Discipline : Mechanical Engineering	Semester : 5th Semester-2020-21	Name of the Teaching Faculty: Shri. SHEKHAR KUMAR SAHU
Subject: Project & Seminar	No. of Days/week Class Allotted: 60	Semester from date: 01/09/2020 to date: 19/03 /2021 No of weeks: 18

week	Class Day	Practical Topics
1st	1st	Group Discussion 1 : Discussion on some topics with essential Questions
	2nd	Group Discussion 2 : Discussion on some topics with essential Questions
2nd	1st	Group Discussion 3 : Discussion on some topics with essential Questions
	2nd	Selection of making a 3d printer
3rd	1st	Work load distribution to the students
	2nd	Collecting Data on different type 3d printers
4th	1st	Collecting Data on different type 3d printers
	2nd	Collecting the datasheet of Types of Arduino
5th	1st	Collecting the datasheet of Types of Arduino
	2nd	Collecting the data sheet of stepper motors and drivers
6th	1st	Collecting the data sheet of stepper motors and drivers
	2nd	Collecting the data sheet of stepper motors and drivers
7th	1st	Collecting the data sheet of stepper motors and drivers
	2nd	Making a model on Autocad
8th	1st	Making a model on Autocad
	2nd	Making a model on Autocad
9th	1st	Making a model on Autocad
	2nd	Making a model on Autocad
10th	1st	Making a model on Autocad
	2nd	Net weight calculation of the 3d printer
11th	1st	Timing belt and pulley material selection
	2nd	Timing belt and pulley pitch and width calculation
12th	1st	Lead screw design and pitch calculation
	2nd	Nut design ,load calculation
13th	1st	Load calculation on different stepper motors(torque calculation)
	2nd	Load calculation on different stepper motors(torque calculation)
14th	1st	Electrical loads such as voltage and current calculation
	2nd	Electrical loads such as voltage and current calculation
15th	1st	Slection of arduino , stepper motor and smps
	2nd	Selection of lead screw material
16th	1st	Selection of beam materials

	2nd	Collecting datasheet of different filament materials
17th	1st	Selecting PLA as filament material
	2nd	Material selection
18th	1st	Material selection
	2nd	Selecting PLA as filament material