Registration No :

Total Number of Pages : 02

MBA
18MBA205

2nd **Semester Regular Examination 2018-19**
OPERATIONS MANAGEMENT
BRANCH : MBA
Max Marks : 100
Time : 3 Hours
Q.CODE : F661
Answer Question No.1 (Part-1) which is compulsory, any eight from Part-II and any two from Part-III.
The figures in the right hand margin indicate marks.

Part- I

Q1	**Only Short Answer Type Questions (Answer All-10)**	**(2 x 10)**
a)	What do you understand by Push/Pull production?	
b)	What are the equipments required for Flexible Manufacturing Systems?	
c)	Define Operations Management?	
d)	What are the principles of Six-Sigma?	
e)	Briefly explain Computer Integrated Manufacturing?	
f)	What do you mean by KPI?	
g)	What is Activity System Map?	
h)	Briefly explain scope of TQM?	
i)	Write some benefits of ISO 9000 Series?	
j)	Where are the places Poka Yoke works well?	

Part- II

Q2	**Only Focused-Short Answer Type Questions- (Answer Any Eight out of Twelve)**	**(6 x 8)**
a)	Discuss the steps of implementing Kaizen.	
b)	What are the aims of Value Engineering?	
c)	List and explain the steps of Business Process Reengineering.	
d)	Give the frame work of supply chain network and explain its components.	
e)	Explain the use of break-even analysis for plant location decision with a suitable example.	
f)	What are the components of ERP cost? Explain them.	
g)	Illustrate the application of QFD with a suitable example.	
h)	Explain the basic principles of JIT manufacturing system.	
i)	List and explain the components of Lean Manufacturing.	
j)	Discuss the need for controlling quality of goods and services.	
k)	Design a single sampling plan with the following parameters. Producer's risk (α)= 0.05; consumer's risk (β) = 0.10; Acceptable quality level (AQL) = 0.04 and Lot tolerance percent defectives (LTPD) = 0.10.	
l)	Distinguish between DMAIC and DMADV.	

Part-III

Only Long Answer Type Questions (Answer Any Two out of Four)

Q3 A project consists of 8 activities. Precedence relation and activity times are given. Draw the network and complete the critical path and show the ES, EF, LS, LF and slack for each activity in a tabular form. Find out the project duration. **(16)**

Activity	Immediate predecessor	Activity Time(Weeks)
P	-	12
Q	-	20
R	-	28
S	R	12
T	P,Q	28
U	T,S	12
V	S	8
W	U,V	8

Q4 A job consists of four work elements and all are performed by the same operator. An analyst conducted work sampling to determine the standard time for the job. The duration of the study is one day with two shifts. Each shift has 420 minutes of effective time. The details of observations are summarized in the following table. The total number of acceptable units produced during the study period is 225 units. Determine the standard time by assuming allowance of 12 percent. **(16)**

Work Element Number	Frequency of Performance	Performance Rating
1	50	90%
2	90	150%
3	75	100%
4	85	115%

Q5 Demonstrate the concept of resource allocation with a suitable example. **(16)**

Q6 Give the frame work of MRP II and explain it. **(16)**