

Marks

TED (10)–3051

Reg. No. ....

(REVISION—2010)

Signature .....

25  
15  
=40)

THIRD SEMESTER DIPLOMA EXAMINATION IN AUTOMOBILE  
ENGINEERING—OCTOBER, 2012

PRODUCTION PROCESS OF AUTOMOBILE COMPONENTS

[Time : 3 hours

=15)

(Maximum marks : 100)

PART—A

Marks

I Answer the following questions in one or two sentences. Each question carries 2 marks.

1. List four types of allowances in pattern making.
2. List four types of Forging operations.
3. Name three types of corner joints in Welding.
4. Write one method used to specify a Lathe.
5. Write two advantages of a CNC machine.

(5×2=10)

=15)

PART—B

II Answer *any five* of the following. Each question carries 6 marks.

1. Illustrate hot chamber die casting method.
2. Differentiate pit moulding and machine moulding.
3. List the advantages and disadvantages of drop forging (three points each).
4. Briefly explain Bessemer process.
5. Describe the process of submerged arc welding.
6. Describe TIG arc welding process.
7. Write short note about the following operations :

(i) drilling

(ii) reaming

(iii) tapping.

(5×6=30)

PART—C

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

UNIT—I

III Write brief description about :

(i) Single piece pattern

(iii) Shell pattern

(ii) Split pattern

15

OR

IV Write brief description about any five properties of moulding sand.

15

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[P.T.O.]

## UNIT—II

- V Illustrate briefly the following cold working operations :
- |                |                             |    |
|----------------|-----------------------------|----|
| (i) Shearing   | (iii) Cutting and blanking. |    |
| (ii) Squeezing |                             | 15 |

OR

- VI Illustrate briefly the following hot working operations :
- |                |               |    |
|----------------|---------------|----|
| (i) rolling    | (iii) drawing |    |
| (ii) extruding |               | 15 |

## UNIT—III

- VII Give brief description about :
- |   |  |    |
|---|--|----|
| (i) Welding torch                                   |  |    |
| (ii) Gas cylinders                                  |  |    |
| (iii) Pressure regulators in Oxy-Acetylene welding. |  | 15 |

OR

- VIII Compare soldering and brazing operations. 15

## UNIT—IV

- IX Describe the method of operation of taper turning in a Lathe. 15

OR

- X Compare the drive arrangement of slotting machine and shaping machine. 15

MADIN POLYTECHNIC College