

Register No.: Name.:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

SECOND SEMESTER MBA DEGREE EXAMINATION (Regular), JULY 2022**(2021 Scheme)****Course Code : 21MBA108****Course Name: Operations Management****Max. Marks : 60****Duration: 3 Hours****PART A***(Answer all questions. Each question carries 2 marks)*

1. Outline Systems concept in operations management.
2. Relate how productivity enhances profitability of manufacturing operations.
3. Summarize the differences between time study and motion study.
4. What is MRP?
5. Illustrate the significance of Kanban system.

PART B*(Answer any 3 questions. Each question carries 10 marks)*

6. Explain the Continuous, Repetitive, Batch and Job Shop process types and indicate the kinds of situations in which each would be used.
7. Briefly examine the various forms of facility layout with appropriate examples.
8. Elaborate the importance of TQM and describe how TQM is applied in a pharmaceutical industry.
9. Discuss the different techniques of inventory control.
10. Analyse the principles of Lean Management

PART C*(Compulsory question, the question carries 20 marks)*

11. Dhanya had worked for the same Trivaco Ltd company for most 15 years. Although the company had gone through some tough times, things were starting to turn around. Customer orders were up, and quality and productivity had improved dramatically from what they had been only a few years earlier due company - wide quality improvement program. So, it comes as a real shock to Dhanya and about 400 of her co-workers when they were suddenly terminated following the new CEO's decision to downsize the company. After recovering from the initial shock, Dhanya tried to find employment elsewhere. Despite her efforts, after eight months of searching she was no closer to finding a job than the day she started. Her funds were being depleted and she was getting more

discouraged. There was one bright spot, though: She was able to bring in a little money by mowing lawns for her neighbors. She got involved quite by chance when she heard one neighbor remark that now that his children were on their own, nobody was around to cut the grass. Almost jokingly, Dhanya asked him how much he'd be willing to pay. Soon Dhanya was mowing the lawns of five neighbors. Other neighbors wanted her to work on their lawns, but she didn't feel that she could spare any more time from her job search. However, as the rejection letters began to pile up, Dhanya knew she had to make an important decision in her life. On a rainy Tuesday morning, she decided to go into business for herself taking care of neighborhood lawns. She was relieved to give up the stress of job hunting, and she was excited about the prospects of being her own boss. But she was also fearful of being completely on her own. Nevertheless, Dhanya was determined to make a go of it. At first, business was a little slow, but once people realized Dhanya was available, many asked her to take care of their lawns. Some people were simply glad to turn - the work over to her; others switched from professional lawn care services. By the end of her first year in business, Dhanya knew she could earn a living this way. She also performed other services such as fertilizing lawns, weeding gardens, and trimming shrubbery. Business became so good that Dhanya hired two part-time workers to assist her and, even then, she believed she could expand further if she wanted to.

Dhanya is the operations manager of her business. Among her responsibilities are forecasting, inventory management, scheduling, quality assurance, and maintenance.

- a) What kinds of things would likely require forecasts? Marks (5)
- b) What inventory items does Dhanya probably have? Name one inventory decision she has to make periodically. Marks (4)
- c) What scheduling must she do? What things might occur to disrupt schedules and cause Dhanya to reschedule? Marks (6)
- d) How important is quality assurance to Dhanya's business? Explain. Marks (5)
