JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA
PGDM (GEN/ M / SM)
THIRD TRIMESTER (Batch 2017-19)
Special Re-appear END TERM EXAMINATIONS, June - 2018

Course Name	Operations Management	Course Code	OP-301
Max. Time	2 Hour	Max. Marks	40 Marks

INSTRUCTIONS: Answer all questions.

Q 1. Discuss the importance of location decisions in operations management. Explain the factors which affect location decision for a milk processing dairy plant. **(7 Marks)**

Q 2. The following table gives the map coordinates and the shipping loads for a set of cities that we wish to connect through a central hub. Based on the information provided in the table, find:

  a) Near which map coordinates should the hub be located?
  b) If the shipments from city A triple, how does this change the coordinates?

(7 Marks)

City	Map Coordinates (Xi, Yi)	Shipping Load
A	(5, 10)	5
B	(6,8)	10
C	(4,9)	15
D	(9,5)	5
E	(7,9)	15
F	(3,2)	10
G	(2,6)	5

Q 3. John has been asked to determine whether the $22.5 cost of tickets for the community dinner theater will allow the group to achieve break-even and whether the 175 seating capacity is adequate. The cost for the entire 10 performances is $10,000. Drinks and parking are extra charges and have their own price and variable costs, which are given in the following table.   **(7 Marks)**

	Selling price ($)	Variable cost ($)
Tickets with dinner	22.5	10.50
Drinks	5.00	1.75
Parking	5.00	2.00

Q 4. The assembly line whose activities are A to H has an 8 minutes cycle time. Draw the precedence graph and find the minimum possible number of one-person workstations. Then arrange the work activities into workstations so as to balance the line. What is the efficiency and minimum number of workstations for this line balance?   **(7 Marks)**

Task	Performance Time (Minutes)	Task must follow this task
A	5	--------
B	3	A
C	4	B
D	3	B
E	6	C
F	1	C
G	4	D,E,F
H	2	G

Q 5. Write short notes on   **(4 ×3 Marks)**

a) 5S
b) Capacity planning
c) Selective inventory control techniques