## bloo bna gnishow tod a Section-C with out senseid

Attempt any two quenstion from this section.  $(15 \times 2=30)$ 

- 10. Explain Lathe Machine with neat sketch and also discuss various operations to be performed.
- 11. Draw the block diagram of a milling machine and describe. What are different operations personned in milling machine?

Explain with neat sketch, the working principle of

- 12. Write short notes on;
  - a) Heat Affected Zone
  - b) Cupola Furnace
  - c) Die and Punch Assembly.

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(Following Paper ID and Roll No. to be filled in your Answer Book)

Paper ID: 140101 Roll No.

B.Tech.

## (SEM. I) THEORY EXAMINATION, 2015-16 BASIC MANUFACTURING PROCESSES

[Time: 3 hours] [Total Marks: 100]

## Moved Inalg To seggy Section-A

- Attempt all sections. All sections carry equal mark.
   Write answer of each section in short. (2×10=20)
  - (a) Define toughness. How is it different from resilience?
  - (b) How cast iron is classified? Write the percentage of carbon in cast iron.
    - (c) What is the purpose of normalizing?
    - (d) Why non-ferrous metals are preferred in some applications?

(1)

- (e) What is the difference between production and productivity?
  - (f) What is the purpose of Core in casting?
  - (g) Differentiate between up milling and down milling.
  - (h) Differentiate between Drilling, Reaming, and Boring?
  - (i) What is the principle of Resistance Welding?
  - (j) Give names of different types of plant layout.

## Section-B Section-B

Attempt any five questions from this section.  $(10 \times 5 = 50)$ 

- 2. Discuss in detail stress-strain digram for ductile and brittle materials.
- 3. What are the types and desirable properties of moulding sand? Discuss different type of casting defects its remedies.

- Discuss the difference between hot working and cold working processes. With appropriate diagrams explain basic Rolling and Forging processes.
- 5. Draw the neat sketch of shaper and specify its different parts. How it differs from Planer machine.
  - 6. Explain with neat sketch, the working principle of Extrusion. Describe indirect extrusion and hydrostatic extrusion. State their applications.
  - Explain Gas Welding Process? What are the types of flames used in Gas Welding? Explain Soldering and Brazing.
- 8. Classify different welding processes. Explain Metal Arc welding in detail with a neat sketch.
  - What are the objectives of plant layout? Write advantages and disadvantages of each plant layout.

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