

Assessment

JIT Forecasting and Master Scheduling *First Edition*

The objectives of this book are:

- To explain the techniques and advantages of long-term planning
- To present a just-in-time forecasting model
- To explain how to use forecasting tools

■ CRISP_{series}

Disclaimer: This assessment was written to test the reader on the content of the book. The publisher and author shall have neither liability nor responsibility to any person with respect to any loss or damage caused or alleged to be caused directly or indirectly by the assessment contained herein.

Assessment Questions for JIT Forecasting and Master Scheduling, First Edition

Select the best response.

1. If a company cannot predict accurately its customer demand, it will probably:
 - A. Carry too much inventory
 - B. Pay unnecessary manufacturing costs
 - C. Spend money too early
 - D. All of the above
 - E. None of the above

2. Today's competitive advantage goes to companies that:
 - A. Keep employee training costs to a minimum
 - B. Are best at managing change
 - C. Require the least information

3. When a product's time to market is reduced, the time in which profit from that product can be earned is increased.
 - A. True
 - B. False

4. When product variety increases, product volume:
 - A. Increases
 - B. Decreases

5. The highest profit margin per unit is in a manufacturing environment of:
 - A. Engineered-to-order goods
 - B. Built-to-order goods
 - C. Assembled-to-order goods
 - D. Built-to-stock goods

6. To set inventory levels, you must consider both customer satisfaction and expected:
 - A. Quality of goods
 - B. Forecast error
 - C. Variation in resources
 - D. Planning errors

7. Realistic production rates must be based on:
 - A. Complete resource plans
 - B. Data on resource availability
 - C. Customer interest in the product
 - D. All of the above

8. *Tracking* is a capacity strategy that plans for capacity:
 - A. Well in advance of anticipated sales
 - B. Only when customer demand is present
 - C. In relation to sales projections
 - D. Only when inventory is low

9. To balance conflicting goals of departments, such as sales, finance, and engineering, key components must have:
 - A. Willingness to change
 - B. Adequate time to change
 - C. Both of the above

10. Raw material is *least* likely to be held in inventory for:
 - A. Engineered-to-order goods
 - B. Built-to-order goods
 - C. Assembled-to-order goods
 - D. Built-to-stock goods

11. Just-in-Time forecasting attempts to replace inventory with:
 - A. Investments
 - B. Information
 - C. Income
 - D. Increased revenue

12. A forecast error is the difference between what you:
- A. Planned to sell and what you manufactured
 - B. Sold and what your competitor sold
 - C. Thought you could sell and what you sold
 - D. Manufactured and what was defective
13. Quantitative forecasting tools are:
- A. Historical analogies
 - B. A panel of experts
 - C. Trend projections
 - D. Arithmetic average
 - E. C and D
14. Once you have established a forecasting model, it should not be changed.
- A. True
 - B. False
15. A moving average forecasting tool is:
- A. A new period plus prior periods, divided by number of periods
 - B. Same as A but the oldest period is dropped
 - C. When data is weighted
 - D. When data is weighted and the newest data counts most
16. Full response forecasting requires that there be:
- A. No variation in sales from year to year
 - B. A wide variation in sales from year to year
17. Extrinsic forecasting indicators:
- A. Presume a constant relationship between two factors
 - B. Are more useful for smaller product lines
 - C. Can come from external or internal business sources
 - D. All of the above
 - E. A and C

18. The standard deviation of the forecast error can determine the inventory needed to meet a projected shipping time.
- A. True
 - B. False
19. The 80/20 rule is that:
- A. 80% of a population is a predictor of 100% of the effect
 - B. 20% of a population generates 100% of the revenue
 - C. A *small* percentage of a group has the greatest influence
 - D. A *large* percentage of a group has the greatest influence
20. The formula for exponential smoothing is:
- A. New forecast = old forecast + [α x (actual demand – old forecast)]
 - B. New forecast = old forecast + [α x (actual demand + old forecast)]
21. In a build-to-order environment:
- A. The stocking point is raw material
 - B. The Master Production Schedule is driven by customer orders
 - C. Lead times are less than in an assemble-to-order environment
 - D. A and B
 - E. A and C
22. If suppliers or customers require changes to the master schedule, the company should absorb the cost of those changes.
- A. True
 - B. False
23. If shortages of critical resources occur:
- A. Production, sales, and inventory levels must be adjusted
 - B. Equipment, staff, and materials must be provided as needed
 - C. Necessary funding must be provided
 - D. All of the above
24. To calculate the number of units that can be produced, use the:
- A. Rough-cut capacity plan
 - B. Rated capacity formula
 - C. Projected available balance formula

25. JIT forecasting and master scheduling are complementary because:
- A. Precise forecasting tools can be used
 - B. Long-term planning can enhance JIT forecasting
 - C. Forecasting helps increase service while reducing costs
 - D. All of the above

**Answer Key for
JIT Forecasting and Master Scheduling, First Edition**

Recommended response (Corresponding workbook page)

- | | | | | |
|-----------|------------|------------|------------|-------------|
| 1. D (4) | 6. B (22) | 11. B (42) | 16. B (65) | 21. D (96) |
| 2. B (8) | 7. D (21) | 12. C (46) | 17. E (67) | 22. B (101) |
| 3. B (5) | 8. C (26) | 13. E (50) | 18. A (69) | 23. D (103) |
| 4. B (19) | 9. C (27) | 14. B (51) | 19. C (76) | 24. B (104) |
| 5. A (20) | 10. A (36) | 15. B (60) | 20. A (65) | 25. D (42) |