

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
M.Tech. Winter 2017 - 18 Examination

Semester: 1
Subject Code: 03208132
Subject Name: Lean Manufacturing

Date: 04/01/2018
Time: 2:00 pm to 4:30 pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 A) Write principles of Lean manufacturing. (05)

B) Is lean system is same as TPS? Justify your answer. (05)

C) What do you understand by KANBAN? Explain. (05)

Q.2 Answer the following questions. (Attempt any three) (Each five mark) (15)

A) Discuss the obstacles for the implementation of TQM in an organization.

B) List and briefly define the 5S Practices that serve as an enabler and essential foundation of lean systems.

C) Compare JIT with Reorder point system.

D) Draw the block diagram to depict conceptual characteristics of agile manufacturing.

Q.3 A) List and briefly define the eight types of waste (or muda) that often occur in firms which must be eliminated in implementing lean systems. (07)

B) How you can say Agile manufacturing is quite different from Lean manufacturing? Discuss it with the help of any practical example. (08)

OR

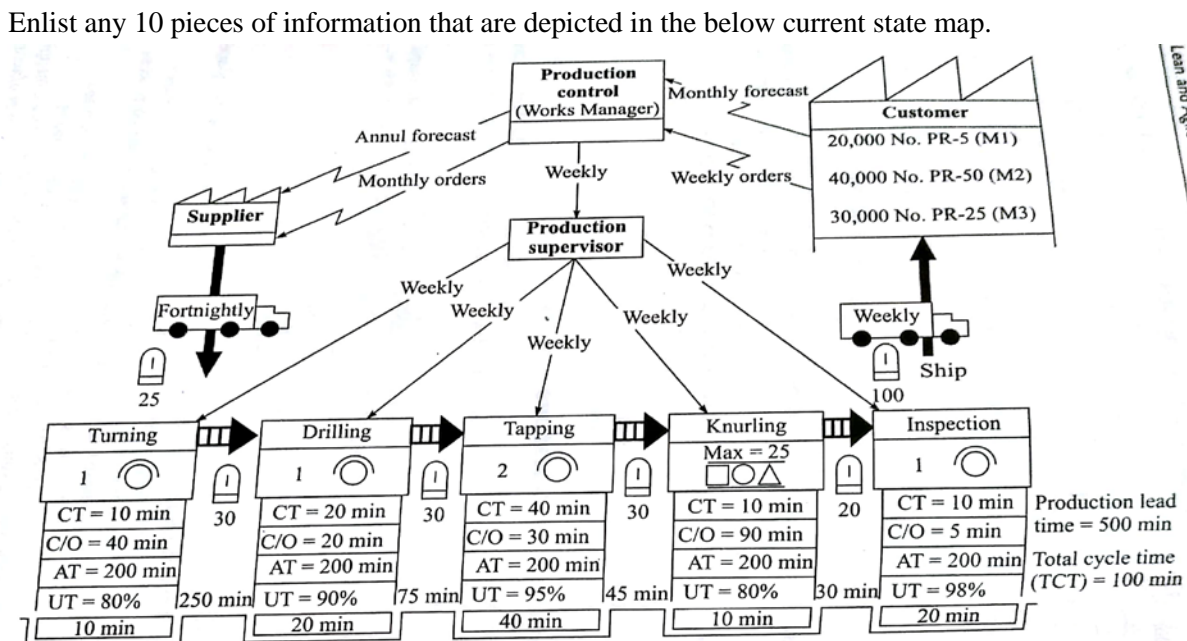
B) Examine a system like the dinning commons or a cafeteria that you are familiar with. Describe how the control of the system works. Is it pull or push? Is it effective? How can it be changed to make it more effective? (08)

Q.4 A) Define equipment effectiveness. Give an account of how TPM integrates with Lean to achieve its goals. (07)

OR

A) What is the objective of TPM? Explain the eight pillars of TPM. (07)

B) The following map indicates the current state observed in manufacturing company: (08)



List down any 10 pieces of information that are depicted in the above current state map.