean by setting of saw teeth ? Why it is done ?
7. Explain single cut and double cut files.

(5x6=30)

PART—C

(Answer *one* full question from each unit. Each question carries 15 marks.)

UNIT – I

- III (a) Explain the procedure to conduct tensile test. 7
- (b) Describe the principle of Magna flux test. 8

OR

- IV (a) State the advantages of Brinell test over other hardness test. 7
 (b) Explain ultrasonic tests with suitable sketches. 8

UNIT - II

- V (a) Write short notes on : (i) Odd leg caliper (ii) Feeler gauge. 8
 (b) Sketch and describe the operation of an outside micrometer. 7

OR

- VI (a) Describe the following : (i) Wire gauge (ii) V-block. 8
 (b) With a neat sketch explain the operation of a universal bevel protractor. 7

UNIT - III

- VII (a) Describe the working of atomic hydrogen welding with sketch. 8
 (b) Enumerate leftward and rightward techniques. 7

OR

- VIII (a) Explain the working of Thermit welding with sketch. 8
 (b) Write short notes on electrodes for arc welding. 7

UNIT - IV

- IX (a) State the advantages of dry sand mould over green sand mould. 8
 (b) Explain the pattern allowances. State the types of allowances. 7

OR

- X (a) Write short notes on :
 (i) Scraping (ii) Reaming (iii) Filing (iv) Drilling. 8
 (b) Name and explain the use of different types of chisels used in fitting shop. 7
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