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**Question Paper Code: 55P19**

M.E. DEGREE EXAMINATION, NOV 2019

Elective

CAD / CAM

15PCD519 - LEAN MANUFACTURING

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART - A (5 x 20 = 100 Marks)

1. (a) (i) Why craft production. CO1- U (5)  
(ii) What is mental model and how conventional model differs from lean model analyze. CO1- U (15)  
Or
- (b) Explain Muda in detail. Differentiate muda ,mura and muri with example. CO1- U (20)
2. (a) Write a Short notes on CO2-U (10)  
(i) Standardized work and kaizen.  
(ii) Common layouts. CO2-U (10)  
Or
- (b) Explain TPM process in detail. CO2- U (20)
3. (a) What is JIT. Explain the components of JIT in detail. CO3- U (20)  
Or
- (b) Explain the types of kanban and the six kanban rules in detail. CO3-U (20)
4. (a) What are the types of detection methods of poke-yoke . Explain it in detail CO4- U (20)  
Or
- (b) What is poka-yoke . Explain the inspection system and zone control. CO4- U (20)

5. (a) Explain the kaizen circle activity with its application CO5- U (20)

Or

(b) Discuss the different phases of hoshin planning system. CO5- U (20)

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