

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE — APRIL, 2018**

**PRODUCTION PROCESS OF AUTOMOBILE COMPONENTS**

[Time : 3 hours

(Maximum marks : 100)

**PART — A**

(Maximum marks : 10)

Marks

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

1. Identify a sweep pattern.
2. State the term extrusion.
3. Define fusion welding.
4. Write down the chemical equation for chermitt welding.
5. Write the purpose of a surface grinding machine.

(5×2 = 10)

**PART — B**

(Maximum marks : 30)

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

1. Describe dry sand moulding.
2. Write a short note on semi centrifugal casting.
3. Discuss briefly about tube drawing process.
4. Illustrate LD process of steel manufacturing.
5. Summarize carbon arc welding process.
6. Point out the method of specification of a lathe.
7. Outline the process of gear hobbing.

(5×6 = 30)

## PART — C

(Maximum marks : 60)

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

## UNIT — I

- III (a) Describe in detail about plaster moulding. 8  
 (b) Explain about cold chamber die casting process. 7

OR

- IV (a) Write down the significance of skeleton pattern. 8  
 (b) Summarize any four casting defects. 7

## UNIT — II

- V (a) Write a short note on isothermal forging. 8  
 (b) Discuss briefly about hot extrusion. 7

OR

- VI (a) Discuss about production of connecting rod by forging operation. 8  
 (b) Outline the powder metallurgy process. 7

## UNIT — III

- VII (a) Write a short note on oxy-acetylene welding. 8  
 (b) Compare between soldering and brazing. 7

OR

- VIII (a) Explain gas tungsten arc welding with a neat sketch. 8  
 (b) Write briefly about the five basic types of weld joints. 7

## UNIT — IV

- IX (a) Discuss the working of quick return mechanism of a shaper. 8  
 (b) Write a short note about rapid prototyping. 7

OR

- X (a) Write the method of taper turning by tail stock set over method in a lathe. 8  
 (b) Describe the different types of grinding wheels. 7