## Paper / Subject Code: 37805 / PRODUCTION AND OPERATIONS MANAGEMENT

T.E. SEM VI / PROD / CREDIT BASE / NOV 2018 / 13.12.2018

Total	viarks: 80		ne: 3 Hours
Note:		* (EXAM)	
	<ol> <li>Question No. 1 is Compulsory</li> <li>Answer any three from remaining fiv</li> <li>Draw figure, charts, block diagram w</li> <li>Numbers in bracket to right side indi</li> </ol>	wherever required.	
Q. 1.	Write in brief Importance of following (05 x4		=20)
	a) P & Q system of Inventory		
	b) Ergonomics & workplace design		
	c) Plant Layout		
	d) Supply Chain Management		
Q. 2.			
	(a) Explain life cycle of production with different stages. write (a) decision (b) challenges		
	(c) major consideration at each stage.		(10)
	(b) List and compare different types of I	Production systems with their characterist	tics (10)
Q.3.		(0)	
	a) Explain the functions of production	planning, control and its interrelationship	with other
	functions.		(10)
	b) What is capacity planning? Explain	in brief the process of capacity planning.	(10)
Q.4.			
	(a) What is Lean Manufacturing? List waste as per Just in Time		(10)
	(b) What is work study? Explain the step	ps for Method and Time study	(10)
Q.5.	.0.		
(a)	What is the objective of Material Requir	rement Planning (MRP) and Capacity Re	quirement
	Planning (CRP)? Also explain term Dep	endent demand, Parent and component is	tems, Bill o
	materials, Level code, Requirements exp	plosion, Lead-time offset.	(10)
(b) Following data is provided for inventory,			(10)
	Demand = 380 units,	Holding cost = $\Box$ 0.80 /unit/year	
	Order cost = □ 100 order	Number of working days = 250 day	/year

Find:

- 1. What is the EOQ?
- 2. What is the expected time between order?
- 3. What is the total cost of inventory?

## Q.6. Write short notes

(05x04=20)

- (a) Purchasing cycle
- (b) Standard Time & Normal time
- (c) Primary Activities and Support system: Value Chain
- (d) Material Requirement Planning

