



**GANDHI SCHOOL OF ENGINEERING  
BHABANDHA, BERHAMPUR**

**SESSION PLAN**

**6TH SEMESTER, BRANCH-MECHANICAL(GROUP 1)**

**TH1- INDUSTRIAL ENGINEERING & MANAGEMENT**

Name of the Faculty – ER. SIBASISH SAHU						
Topics to be taken						
SL NO & CHAPTER	No. of Periods assigned by SCTE & VT	Details of the topics	PLANNING 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.	18.01.2024 TO 2.02.2024	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.	18.01.2024 19.01.2024  20.01.2024  22.01.2024  25.01.2024 29.01.2024  1.02.2024 2.02.2024	


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.	3.02.2024 TO 16.02.2024	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.	3.02.2024  5.02.2024  8.02.2024 9.02.2024  10.02.2024 12.02.2024  15.02.2024 16.02.2024	
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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.	17.02.2024 TO 1.03.2024	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.	17.02.2024 19.02.2024  22.02.2024 23.02.2024 24.02.2024 26.02.2024 29.02.2024  1.03.2024	
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4. INSPECTION AND QUALITY CONTROL	15	4.1 Define Inspection and Quality control. 4.2 Describe 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.	<b>2.03.2024 TO 28.03.2024</b>	4.1 Define Inspection and Quality control. 4.2 Describe 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.	<b>2.03.2024 4.03.2024 7.03.2024 11.03.2024 14.03.2024  15.03.2024  16.03.2024  18.03.2024 21.03.2024 22.03.2024  23.03.2024  28.03.2024</b>	
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5. PRODUCTION PLANNING AND CONTROL	15	5.1 Introduction	30.03.2024 TO 27.04.2024	5.1 Introduction	30.03.2024
		5.2 Major functions of production planning and control		5.2 Major functions of production planning and control	4.04.2024
		5.3 Methods of forecasting		5.3 Methods of forecasting	5.04.2024
		5.3.1 Routing		5.3.1 Routing	6.04.2024
		5.3.2 Scheduling		5.3.2 Scheduling	8.04.2024
		5.3.3 Dispatching		5.3.3 Dispatching	12.04.2024
		5.3.4 Controlling		5.3.4 Controlling	13.04.2024
		5.4 Types of production		5.4 Types of production	15.04.2024
		5.4.1 Mass production		5.4.1 Mass production	18.04.2024
		5.4.2 Batch production		5.4.2 Batch production	19.04.2024
		5.4.3 Job order production		5.4.3 Job order production	20.04.2024
		5.5 Principles of product and process planning.		5.5 Principles of product and process planning.	22.04.2024 25.04.2024 26.04.2024 27.04.2024

  
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Mechanical Engg.  
Gandhi School of Engg.  
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HOD, MECHANICAL



**GANDHI SCHOOL OF ENGINEERING  
BHABANDHA, BERHAMPUR**

**SESSION PLAN**

**6TH SEMESTER, BRANCH-MECHANICAL(GROUP 2)**

**TH1- INDUSTRIAL ENGINEERING & MANAGEMENT**

Name of the Faculty – PROF. SOMANATH BHUTIA						
Topics to be taken						
SL NO & CHAPTER	No. of Periods assigned by SCTE & VT	Details of the topics	PLANNING 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.	19.01.2024 TO 5.02.2024	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.	19.01.2024 22.01.2024  24.01.2024  29.01.2024  30.01.2024 31.01.2024  2.02.2024 5.02.2024	

2. OPERATIONS RESEARCH	10	<p>2.1 Introduction to Operations Research and its applications.</p> <p>2.2 Define Linear Programming Problem, 2.3Solution of L.P.P. by graphical method.</p> <p>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.</p>	<p>6.02.2024 TO 20.02.2024</p>	<p>2.1 Introduction to Operations Research and its applications.</p> <p>2.2 Define Linear Programming Problem,</p> <p>2.3Solution of L.P.P. by graphical method.</p> <p>2.4 Evaluation of Project completion time by Critical Path Method and PERT (Simple problems)-</p> <p>2.5Explain distinct features of PERT with respect to CPM.</p>	<p>6.02.2024</p> <p>7.02.2024</p> <p>9.02.2024 12.02.2024</p> <p>13.02.2024 16.02.2024</p> <p>19.02.2024 20.02.2024</p>	
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3. INVENTORY CONTROL	10	<p>3.1 Classification of inventory.</p> <p>3.2 Objective of inventory control.</p> <p>3.3 Describe the functions of inventories.</p> <p>3.4 Benefits of inventory control.</p> <p>3.5 Costs associated with inventory.</p> <p>3.6 Terminology in inventory control</p> <p>3.7 Explain and Derive economic order quantity for Basic model. (Solve numerical)</p> <p>3.8 Define and Explain ABC analysis.</p>	21.02.2024 TO 28.02.2024	<p>3.1 Classification of inventory.</p> <p>3.2 Objective of inventory control.</p> <p>3.3 Describe the functions of inventories.</p> <p>3.4 Benefits of inventory control.</p> <p>3.5 Costs associated with inventory.</p> <p>3.6 Terminology in inventory control</p> <p>3.7 Explain and Derive economic order quantity for Basic model. (Solve numerical)</p> <p>3.8 Define and Explain ABC analysis.</p>	<p>21.02.2024</p> <p>23.02.2024</p> <p>26.02.2024</p> <p>27.02.2024</p> <p>22.03.2024</p> <p>24.03.2024</p> <p>27.03.2024</p> <p>28.02.2024</p>	
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4. INSPECTION AND QUALITY CONTROL	15	4.1 Define Inspection and Quality control. 4.2 Describe 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.	<b>1.03.2024 TO 27.03.2024</b>	4.1 Define Inspection and Quality control. 4.2 Describe 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.	<b>1.03.2024 4.03.2024 6.03.2024 11.03.2024 12.03.2024  13.03.2024  15.03.2024  18.03.2024 19.03.2024 20.03.2024  22.03.2024  27.03.2024</b>	
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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 5.3.2Scheduling 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.	2.04.2024 TO 26.04.2024	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.	2.04.2024 3.04.2024 5.04.2024 8.04.2024 9.04.2024 10.04.2024 12.04.2024 15.04.2024 16.04.2024 19.04.2024 22.04.2024 23.04.2024 24.04.2024 26.04.2024	
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