

Printed Pages: 2

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Sub Code: EME201

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B TECH
(SEM II) THEORY EXAMINATION 2017-18
MANUFACTURING PROCESS

Time: 3 Hours**Total Marks: 100****Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.**SECTION A**

- 1. Attempt *all* questions in brief. 2 x 10 = 20**
- a. Differentiate between ductile & brittle fracture.
 - b. What is Toughness?
 - c. Explain Resilience?
 - d. Explain any two copper alloys with their composition.
 - e. What is metal forming? Enlist its various processes?
 - f. Explain core & core prints?
 - g. Differentiate the between straight & reverse polarity in welding.
 - h. What is arc blow?
 - i. What is Pickling?
 - j. Explain Alligatoring?

SECTION B

- 2. Attempt any *three* of the following: 10 x 3 = 30**
- a. Write notes on:
 - I) Aluminium alloys with examples
 - II) High Speed Steel with examples
 - b. What is rolling? Explain its types with neat sketch.
 - c. Explain shaper machine with neat sketch and also discuss difference between shaper and planer.
 - d. What is welding? Give its classification.
 - e. Write short notes on: - I) Composite II) Plastics

SECTION C

- 3. Attempt any *one* part of the following: 10 x 1 = 10**
- (a) Write short notes on with neat sketch:
 - i) Brittleness
 - ii) Malleability
 - iii) Infiltration
 - iv) Impregnation
 - v) Shaving
 - (b) Explain die-punch assembly with neat sketch.
- 4. Attempt any *one* part of the following: 10 x 1 = 10**
- (a) What is Creep? Explain its various stages & the effect of increasing stress and temperature on creep curve. Also differentiate between Creep & Fatigue.
 - (b) Explain different elements of gating system. Also explain types of gates.

5. Attempt any *one* part of the following: 10 x 1 = 10
- (a) Explain different types of pattern allowances and enlist different types of pattern.
 - (b) Explain the purposes of heat treatment. Explain any two surface hardening processes.
6. Attempt any *one* part of the following: 10 x 1 = 10
- (a) Explain milling machine with neat sketch. Also explain lathe operations.
 - (b) Discuss Gas Welding with neat sketch. Also explain different types of flames used in oxy acetylene welding.
7. Attempt any *one* part of the following: 10 x 1 = 10
- (a) What is plant layout? Explain its different types with neat sketch.
 - (b) What is powder metallurgy and also explain its advantages, limitations & applications in brief?