

BAPURAO DESHMUKH COLLEGE OF ENGINEERING, SEVAGRAM
DEPARTMENT OF ELECTRICAL ENGINEERING

Name of the Course: Electrical Drives and their control.
Semester: VI th SEM (CBCS)

Course code: BELE603T
Branch: Electrical Engineering
Academic Year: 2022-23
Date of Submission: 31/03/2023

Date of Assignment: 20/03/2023

Assignment No- I

1. Explain in detail about Electrical Motor Drive.
2. Write in brief about speed torque conversion and multi quadrant operation of motor.
3. Explain in detail about the speed control method of DC Motor
4. Draw and explain the star-delta starter and auto transformer starter.
5. Derive an expression for temperature rise of motor under heating and cooling medium.
6. Explain the working of a programmable logic controller with a block diagram.
7. What are the advantages of PLC over conventional electromechanical control circuits
8. What is ladder diagram with reference to PLC programing.
9. Draw Block diagram of EV, explain each block in detail.
10. What are the different controllers used in EVs?
11. Explain about different motors used in Evs.

Course Outcomes (COs) Covered:

CO1 : Student should be able to understand the basic concept related to heating and cooling of motors. starting , speed control and braking of motor.

CO2 : Work with PLC's in the Industry.

CO3 : Student should be able to understand the basic concept related to EVS

Mapping with CO :

Q NO / CO	1	2	3	4	5	6	7	8	9	10	11
CO1	X	X	X	X							
CO2					X	X	X	X			
CO3									X	X	X