

---

**PGCIPWS - 2023**

**ASSIGNMENT BOOKLET**  
MWR 002

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

**Last date for submission:**

**30th October 2023**

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

Dear Student,

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:** .....

**NAME:** .....

**ADDRESS:** .....

.....

**COURSECODE:** .....

**COURSETITLE:** .....

**ASSIGNMENT NO.:** .....

**STUDYCENTRE:** .....                      **DATE:**.....

---

**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: Advance Inventory Planning**

**Assignment Code: MWR – 002/TMA/2023**

**Maximum Marks: 100**

**Last Date of Submission: 30<sup>th</sup> October - 2023**

**Note:**

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

<b>Q.1</b>	Discuss the importance of materials management in today's scenario. How is it different from traditional practices ?	10
<b>Q. 2</b>	Describe the functions and responsibilities of materials manager. Illustrate with the suitable example of any industry or organization.	10
<b>Q. 3</b>	(a) Define and describe materials requirement planning.	5
	(b) Describe the role of 'product structure' in materials requirement planning.	5
<b>Q. 4</b>	(a) What do you understand by just in time production system ?	4
	(b) How does the purpose of ERP differ from the purpose of MRP II and what are challenges for implementing ERP in an organization ?	6
<b>Q. 5</b>	(a) Describe the role of aggregate planning in any business organization.	5
	(b) Discuss the relationship of aggregate planning with master production schedule.	5
<b>Q. 6</b>	<p>Production manager of a producer of lawn movers and leaf blowers, has the following information on its major product:</p> <ul style="list-style-type: none"> <li>(i) Regular time production capacity = 2600 units/period</li> <li>(ii) Overtime production costs = Rs. 120/Unit</li> <li>(iii) Inventory costs = Rs. 20/ Unit/period (based on the ending inventory)</li> <li>(iv) Backlog Costs = Rs. 50/unit/period</li> <li>(v) Beginning inventory = 400 units</li> </ul> <p>Demand (in units) for period 1, 2, 3 and 4 are 4000, 3200, 2000 and 2500 respectively.</p>	
	(a) Develop a level output plan that yields zero inventory at the end of period 4.	6

	(b) What will be the total costs resulting from this plan ?	4
<b>Q. 7</b>	(a) Describe '5S' technique used under Kaizen for workplace	5
	(b) What are the various wastes of manufacturing and describe any two of them with suitable examples ?	5
<b>Q. 8</b>	(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 parts per hour if the time for a container to complete a cycle (i.e move, wait, empty, return, fill) is 90 minutes, and a standard container holds 84 parts. An inefficiency factor of 0.10 is currently being used.	5
<b>Q. 9</b>	(a) What do you understand by supply chain management ? What are potential benefits of managing the supply chain ?	6
	(b) What do you mean by logistics management and how does it relate with the supply chain management ?	4
<b>Q. 10</b>	Write shorts notes on only two the following : (a) Problems with MRP implementation (b) ABC inventory management strategy (c) Master production schedule	5 + 5 = 10