GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–VII (NEW) EXAMINATION – WINTER 2018

Subject Code: 2171501   **Date: 15/11/2018**
Subject Name: Operations Planning & Control
Time: 10:30 AM TO 01:00 PM   **Total Marks: 70**
Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

			MARKS
Q.1	**(a)**	What is Process planning?	**03**
	(b)	Explain Index method of scheduling.	**04**
	(c)	What are the conditions under which you apply Johnson's rule for finding Optimal Sequence of operations?	**07**
Q.2	**(a)**	What is scheduling?	**03**
	(b)	Discuss Economic Manufacturing Quantity.	**04**
	(c)	Discuss Production planning v/s Project planning.	**07**
		OR	
	(c)	Discuss MRP and its four fundamental inputs.	**07**
Q.3	**(a)**	Discuss a composite production system.	**03**
	(b)	Short note on: Line of balance technique.	**04**
	(c)	The sequence of manufacturing a product is as follows; Find out minimum no. of work stations and line efficiency:	**07**

Operation	A	B	C	D	E	F	G	H
Time (In Min.)	3	7	8	4	2	5	23	8

OR

			MARKS
Q.3	**(a)**	Explain scope of scheduling with example.	**03**
	(b)	Explain method of regression analysis.	**04**
	(c)	Discuss aggregate planning. Justify use of mixed strategy.	**07**
Q.4	**(a)**	Classify sales forecasting techniques.	**03**
	(b)	Discuss Master Production Scheduling.	**04**
	(c)	Discuss how PPC function is carried out in Job Production, Batch Production and Continuous production.	**07**
		OR	
Q.4	**(a)**	What is 'Break even analysis'?	**03**
	(b)	Discuss usefulness and limitations of 'Break even analysis'	**04**
	(c)	Use Johnson's rule to find out the best sequence and find total idle time form the following data :	**07**

Job	1	2	3	4	5	6
Milling M/c	1	5	4	2	2	4
Drilling M/c	3	1	5	2	7	3

			MARKS
Q.5	**(a)**	What is dispatching?	**03**
	(b)	Explain the procedure of decentralizing dispatching system.	**04**
	(c)	Discuss Route sheet preparation with an example.	**07**

OR

Q.5 **(a)** What are different types of production? **03**

(b) Discuss forecasting for a new product being launched, with an example. **04**

(c) Define OPC function in an organization. Discuss different phases of PPC. **07**

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