Name: Enrolment No:	

UNIVERSITY OF PETROLEUM & ENERGY STUDIES

End Semester Examination – Dec 2022

Program: BBA LM-I
Semester:INPE 01
Subject/Course: Operation & Material management **Max. Marks: 100**
Course Code: LSCM1004 **Duration: 3 Hours**

Q.No	Section A (multiple choice questions)	Marks	COs
Q1.	i) JIT does not believe in a. Quality b. Over production c. Human relations d. All of the above ii). Just-In-Time (JIT) combines the benefits of a. Job order production and Line production b. Batch production and Line production c. Job order production and Batch production d. None of the above iii. Materials Management has an important role in _____ management. a. Production b. Supply chain c. Operations d. All of the above iv) The cost of insurance and taxes are included in a. Cost of ordering b. Set up cost c. Inventory carrying cost d. Cost of shortages v. The time period between placing an order its receipt in stock is known as a. Lead time b. Carrying time c. Shortage time d. Over time	2*10=20	CO1

	vi. The Economic Order Quantity (EOQ) is calculated as a. $\sqrt{(2D * S/h)}$ b. $\sqrt{(DS */h)}$ c. $\sqrt{(D * S/2h)}$ d. $\sqrt{(D * S/3h)}$ Where, D=Annual demand (units), S=Cost per order, h=Annual carrying cost per unit vii. Buying the annual requirements of an item during its season is called _____ a. Seasonal Buying b. Hand to mouth buying c. Scheduled Buying d. Speculative Buying viii. Materials management mainly focuses on _____ a. management of raw material or components required for continuous production b. production of finished goods and it's sale in the appropriate market c. management of logistics and supply chain activities for timely market reach d. distribution of materials to the seller and distributor for smooth functioning of the market activities ix. The available capacity can be increased by _____ a. Limiting subcontracting b. Using fewer workers c. Rerouting away from other work centers d. Scheduling overtime x. Buying according to the requirements is called _____ a. Seasonal Buying b. Hand to mouth buying c. Scheduled Buying d. Tender Buying		
Q2.	**Section B** i) Differentiate operations & projects with suitable example. ii) Explain service layout and its operations. iii) Explain the inventory management and control on the basis of selective control of inventory. iv) Explain the capacity planning & how is it essential operation	5*4=20	CO2

	strategy for any company?		
Q3.	**Section C** i) Explain the parameters & criterion for selection of facility location? ii) Explain the concept of Kanban and how is it useful to reduce the losses in operations? iii) Discuss the various tools of lean manufacturing a)Cellular manufacturing b)JIT c)Total preventive maintenance	10*3=30	CO3
Q4.	**Section D** i)What is assembly line balancing? Justify "Assembly line balancing is an effective tool for improving productivity". An assembly line has a production time of 20 hours per day and required output of 500 units per day. Total task time is 56 min. Calculate: i) takt time/cycle time ii) Theoretical number of work stations in nearest whole number ii) ABC ltd uses EOQ logic to determine the order quantity for its various components and is planning its orders. The annual consumption is 80,000 units, cost to place one order is Rs 1200, Cost per unit is Rs 50 and carrying cost is 6% of unit cost. Find the EOQ, no of order per year, ordering cost, carrying cost and total cost of inventory	15*2=30	CO4