## ASSIGNMENT BOOKLET

Post Graduate Certificate in Inventory Planning and Warehousing System (PGCIPWS)

## Last date for submission:

30th April 2024

School of Engineering and Technology
Indira Gandhi National Open University
Maidan Garhi New Delhi - 110068

We advise you to go through your course material carefully and read all the units pertaining to assignments. A weightage of 30 per cent, as you are aware, has been earmarked for continuous evaluation which would consist of one tutor-marked assignment for each of MWR - 001, MWR - 002, and MWR - 003 of this course. You need to score a minimum of 40 marks out of 100 marks in each of the assignments. Submit scan copy of handwriting assignments through e-mail and e-mail Id is pgcipws.assignment @ignou.ac.in.

## Instructions for Formatting Your Assignments

Before attempting the assignment please read the following instructions carefully.

1) On top of the first page of your TMA answer sheet, please write the details exactly in the following format:

ENROLMENT NO: $\qquad$
NAME: $\qquad$
ADDRESS: $\qquad$

COURSECODE: $\qquad$
COURSETITLE: $\qquad$
ASSIGNMENT NO.: $\qquad$
STUDYCENTRE:
DATE: $\qquad$

## PLEASE FOLLOW THE ABOVE FORMAT STRICTLY TO FACILITATE EVALUATION AND TO AVOID DELAY.

2) Use only full size writing paper (but not of very thin variety) for writing your answers.
3) Leave 4 cm margin on the left, top and bottom of your answer sheet.
4) Your answers should be precise.
5) Only hand written assignments acceptable. No typed assignments
6) While solving problems, clearly indicate the question number along with the part being solved. Be precise. Recheck your work before submitting it.

Answer sheets received after the due date shall not be accepted.
We strongly feel that you should retain a copy of your assignment response to avoid any unforeseen situation and append, if possible, a photocopy of this booklet with your response.

We wish you good luck.

## Assignment -1

(To be done after studying the course material)
Course Code: MWR - 002
Course Title: Warehousing System
Assignment Code: MWR - 002/TMA/2024
Maximum Marks: 100
Last Date of Submission: 30 ${ }^{\text {th }}$ April - 2024
Note:

1. Attempt all questions. All questions carry equal marks.

| Q. 1 | Discuss the issues and challenges for materials management in today's scenario. Explain the functions of materials management. | 10 |
| :---: | :---: | :---: |
| Q. 2 | What are the functions and responsibilities of materials manager? Illustrate with the suitable example of any industry or organization. | 10 |
| Q. 3 | (a) Describe materials requirement planning. | 5 |
|  | (b) Discuss the role of 'product structure' in materials requirement planning. | 5 |
| Q. 4 | (a) Explain just in time production system. Discuss its limitations. | 5 |
|  | (b) How does ERP help in MRP II? Discuss challenges in implementing ERP in an organization. | 5 |
| Q. 5 | (a) Explain the role of aggregate planning in any business organization. | 5 |
|  | (b) Discuss the relationship of aggregate planning with master production schedule. | 5 |
| Q. 6 | Production manager of a producer of lawn movers and leaf blowers, has the following information on its major product: <br> (i) Regular time production capacity $=5600$ units/period <br> (ii) Overtime production costs = Rs. 150/Unit <br> (iii) Inventory costs $=$ Rs. 25/ Unit/period (based on the ending inventory) <br> (iv) Backlog Costs $=$ Rs. 70/unit/period <br> (v) Beginning inventory $=500$ units <br> Demand (in units) for periods 1,2,3 and 4 are 4500, 3300, 2100 and 2600 respectively. |  |
|  | (a) Develop a level output plan that yields zero inventory at the end of period 4. | 5 |


|  | (b) What will be the total costs resulting from this plan? | 5 |
| :--- | :--- | :--- |
| Q. $\mathbf{7}$ | (a) Describe '5S' technique used under Kaizen for workplace | 5 |
|  | (b) What are the various wastes of manufacturing and describe any two of them <br> with suitable examples? | 5 |
| Q. $\mathbf{8}$ | (a) What do you mean by 'Kanban' and what is its role in production system. | 5 |
|  | (b) Determine the number of containers needed for a workstation that uses 100 <br> parts per hour if the time for a container to complete a cycle (i.e move, wait, <br> empty, return, fill) is 90 minutes, and a standard container holds 84 parts. An <br> inefficiency factor of 0.10 is currently being used. | 5 |
| Q. $\mathbf{9}$ | (a) What do you understand by supply chain management? What are potential <br> benefits of managing the supply chain? | 5 |
|  | (b) What do you mean by logistics management and how does it relate with the <br> supply chain management? | 5 |
|  | Write shorts notes on only two the following: <br> Q. $\mathbf{1 0}$ <br> (b) Value Analysis <br> (c) Crossdocking strategy | $5+$ |

