GANDHI SCHOOL OF ENGINEERING
BHABANDHA, BERHAMPUR
SESSION PLAN
6TH SEMESTER, BRANCH-MECHANICAL(GROUP 1)
TH1- INDUSTRIAL ENGINEERING & MANAGEMENT

Name of the Faculty – ER. SANJAY KUMAR BISOYI & ER. KABITA KUMARI TRIPATHY

		Topics to be taken					
SL NO & CHAPTER	**No. of Periods assigned by SCTE & VT**	**Details of the topics**	**PLANNIND DATE**	**Details of the topics**	**ACTUAL DATE**	**Remarks**
1. PLANT ENGINEERING	**10**	1.1 Selection of Site of Industry. 1.2 Define plant layout. 1.3 Describe the objective and principles of plant layout. 1.4 Explain Process Layout, Product Layout and Combination Layout. 1.5 Techniques to improve layout. 1.6 Principles of material handling equipment. 1.7 Plant maintenance. 1.7.1 Importance of plant maintenance. 1.7.2 Break down maintenance. 1.7.3 Preventive maintenance. 1.7.4 Scheduled maintenance.	**13/02/2023 TO 27/02/2023**	1.1 Selection of Site of Industry. 1.2 Define plant layout. 1.3 Describe the objective and principles of plant layout. 1.4 Explain Process Layout, Product Layout and Combination Layout. 1.5 Techniques to improve layout. 1.6 Principles of material handling equipment. 1.7 Plant maintenance. 1.7.1 Importance of plant maintenance. 1.7.2 Break down maintenance. 1.7.3 Preventive maintenance. 1.7.4 Scheduled maintenance.	**13.02.2023 16.02.2023** **17.02.2023** **20.02.2023** **23.02.2023 24.02.2023** **25.02.2023 27.02.2023**	

2. OPERATIONS RESEARCH	10	2.1 Introduction to Operations Research and its applications. 2.2 Define Linear Programming Problem, 2.3Solution of L.P.P. by graphical method. 2.4 Evaluation of Project completion time by Critical Path Method and PERT (Simple problems)- 2.5Explain distinct features of PERT with respect to CPM.	2/03/2023 TO 13/03/2023	2.1 Introduction to Operations Research and its applications.	2.03.2023	
				2.2 Define Linear Programming Problem,	3.03.2023	
				2.3Solution of L.P.P. by graphical method.	4.03.2023 6.03.2023	
				2.4 Evaluation of Project completion time by Critical Path Method and PERT (Simple problems)-	9.03.2023 10.03.2023	
				2.5Explain distinct features of PERT with respect to CPM.	11.03.2023 13.03.2023	

3. INVENTORY CONTROL	**10**	3.1 Classification of inventory. 3.2 Objective of inventory control. 3.3 Describe the functions of inventories. 3.4 Benefits of inventory control. 3.5 Costs associated with inventory. 3.6 Terminology in inventory control 3.7 Explain and Derive economic order quantity for Basic model. (Solve numerical) 3.8 Define and Explain ABC analysis.	**16/03/2023 TO 27/03/2023**	3.1 Classification of inventory. 3.2 Objective of inventory control. 3.3 Describe the functions of inventories. 3.4 Benefits of inventory control. 3.5 Costs associated with inventory. 3.6 Terminology in inventory control 3.7 Explain and Derive economic order quantity for Basic model. (Solve numerical) 3.8 Define and Explain ABC analysis.	**16.03.2023 17.03.2023** **18.03.2023** **20.03.2023** **23.03.2023** **24.03.2023** **25.03.2023** **27.03.2023**

| 4. INSPECTION AND QUALITY CONTROL | 15 | 4.1Define Inspection and Quality control.
4.2Describe planning of inspection.
4.3 Describe types of inspection.
4.4 Advantages and disadvantages of quality control.
4.5 Study of factors influencing the quality of manufacture.
4.6 Explain the Concept of statistical quality control, Control charts (X, R, P and C - charts).
4.7 Methods of attributes.
4.8 Concept of ISO 9001-2008.
4.9.1 Quality management system, Registration /certification procedure.
4.9.2 Benefits of ISO to the organization.
4.9.3 JIT, Six sigma,7S, Lean manufacturing
4.9.4 Solve related problems. | 31/03/2023 TO 27/04/2023 | 4.1Define Inspection and Quality control.
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3.04.2023
6.04.2023
8.04.2023
10.04.2023

13.04.2023

15.04.2023

17.04.2023
20.04.2023
21.04.2023

24.04.2023

27.04.2023 | |

				5.1 Introduction	28.04.2023	
5. PRODUCTION PLANNING AND CONTROL	**15**	5.1 Introduction 5.2 Major functions of production planning and control 5.3 Methods of forecasting 5.3.1 Routing 5.3.2Scheduling 5.3.3 Dispatching 5.3.4 Controlling 5.4 Types of production 5.4.1 Mass production 5.4.2 Batch production 5.4.3 Job order production 5.5 Principles of product and process planning.	**28/04/2023 TO 22/05/2023**	5.2 Major functions of production planning and control 5.3 Methods of forecasting 5.3.1 Routing 5.3.2Scheduling 5.3.3 Dispatching 5.3.4 Controlling 5.4 Types of production 5.4.1 Mass production 5.4.2 Batch production 5.4.3 Job order production 5.5 Principles of product and process planning.	29.04.2023 1.05.2023 4.05.2023 6.05.2023 8.05.2023 11.05.2023 12.05.2023 13.05.2023 15.05.2023 18.05.2023 20.05.2023 22.05.2023	

K. K. Tripathy

Sanjaya Kumar Bisoyi

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		Topics to be taken				
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28.02.2023

1.03.2023
3.03.2023

6.03.2023
10.03.2023

13.03.2023
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| 5. PRODUCTION PLANNING AND CONTROL | 15 | 5.1 Introduction
5.2 Major functions of production planning and control
5.3 Methods of forecasting
5.3.1 Routing
5.3.2 Scheduling
5.3.3 Dispatching
5.3.4 Controlling
5.4 Types of production
5.4.1 Mass production
5.4.2 Batch production
5.4.3 Job order production
5.5 Principles of product and process planning. | 24/04/2023 TO 16/05/2023 | 5.1 Introduction

5.2 Major functions of production planning and control
5.3 Methods of forecasting
5.3.1 Routing
5.3.2 Scheduling
5.3.3 Dispatching
5.3.4 Controlling
5.4 Types of production
5.4.1 Mass production
5.4.2 Batch production
5.4.3 Job order production
5.5 Principles of product and process planning. | 24.04.2023

25.04.2023

26.04.2023
28.04.2023
1.05.2023
2.05.2023
3.05.2023
8.05.2023
9.05.2023
10.05.2023

12.05.2023

15.05.2023
16.05.2023 | |

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S.Bhatia.

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