

TED (10)–3051

Reg. No. ....

(REVISION—2010)

Signature .....

THIRD SEMESTER DIPLOMA EXAMINATION IN AUTOMOBILE  
ENGINEERING—MARCH, 2014

PRODUCTION PROCESS OF AUTOMOBILE COMPONENTS

[Time : 3 hours

(Maximum marks : 100)

Marks

PART—A

(Maximum marks : 10)

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

1. Write the difference between pattern and casting.
2. List the common pattern making materials.
3. Write any two features of hydraulic press.
4. List the two basic type of welding.
5. List the two general categories of grinding.

(5x2=10)

PART—B

(Maximum marks : 30)

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

1. Discuss the factors deciding the selection of pattern material.
2. Write about loose piece pattern.
3. Discuss briefly about the production process of crankshaft.
4. Discuss about indirect extrusion.
5. Write the advantages and disadvantages of arc welding.
6. How the specification of the size of a lathe can be done ?
7. Discuss briefly the operations that can be performed on a drilling machine.

(5x6=30)

PART—C

(Maximum marks : 60)

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

UNIT – I

III Discuss about the various allowances provided to the patterns.

15

OR

IV Discuss about shell molding process. Write the advantages and disadvantages. 15

UNIT – II

V (a) Discuss about Open Hearth process for steel manufacturing. 8

(b) Compare hot rolling and cold rolling. 7

OR

VI (a) Discuss about rolling operation. 8

(b) Discuss about drawing operation. 7

UNIT – III

VII (a) Explain the working of metal arc welding process. 8

(b) Compare among welding, soldering and brazing. 7

OR

VIII (a) Discuss about spot welding. 8

(b) Explain about gas cutting operation. 7

UNIT – IV

IX Explain about the construction of a lathe machine. 15

OR

X (a) Draw the figure of a drilling machine and identify the parts. 8

(b) State the different parts of a slotter with the help of a figure. 7

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