

LESSON PLAN 2020-21

PRODUCTION TECHNOLOGY(TH-1)

(From 07-09-2020 to 02-01-2021)

Semister-3RD (Automobile Engineering)

Name of the teaching faculty-SIBASIS HARIHAR SAHU

BHUBANANANDA ODISHA SCHOOL OF ENGINEERING, CUTTACK

DEPARTMENT OF AUTOMOBILE ENGINEERING

LESSON PLAN

SUBJECT NAME- PRODUCTION TECHNOLOGY (TH-1)

SEMESTER-3RD

TOTAL PERIODS – 60

CLASSES ALLOTTED PER WEEK-4

NAME OF TEACHING FACULTY –SIBASIS HARIHAR SAHU

SESSION-(2020-2021)

Week & Date	No of periods allotted	Topics to be covered	Topics actually covered	Shortfall If any	Reason of shortfall	How to make up	Remarks / Signature With date
1st 07-09-2020 To 12-12-2020	4	Dt. 08/09/2020 1.0 Metal Forming Processes 1.1 Extrusion: Definition & Classification. Dt. 10/09/2020 1.2 Explain direct, indirect and impact extrusion process. (Cont.) Dt. 11/09/2020 Explain direct, indirect and impact extrusion process. Dt. 12/09/2020 1.3 Define rolling. Classify it.					
2nd 14-09-2020	4	Dt. 15/09/2020 1.4 Differentiate between cold					

To 19-09-2020		<p>rolling and hot rolling process.</p> <p>Dt. 17/09/2020</p> <p>1.5 List the different types of rolling mills used in Rolling process. (Cont.)</p> <p>Dt. 18/09/2020</p> <p>List the different types of rolling mills used in Rolling process.</p> <p>Dt. 19/09/2020</p> <p>2.0 Welding</p> <p>2.1 Define welding and classify various welding processes.</p>					
3rd 21-09-2020 To 26-09-2020	4	<p>Dt. 22/09/2020</p> <p>2.2 Explain fluxes used in welding.</p> <p>Dt. 24/09/2020</p> <p>2.3 Explain Oxy-acetylene welding process.</p> <p>Dt. 25/09/2020</p> <p>2.4 Explain various types of flames used in Oxy-acetylene welding process. (Cont.)</p> <p>Dt. 26/09/2020</p> <p>Explain various types of flames used in Oxy-acetylene welding process.</p>					
4th	3	Dt. 29/09/2020					

28-09-2020 To 03-10-2020		2.5 Explain Arc welding process. (Cont.) Dt. 01/10/2020 Explain Arc welding process. Dt. 03/10/2020 2.6 Specify arc welding electrodes. (Cont.)					
5th 05-10-2020 To 10-10-2020	4	Dt. 06/10/2020 Specify arc welding electrodes. Dt. 08/10/2020 2.7 Define resistance welding and classify it. Dt. 09/10/2020 2.8 Describe various resistance welding processes such as butt welding, spot welding, flash welding, projection welding and seam welding. (Cont.) Dt. 10/10/2020 Spot welding, flash welding					
6th 12-10-20 To 17-10-20	4	Dt. 13/10/2020 Projection welding and seam welding. Dt. 15/10/2020 2.9 Explain TIG and MIG welding process (Cont.) Dt. 16/10/2020 Explain TIG and MIG welding process					

		Dt. 17/10/2020 2.10 State different welding defects with causes and remedies.					
7th 19-10-20 To 24-10-20	3	Dt. 20/10/2020 3.0 Casting 3.1 Define Casting and Classify the various Casting processes. (Cont.) Dt. 22/10/2020 Define Casting and Classify the various Casting processes. Dt. 23/10/2020 3.2 Explain the procedure of Sand mould casting. (Cont.)					
8th 26-10-20 To 31-10-20	2	Dt. 27/10/2020 Explain the procedure of Sand mould casting. Dt. 29/10/2020 3.3 Explain different types of molding sands with their composition and properties. (Cont.)					
9th 02-11-20 To 07-11-20	4	Dt. 03/11/2020 Explain different types of molding sands with their composition and properties. Dt. 05/11/2020 3.4 Classify different pattern					

		<p>and state various pattern allowances. (Cont.)</p> <p>Dt. 06/11/2020</p> <p>Classify different pattern and state various pattern allowances.</p> <p>Dt. 07/11/2020</p> <p>3.5 Classify core.</p>					
<p>10th</p> <p>09-11-20</p> <p>To</p> <p>14-11-20</p>	4	<p>Dt. 09/11/2020</p> <p>3.6 Describe construction and working of cupola and crucible furnace. (Cont.)</p> <p>Dt. 10/11/2020</p> <p>Describe construction and working of cupola and crucible furnace.</p> <p>Dt. 11/11/2020</p> <p>3.7 Explain die casting method. (Cont.)</p> <p>Dt. 12/11/2020</p> <p>Explain die casting method.</p>					
<p>11th</p> <p>16-11-20</p> <p>To</p> <p>21-11-20</p>	4	<p>Dt. 16/11/2020</p> <p>3.8 Explain centrifugal casting such as true centrifugal casting, centrifuging with advantages, limitation and area of application. (Cont.)</p> <p>Dt. 17/11/2020</p> <p>Explain centrifugal casting</p>					

