

**BALLARI INSTITUTE OF TECHNOLOGY & MANAGEMENT**

(Autonomous Institute under Visvesvaraya Technological University, Belagavi)

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Course Code 

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Seventh Semester B.E. Degree Examinations, February 2025

**PRODUCTION PLANNING AND CONTROL**

Duration: 3 hrs

Max. Marks: 100

**Note:** 1. Answer any FIVE full questions, choosing ONE full question from each module.  
 2. Missing data, if any, may be suitably assumed

<u>Q. No</u>	<u>Question</u>	<u>Marks</u>	<u>(RBTL:CO:PI)</u>
<b><u>Module-1</u></b>			
1.	a. Define production planning and control. Differentiate between job production and batch production.	10	(2:1:1.2.1)
	b. How production planning and control improves quality control during the production process.	10	(2:1:1.2.1)
<b>(OR)</b>			
2.	a. Write a short note on (i) functional aspects (ii) operational aspects	10	(2:1:1.2.1)
	b. Explain briefly profit consideration and standardization in production planning and control.	10	(2:1:1.4.1)
<b><u>Module-2</u></b>			
3.	a. Explain briefly the basic procedure of time study.	10	(2:2:1.4.1)
	b. Explain how critical analysis in work study improves operational efficiency.	10	(2:2:1.4.1)
<b>(OR)</b>			
4.	a. Differentiate between time study and production study.	10	(2:2:1.2.1))
	b. Explain briefly the technique of work measurement in method study.	10	(2:2:1.4.1)
<b><u>Module-3</u></b>			
5.	a. What is value analysis? Briefly explain the steps in the value analysis.	10	(2:3:1.4.1)
	b. Write a short note on (i) Determination of batch size (ii) Trade-off between costs.	10	(2:3:1.2.1)
<b>(OR)</b>			
6.	a. Mention the benefits of computer aided process planning.	10	(2:3:1.4.1)
	b. Examine the responsibilities of a process planning engineer in a multi-product scenario.	10	(5:3:1.2.1)
<b><u>Module-4</u></b>			
7.	a. Define KANBAN? Explain briefly the use of KANBAN system in controlling production work flow.	10	(2:4:1.4.1)
	b. Discuss briefly aggregate planning and master scheduling.	10	(2:4:1.2.1)

**Note: (RBTL - Revised Bloom's Taxonomy Level: CO - Course Outcome: PI- Performance Indicator)**

**(OR)**

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| <b>8.</b> | <b>a.</b> Define line of balancing? Explain briefly how this method used in scheduling batch production. | <b>10</b> | <b>(2.4:1.2.1)</b> |
|           | <b>b.</b> Explain briefly the steps in process planning.   | <b>10</b> | <b>(2.4:1.4.1)</b> |

**Module-5**

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| <b>9.</b> | <b>a.</b> What is inventory control? Mention its functions and objectives.                         | <b>10</b> | <b>(2.5:1.4.1)</b> |
|           | <b>b.</b> Explain the concept of economic order quantity and its application in inventory control. | <b>10</b> | <b>(2.5:1.2.1)</b> |

**(OR)**

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|------------|---|-----------|--------------------|
| <b>10.</b> | <b>a.</b> Define JIT? Mention its impact on reducing inventory carrying cost.   | <b>10</b> | <b>(2.5:1.2.1)</b> |
|            | <b>b.</b> With a neat sketch explain briefly MRP II, and mention its functions. | <b>10</b> | <b>(2.5:1.4.1)</b> |

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