

**SUBJECT CODE NO:- P-56**  
**FACULTY OF ENGINEERING AND TECHNOLOGY**  
**S.E.(Mech/Prod) Examination MAY/JUNE-2016**  
**Production Processes I**  
**(Revised)**

[Time: Three Hours]

[Max Marks:80]

“Please check whether you have got the right question paper.”

N.B

- i) Q.No.1 and Q.No.6 are compulsory. Solve two questions from remaining questions from each section.  
 ii) Figures to the right indicate full marks.

## SECTION A

- Q.1 Solve any five out of the following: 10
- i) Explain the use of chills in casting.
  - ii) Why the sprue should be tapered?
  - iii) State the important parameters for the design of a cupola.
  - iv) State the different types of cores.
  - v) What do you understand by the term flash in forging?
  - vi) List the allowances that are normally provided in forging?
  - vii) Define impact extrusion.
  - viii) Define embossing process.
  - ix) Why is a shear angle provided in a shearing operation?
  - x) Define lancing and nibbing operations.
- Q.2 a) What are common allowances provided on pattern and why? 05  
 b) What do you understand by Gating system? Discuss all parts of ideal Gating system. 10
- Q.3 a) What are the common defects of casting? State their causes and remedies. 09  
 b) Explain pit furnace and tilting furnace. 06
- Q.4 a) Explain briefly with neat sketch the process of wire drawing. 07  
 b) Show by sketch the various roll arrangements used in rolling mills. 08
- Q.5 a) Describe the following sheet metal operation with suitable sketches. 08  
 i) Punching ii) blanking iii) shearing iv) slitting  
 b) Explain how seamless pipes and tubes are manufactured? 07

## SECTION B

- Q.6 Solve any five out of the following: 10
- i) Draw neat sketch of lap and butt joint of flat parts.
  - ii) Define friction welding.
  - iii) What is flux?
  - iv) What is filler metal?
  - v) List the major defects in welding.
  - vi) State the purpose of surface treatment.
  - vii) Define galvanizing.
  - viii) How are plastic classified?
  - ix) Define powder metallurgy?
  - x) List the various methods used for joining plastics.

Q.7	a) Explain the extrusion moulding process with the help of neat sketch.	08
	b) Discuss the working principle of plasma arc welding with the help of neat sketch.	07
Q.8	a) Write short note on the following: i) Transfer moulding ii) compression moulding	10
	b) Explain resistance seam welding process.	05
Q.9	a) With the help of neat sketch describe the submerged Arc – welding (SAW) process. Also show the edge preparations for SAW.	10
	b) Explain electroplating process.	05
Q.10	a) Write short note on the following: i) Metal spraying ii) anodizing	08
	b) Describe the oxy- acetylene gas welding technique.	07