

May 2023

B Tech.VI SEMESTER

Visionary Learning in Manufacturing (PEC-ME-330)

Time: 3 Hours

Max. Marks:75

- Instructions:**
1. It is compulsory to answer all the questions (1.5 marks each) of Part -A in short.
 2. Answer any four questions from Part -B in detail.
 3. Different sub-parts of a question are to be attempted adjacent to each other.

PART -A

- Q1 (a) What do understand by SME? (1.5)
- (b) What is manufacturing? (1.5)
- (c) Define Observation. (1.5)
- (d) Write the concept of 3S in VLM. (1.5)
- (e) Define Ergonomics. (1.5)
- (f) What is JIT Manufacturing? (1.5)
- (g) Define Standard Work Principle. (1.5)
- (h) What is SWAT chart? (1.5)
- (i) Define Hie-Junka (1.5)
- (j) What is Kizen? (1.5)

PART -B

- Q2 (a) Explain challenges faced by SME's in their existence and development. (10)
- (b) Describe about VLCI. (5)
- Q3 (a) How can cleanliness of a factory be ensured? (5)
- (b) Write the steps to implement 3S in any manufacturing firm. (10)
- Q4 What is V -map 1 &3? Explain the steps to draw V-map 3, taking a suitable example. (15)
- Q5 (a) What is tier structure in manufacturing? (5)
- (b) Define Cycle Time and write steps to prepare SWAT chart. (10)
- Q6 (a) Write the method to review of Hie-Junka control. (10)
- (b) Write quality related programme run in the Indian industries. (5)

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Q7 Write Short notes on the followings.

- (a) Describe Concept of ZED.
- (b) Explain Lean Manufacturing
- (C) Write about material flow in a manufacturing firm.