		<p>such as true centrifugal casting, centrifuging with advantages, limitation and area of application.</p> <p>Dt. 18/11/2020</p> <p>3.9 Explain various casting defects with their causes and remedies.</p> <p>Dt. 19/11/2020</p> <p>4.0 Powder Metallurgy</p> <p>4.1 Define powder metallurgy process. (Cont.)</p>					
<p>12th 23-11-20 To 28-11-20</p>	4	<p>Dt. 23/11/2020</p> <p>Define powder metallurgy process.</p> <p>Dt. 24/11/2020</p> <p>4.2 State advantages of powder metallurgy technology technique</p> <p>Dt. 25/11/2020</p> <p>4.3 Describe the methods of producing components by powder metallurgy technique. (Cont.)</p> <p>Dt. 26/11/2020</p> <p>Describe the methods of producing components by powder metallurgy technique.</p>					
13th	3	Dt. 01/12/2020					

30-11-20 To 05-12-20		4.4 Explain sintering. Dt. 02/12/2020 4.5 Economics of powder metallurgy. Dt. 03/12/2020 5.0 Press Work 5.1 Describe Press Works: blanking, piercing and trimming. (Cont.)					
14th 07-12-20 To 12-12-20	4	Dt. 07/12/2020 Describe Press Works: blanking, piercing and trimming. Dt. 08/12/2020 5.2 List various types of die and punch. (Cont.) Dt. 09/12/2020 List various types of die and punch. Dt. 10/12/2020 5.3 Explain simple, Compound & Progressive dies. (Cont.)					
15th 14-12-20 To 19-12-20	4	Dt. 14/12/2020 Explain simple, Compound & Progressive dies. Dt. 15/12/2020 5.4 Describe the various advantages & disadvantages of above dies.					

		Dt. 16/12/2020 6.0 Press Work 6.1 Define jigs and fixtures. Dt. 17/12/2020 6.2 State advantages of using jigs and fixtures.					
16th 21-12-20 To 26-12-20	4	Dt. 21/12/2020 6.3 State the principle of locations. Dt. 22/12/2020 6.4 Describe the methods of location with respect to 3-2-1 point location of rectangular jig. (Cont.) Dt. 23/12/2020 Describe the methods of location with respect to 3-2-1 point location of rectangular jig. Dt. 24/12/2020 6.5 List various types of jig and fixtures. (Cont.)					
17th 28-12-20 To 02-01-21	4	Dt. 28/12/2020 List various types of jig and fixtures. Dt. 29/12/2020 Doubt Clearing Class Dt. 30/12/2020 Previous year questions					

		discussions Dt. 31/12/2020 Final revision					
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LESSON PLAN 2020-21

AUTOMOBILE ELECTRICITY(TH-3)

(From 07-09-2020 to 02-01-2021)

Semister-5TH (Automobile Engineering)

Name of the teaching faculty-SIBASIS HARIHAR SAHU

BHUBANANANDA ODISHA SCHOOL OF ENGINEERING, CUTTACK

DEPARTMENT OF AUTOMOBILE ENGINEERING

LESSON PLAN

SUBJECT NAME- AUTOMOBILE ELECTRICITY (TH-3)

SEMESTER-5TH

TOTAL PERIODS – 60

CLASSES ALLOTTED PER WEEK-4

NAME OF TEACHING FACULTY –SIBASIS HARIHAR SAHU

SESSION-(2020-2021)

Week & Date	No of periods allotted	Topics to be covered	Topics actually covered	Shortfall If any	Reason of shortfall	How to make up	Remarks / Signature With date
1st 07-09-2020 To 12-12-2020	4	Dt. 07/09/2020 1. Storage Battery 1.1 Purpose and types of battery. (Cont.) Dt. 09/09/2020 Purpose and types of battery. Dt. 11/09/2020 1.2 Construction capacity and charging of battery. (Cont.) Dt. 12/09/2020 Construction capacity and charging of battery.					
2nd 14-09-2020 To	4	Dt. 14/09/2020 1.3 Testing servicing and maintenance of battery. (Cont.)					

