

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF COMMERCE

DEPARTMENT OF ECONOMICS

BACHELOR OF SCIENCE HONOURS DEGREE IN PURCHASING & SUPPLY

SCM 107: MATERIALS PLANNING AND PRODUCTION CONTROL

PAS 203: LOGISTICS IN PURCHASING AND SUPPLY 2

DURATION :3 HOURS

TOTAL MARKS: 100

INSTRUCTIONS TO CANDIDATES

NOV 2024

- i. Section A [Compulsory]
 - ii. Answer any 3 questions [Section B]
 - iii. Begin a new answer on a new page
 - iv. All questions carry 25 marks
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QUESTION 1 [Compulsory]

1a) Explain the concept of Supply Chain Optimization.? [10 marks]

1b) Explain the concept of Capacity planning and how does it add value in controlling production.? [15 marks]

SECTION B [Answer 3 questions]**QUESTION 2**

2a) Describe the concept of demand variability and its impact on forecasting in material planning.? [10 marks]

2b) How can organization use forecasting techniques to improve material planning? [15marks]

QUESTION 3

3a) Describe the role of production schedule in production control.? [10 marks]

3b) What are the potential challenges or risks associated with production scheduling and how can they be mitigated. [15 marks]

QUESTION 4

The CEO of Natpak Pvt Ltd company decides to stop carrying stocks of finished goods and decides to increase stocks of raw materials. Evaluate this decision? [25 marks]

QUESTION 5

Compare and contrasts continuous review and periodic review system in material planning and production control.? [25 marks]

QUESTION 6

6a) Explain the concept of Lead time and its significance in material planning [15 marks]

6b). VHW operates 48 weeks /year. In 2018, their cost of goods sold was \$87 000. VHW trading carries 7 Stock Keeping Units in its storeroom. The table below shows the nature and quantities of the SKUs that are kept:

Category	Part number	Av inventory units	Value
Raw materials	Rm -1	8 00	\$1.44
	Rm-2	9 900	\$1.25
	Rm-3	9300	\$2.00
Work in progress	Wp-1	3 70	\$1.09
	Wp-2	8 200	\$0.25
Finished goods	Fg-1	800	\$4.33
	Fg-2	40	\$4.77

Calculate the following for VHW;

- i. Weeks of supply [5 marks]
- iii. Inventory Turnover [5 marks]

END OF PAPER