

BHUBANANANDA ODISHA SCHOOL OF ENGINEERING, CUTTACK
DEPARTMENT OF MECHANICAL ENGINEERING



LESSON PLAN

SUBJECT: PRODUCTION TECHNOLOGY (TH1)

FACULTY: MRS SUNITA NAYAK

Sunita Nayak

ACADEMIC SESSION: 2022-23

SEMESTER: 3rd

SEC: B

[Signature]
14.07.22
H O D (Mech Engg.)

Sunita Nayak

Discipline- Mechanical Engg	Semester :- 3 rd Sec-B	Name of the teaching faculty :- SUNITA NAYAK
Subject- Production Technology	No of periods Allotted per Week- 04 (Monday, Tuesday, Wednesday, Thursday)	Semester from Date - 15/09/2022 To Date - 22/12/2022 No. of Weeks: 15
Week	Class	Theory Topics
1st	15/09/2022	Discussion of syllabus and Introduction to Production technology
2nd	19/09/2022	1.0 Metal forming processes
	20/09/2022	1.1 Extrusion: Definition & Classification
		1.2 Explain Direct Extrusion Process.
	21/09/2022	1.2 Explain Indirect Extrusion Process
	22/09/2022	1.2 Explain Impact extrusion process
3rd	26/09/2022	1.3 Define rolling. Classify it.
	27/09/2022	1.4 Differentiate between cold rolling and hot rolling process.
	28/09/2022	1.5 List the different types of rolling mills used in Rolling process
	29/09/2022	2. Welding
		2.1 Define welding & classify various welding processes.
4th	03/10/2022- 08/10/2022	PUJA VACATION
5th	10/10/2022	2.2 Explain fluxes used in welding.

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	11/10/2022	2.3 Explain Oxy-acetylene welding process
	12/10/2022	2.4 Explain various types of flames used in oxy-acetylene welding process
	13/10/2022	2.5 Explain Arc welding process
6th	17/10/2022	2.6 Specify Arc welding electrodes
	18/10/2022	2.7 Define resistance welding and classify it
	19/10/2022	2.8. Describe Butt Welding,
	20/10/2022	2.8 Describe Spot welding
7th	25/10/2022	2.8 Describe Flash Welding
	26/10/2022	Class test
	27/10/2022	2.8 Describe Projection Welding
8th	31/10/2022	2.8 Describe Seam welding
	01/11/2022	2.9 Explain TIG Welding
	02/11/2022	2.9. Explain MIG welding process
	03/11/2022	2.10 State different welding defects with Causes and remedies of welding defects
9th	07/11/2022	3.Casting 3.1 Define Casting and Classify the various Casting processes.

Concepts

	09/11/2022	3.2 Explain the procedure of Sand mould casting.
	10/11/2022	3.3 Explain different types of moulding sands, composition and properties of different moulding sand
10th	14/11/2022	3.4 Classify different pattern
	15/11/2022	3.4 State Various pattern allowances
	16/11/2022	3.5 Classify core
	17/11/2022	Internal examination
11th	21/11/2022	3.6 Describe construction and working of cupola furnace
	22/11/2022	3.6 Describe construction and working of Crucible Furnace
	23/11/2022	3.7 Explain Die Casting Method
	24/11/2022	3.8 Explain centrifugal casting such as true centrifugal casting, advantages, limitation and area of application
12th	28/11/2022	3.8. Explain Centrifuging casting with advantages, limitation and area of application
	29/11/2022	3.9 Explain various casting defects with their causes and remedies.

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	30/11/2022	Chapter-4 Powder Metallurgy 4.1 Define powder metallurgy process. 4.2 State advantages of powder metallurgy technology technique
	01/12/2022	4.3 Describe the methods of producing components by powder metallurgy technique.
13th	05/12/2022	4.4 Explain sintering.
	06/12/2022	4.5 Economics of powder metallurgy
	07/12/2022	Chapter-5 Press Work 5.1 Describe Press Works: blanking, piercing and trimming. 5.2 List various types of die and punch
	08/12/2022	5.3.1 Explain simple Die, Compound Die
14th	12/12/2022	5.3. Explain Progressive Dies
	13/12/2022	5.4 Describe the various advantages & disadvantages of above dies
	14/12/2022	Chapter-6 Jigs and fixtures 6.1 Define jigs and fixtures 6.2 State advantages of using jigs and fixtures
	15/12/2022	6.3 State the principle of locations
15th	19/12/2022	6.4 Describe the methods of location with respect to 3-2-1 point location of rectangular jig 6.5 List various types of jig and fixture
	20/12/2022	Class test
	21/12/2022	Revision and doubt clearing
	22/12/2022	Revision and doubt clearing

Extended lesson plan w.e.f. 23/12/2022 to 21/1/2023

Week	Class day	
16 th	2/1/2023	Theory/practical topics 5.3. Explain Progressive Dies
	3/1/2023	5.4 Describe the various advantages & disadvantages of above dies
	4/1/2023	Chapter-6 Jigs and fixtures 6.1 Define jigs and fixtures 6.2 State advantages of using jigs and fixtures 6.3 State the principle of locations
	5/1/2023	
	9/1/2023	6.4 Describe the methods of location with respect to 3-2-1 point location of rectangular jig 6.5 List various types of jig and fixture
17 th	10/1/2023	Revision
	11/1/2023	Revision
	12/1/2023	Revision
	16/1/2023	Class test
	17/1/2023	Previous semester question discussion
18 th	18/1/2023	Revision
	19/1/2023	Revision

Srinivas