19-09-2020		Dt. 16/09/2020 Testing servicing and maintenance of battery. Dt. 18/09/2020 2. Starting System 2.1 Principle and construction of starter motor. (Cont.) Dt. 19/09/2020 Principle and construction of starter motor.					
3rd 21-09-2020 To 26-09-2020	4	Dt. 21/09/2020 2.2 Drive arrangement and control. (Cont.) Dt. 23/09/2020 Drive arrangement and control. Dt. 25/09/2020 2.3 Servicing and maintenance of starter motor. (Cont.) Dt. 26/09/2020 Servicing and maintenance of starter motor.					
4th 28-09-2020 To 03-10-2020	3	Dt. 28/09/2020 3. Generating system 3.1 Flemings right hand rule and lenz's law. (Cont.) Dt. 30/09/2020 Flemings right hand rule and lenz's law. Dt. 03/10/2020					

		3.2 Principle and constructional details of generator. (Cont.)					
5th 05-10-2020 To 10-10-2020	4	Dt. 05/10/2020 Principle and constructional details of generator. (Cont.) Dt. 07/10/2020 Principle and constructional details of generator. Dt. 09/10/2020 3.3 Current and voltage regulator. (Cont.) Dt. 10/10/2020 Current and voltage regulator.					
6th 12-10-20 To 17-10-20	4	Dt. 12/10/2020 3.4 Cut-out relay, routine maintenance of generator. (Cont.) Dt. 14/10/2020 Cut-out relay, routine maintenance of generator. (Cont.) Dt. 16/10/2020 Cut-out relay, routine maintenance of generator. Dt. 17/10/2020 4. Alternator 4.1 Principle and construction of alternator. (Cont.)					

7th 19-10-20 To 24-10-20	3	Dt. 19/10/2020 Principle and construction of alternator. (Cont.) Dt. 21/10/2020 Principle and construction of alternator. Dt. 23/10/2020 4.2 Maximum R.M.S. and average value.					
8th 26-10-20 To 31-10-20	1	Dt. 28/10/2020 4.3 Maintenance of alternator.					
9th 02-11-20 To 07-11-20	4	Dt. 02/11/2020 5. Ignition System 5.1 Principle and components (induction coil, contact breaker, spark plug, distributor, condenser) of spark ignition system. (Cont.) Dt. 04/11/2020 Principle and components (induction coil, contact breaker, spark plug, distributor, condenser) of spark ignition system. (Cont.) Dt. 06/11/2020 Principle and components (induction coil, contact					

		breaker, spark plug, distributor, condenser) of spark ignition system. (Cont.) Dt. 07/11/2020 Principle and components (induction coil, contact breaker, spark plug, distributor, condenser) of spark ignition system.					
10th 09-11-20 To 14-11-20	4	Dt. 09/11/2020 5.2 Electronics spark timing computer controlled coil ignition system operation (Cont.) Dt. 11/11/2020 Electronics spark timing computer controlled coil ignition system operation (Cont.) Dt. 13/11/2020 Electronics spark timing computer controlled coil ignition system operation 5.3 Electronics ignition system with distributor/distributer less. (Cont.)					
11th 16-11-20 To	4	Dt. 16/11/2020 Electronics ignition system with distributor/distributer less.					

21-11-20		<p>Dt. 18/11/2020</p> <p>5.4 Types of ignition system such as:- Coil ignition system magnet ignition system electronics ignition system, transistorised ignition system. (Cont.)</p> <p>Dt. 20/11/2020</p> <p>Types of ignition system such as:- Coil ignition system magnet ignition system electronics ignition system, transistorised ignition system. (Cont.)</p>					
<p>12th</p> <p>23-11-20</p> <p>To</p> <p>28-11-20</p>	4	<p>Dt. 23/11/2020</p> <p>Types of ignition system such as:- Coil ignition system magnet ignition system electronics ignition system, transistorised ignition system.</p> <p>Dt. 25/11/2020</p> <p>5.5 Ignition system servicing and fault diagnosis. (Cont.)</p> <p>Dt. 27/11/2020</p> <p>Ignition system servicing and fault diagnosis.</p> <p>6. Light</p> <p>6.1 Setting of head lights (Cont.)</p>					

13th 30-11-20 To 05-12-20	3	Dt. 02/12/2020 Setting of head lights. Dt. 04/12/2020 6.2 Tail and stop lights.					
14th 07-12-20 To 12-12-20	4	Dt. 07/12/2020 6.3 Indicator and dim deeper mechanism. (Cont.) Dt. 09/12/2020 Indicator and dim deeper mechanism. Dt. 11/12/2020 7. Accessories & Control 7.1 Electric horn and screen wiper (Cont.)					
15th 14-12-20 To 19-12-20	4	Dt. 14/12/2020 Electric horn and screen wiper. Dt. 16/12/2020 7.2 Fuel gauge oil pressure gauge and water temperature gauge. (Cont.) Dt. 18/12/2020 Fuel gauge oil pressure gauge and water temperature gauge.					
16th 21-12-20 To 26-12-20	2	Dt. 21/12/2020 8. Wiring system 8.1 Types of wiring such as :- Earth return and insulated return system. (Cont.) Dt. 23/12/2020					

		Types of wiring such as :- Earth return and insulated return system.					
17th 28-12-20 To 02-01-21	4	Dt. 28/12/2020 8.2 Wiring diagram of four wheelers and two wheelers. Dt. 30/12/2020 8.3 Elective wiring layout in a four wheeler. Dt. 01/01/2021 8.4 Inspection and maintenance of electrical systems.					