

Discipline -  
Mechanical  
Subject - MT

Semester - 4th

Name of the teaching faculty  
Er. Rabintra Dasgupta

No. of days/  
class allotted - 05

Semester From - 14/02/23  
To - 23/05/23.

Week	No. of Period	Theory Topics
14th Feb	1st	Introduction to Tool material
to	2nd	Types of tool material (HSS, CBN)
18th Feb	3rd	Composition of various tool materials
	4th	Maha Shiva Ratri
20th Feb	1st	Physical properties and uses of such material.
to		
25th Feb	2nd	Cutting action of various tool
	3rd	Action of chisel, hacksaw blade & dies.
	4th	Turning tool geometry.
	5th	Revision of the chapter.
27th Feb	1st	Machining process parameter
to	2nd	Construction & working of lathe
4th March	3rd	Major components of lathe & their functions.
	4th	Major operation (Ext. operations - Facing, parting off, knurling)
	5th	Internal operation - (Drilling, Boring etc)
6th March	1st	Safety measures during machining
to	2nd	----- Dolo Purnima -----
11th March	3rd	----- Holi -----
	4th	Introduction of Capstan lathe
	5th	Diff. bet <sup>n</sup> Engine, Capstan & Turret lathe
3th March	1st	Parts function (Capstan lathe)
to	2nd	Define multiple tool holder.
8th March		

Week	No. of Period	Theory Topics
	3rd	Introduction of turret lathe
	4th	Difference bet <sup>n</sup> capstan and turret
	5th	Discuss the major components & its function of turret lathe.
20th March	1st	Components function
To	2nd	Discuss a hexagonal bolt
25th March	3rd	Tool layout of hexagonal bolt.
	4th	Introduction & application of shaper m/c
	5th	Major components
27th March	1st	Components function of shaper m/c
To	2nd	Automatic Table Feed Mechanism
1st April	3rd	Construct the shaper m/c
	4th	Working of tool head
	5th	Utkal Dibas
3rd April	1st	Quick return Mechanism
To	2nd	Specification of a Shaper m/c
8th April	3rd	Revision of the Chapter.
	4th	Good Friday
	5th	Introduction to planer m/c.
10th April	1st	Application Area of Planer
To	2nd	Difference bet <sup>n</sup> shaper & planer
15th April	3rd	Major components & parts function of shaper planer m/c.
	4th	Maha Visuba Sankranti
	5th	Table Drive Mechanism

Week	No. of Period	Theory Topics
7th April	1st	Working of tool & tool support.
To	2nd	Clamping of work
2nd April	3rd	Types of milling m/c & operations perfor
	4th	Work holding attachment.
	5th	Id - Ul - Fitre
4th April	1st	Simple and Universal dividing head
To	2nd	Simple and Compound Indexing
29th April	3rd	Introduction of slotter m/c
	4th	Major components of slotter m/c
	5th	Functions of parts.
1st May	1st	Construction & working
To	2nd	Tools used in holder of slotter m/c
6th May	3rd	Continue of the topic
	4th	← Budha Purnima →
	5th	Introduction of Grinding
5th May	1st	Selection criteria for grinding wheel
To	2nd	Specification of grinding wheel.
13th May	3rd	Cylindrical & Surface grinder.
	4th	Introduction of Centreless grinder
	5th	Internal machining operation.
5th May	1st	Bench drill & Pillar drill m/c
to	2nd	Radial drill & Boring operation
6th May	3rd	Difference between boring and drilling
	4th	← Sabitri Amabasya →

