PRESIDENCY UNIVERSITY
BENGALURU

SCHOOL OF MANAGEMENT

MAKE UP EXAMINATION – JAN 2023

Course Code: MBA2032

Course Name: Production and Operation Management

Program : MBA

Date; 20-JAN-2023

Time: 09.30AM – 12.30PM

Max Marks: 100

Weightage: 50%

Instructions:
(i) *Read the all questions carefully and answer accordingly.*

Part A

Answer all the Questions. Each question carries three marks.   **(10Qx 3M= 30M)**

1. There are several Factors that impact the changes in production and operation management right from its evolution stage. Mention any three important Factors affecting Operation Management Current scenario.   (CO1) [Knowledge]

2. In manufacturing sector two important criteria to be in practice such as make to order and make to buy. Then what is make to order and what is make to buy with examples each? (CO1) [Knowledge]

3. Errors are always existing in any planning and decision process even forecasting not exceptional, what are three forecast errors?   (CO1) [Knowledge]

4. Production of any commodity require planning and control then Define Production planning and control.   (CO1) [Knowledge]

5. To practice a good managerial concept, different phases of implementation in needed, then what are the different phases of PPC?   (CO1) [Knowledge]

6 The concept of production planning with respect to capacity and aggregate planning with other requirement is essential, then what are the functions of Master Production Schedule.   (CO1) [Knowledge]

7. MRP system is an integral part of PPC it requires few important inputs. Indicate the different inputs of a good MRP system.   (CO1) [Knowledge]

8 MRP – I concerned with materials planning then what are the significance of MRP-II.   (CO1) [Knowledge]

9 Inventory is the important integral part of the Operation Management then What is inventory control?   (CO1) [Knowledge]

10 Standard time is the time allowed to an operator to carry out the specified task under specified Conditions, what are the component of the standard time.   (CO1) [Knowledge]

Part B

Answer all the Questions. Each question carries Eight marks.   (5Qx8M=40M)

11. The Lay outing of Plants, Machineries, Equipment's and others plays important role in continuous and uninterrupted production process. Then what is Product layout and what are its are the advantages of Product Layout.   (CO2) [Comprehension]

12. Sales of hair dryers at the Walgreens stores in Youngstown, Ohio, over the past 4 months have been 100, 110, 120, and 130 units (with 130 being the most recent sales).
    Develop a moving-average forecast for next month, using these three techniques:
    a) 3-month moving average.
    b) 4-month moving average.
    c) Weighted 4-month moving average with the most recent month weighted 4, the preceding month 3, then 2, and the oldest month weighted 1.
    d) If next month's sales turn out to be 140 units, forecast the following month's sales (months) using a 4-month moving average.   (CO3) [Application]

13. Material management decides the production planning and production effectiveness, as Manager one should know about MRP- I, describe MRP-I and explain the required Inputs of MRP system.   (CO3) [Application]

14. "The application of techniques designed to establish the time for a qualified worker to carry out a specified job at a defined level of performance." Explain the steps in Time Study.
                    (CO4) [Comprehension]

15. Inventory generally refers to the materials in stock, then what is Inventory Management and explain the benefits of Inventory Control.   (CO4) [Comprehension]

Part C

Answer all the Questions. Each question carries 15 marks.   (2Qx15M=30M)

16. The Burger Doodle restaurant chain purchases ingredients from four different food suppliers. The company wants to construct a new central distribution center to process and package the ingredients before shipping them to their various restaurants. The suppliers transport ingredient items in 40-foot truck trailers, each with a capacity of 38,000 lbs. The locations of the four suppliers, as shown.

    $$x_A = 200 \quad x_B = 100 \quad x_C = 250 \quad x_D = 500$$
    $$y_A = 200 \quad y_B = 500 \quad y_C = 600 \quad y_D = 300$$
    $$W_A = 75 \quad W_B = 105 \quad W_C = 135 \quad W_D = 60$$

    Using the center-of-gravity method, determine a possible location for the distribution center.
                    (CO4) [Application]

17. A manufacturing company purchase 9000 parts of a machine for its annual requirements ordering for month usage at a time, each part costs Rs. 20. The ordering cost per order is Rs. 15 and carrying charges are 15% of the average inventory per year. You have been assigned to suggest a more economical purchase policy for the company. What advice you offer and how much would it save the company per year.   (CO4) [Application]