

OMGT3123 Exam I Review

The exam IS NOT multiple choice. You can expect questions that ask for critical thinking and test problem solving skills. Short answer, graphing, diagram construction, what if analysis, and explanation thereafter should all be expected. Especially review the in class homework problems.

Items to help you study for the exam:

1. What is the definition of Operations Management?
2. What is scientific management? Who developed the concept first? Why was the concept developed?
3. What is the difference between the ideas and people behind the old school operations management and new school operations management?
4. How does service quality differ from product quality?
5. Why is service quality at times more difficult than product quality?
6. Why are designing services at times more difficult than designing products?
7. Study the seven QC tools and be able to apply them to a set of data. Specifically, be able to draw a scatter plot and a Pareto diagram. See the notes and lecture on Jan. 17th.
8. Completely understand how to construct x-bar and R charts. Take a look at the exercises provided in class as practice (e.g., Homework #1, Jan. 24th). Hint: Do not memorize formulas and such, learn the process and think about questions such as
 - (1) Why are both x-bar and R charts used?
 - (2) Why should products be uniform?
 - (3) Can SPC be applied to the service industry? Give some examples.
9. Understand reliability analysis. What is the difference between components in series versus components in parallel? Be able to calculate reliability for components in series or in parallel. See in class example and the reliability handout on Jan. 26th.
10. Understand break-even analysis. Be able to construct a break-even chart and comment on its implications. Take a look at Homework #2, Feb. 2nd.
11. Understand what block diagramming and line balancing is. Hint: Do not memorize formulas learn the process. Practice problems from the text such the solved problems on pages 350 and 365 (for block diagramming) and pages 360 and 367 (for line balancing). Also see the example problems worked in class on Feb. 9th and Homework #3 on Feb. 14th.
12. Be able to construct a block diagram and be able to balance a product layout/assembly line.
13. Where and why would a manager use block diagramming instead of line balancing?

Remember you must explain all answers as fully as possible. You may use graphs, charts, tables, etc. to aid in your explanation. You are telling a story in the attempt to win a contract with a client. So justify your answers to the best of your ability.