

STATE BOARD OF TECHNICAL EDUCATION, BIHAR

**Scheme of Teaching and Examinations for
Vth SEMESTER DIPLOMA IN ELECTRICAL ENGINEERING/ ELECTRICAL & ELECTRONIC ENGINEERING.
(Effective from Session 2020-21 Batch)**

THEORY

Sr. No.	SUBJECT	SUBJECT CODE	TEACHING SCHEME	EXAMINATION-SCHEME								
			Periods per Week	Hours of Exam.	Teacher's Assessment (TA) Marks A	Class Test (CT) Marks B	End Semester Exam. (ESE) Marks C	Total Marks (A+B+C)	Pass Marks ESE	Pass Marks in the Subject	Credits	
1.	Microprocessor & Microcontroller	2020501	4	3	10	20	70	100	28	40	4	
2.	Energy Conservation and Audit	2020502	3	3	10	20	70	100	28	40	3	
3.	Elective III		3	3	10	20	70	100	28	40	3	
	Electrical Testing and Commissioning (2020503A)		Electrical Estimating and Costing (2020503B)				Switchgear and Protection (2020503C)					
4.	Elective IV		3	3	10	20	70	100	28	40	3	
	Illumination Practices (2020504A)				Industrial Automation & Control (2020504B)				Electric Traction (2020504C)			
5.	Open Elective I / COE		2	3	10	20	70	100	28	40	2	
	Soft Computing Techniques (2020505A)											
	Artificial Intelligence (Basics) (2000505B)	Internet of Things (Basics) (2000505C)		Drone Technology (Basics) (2000505D)			3D Printing (Basics) (2000505E)					
	Industrial Automation (Basics) (2000505F)			Electric Vehicles (Basics) (2000505G)			Robotics (Basics) (2000505H)					
	Total :-		15				350	500			15	

PRACTICAL

Sr. No.	SUBJECT	SUBJECT CODE	TEACHING SCHEME	EXAMINATION-SCHEME						
			Periods per Week	Hours of Exam.	Practical (ESE)		Total Marks	Pass Marks in the Subject	Credits	
					Internal (PA)	External (ESE)				
6.	Microcontroller Applications Laboratory	2020506	04 50% physical 50% Virtual	3	15	35	50	20	2	
7.	Energy Conservation and Audit	2020507	02 50% physical 50% Virtual	3	07	18	25	10	1	
8.	Elective Lab / COE Lab		04 50% physical 50% Virtual	3	20	30	50	20	2	
	Electrical Testing and Commissioning Laboratory (2020508A)		Electrical Estimation and Costing Laboratory (2020508B)			Switchgear and Protection Laboratory (2020508C)				
	Artificial Intelligence Lab (Basics) (2000508B)	Internet of Things Lab (Basics) (2000508C)		Drone Technology Lab (Basics) (2000508D)			3D Printing & Design Lab (Basics) (2000508E)			
	Industrial Automation Lab (Basics) (2000508F)		Electric Vehicles Lab (Basics) (2000508G)			Robotics Lab (Basics) (2000508H)				
9.	Elective IV Laboratory		02 50% physical 50% Virtual	3	07	18	25	10	1	
	Illumination Practices Laboratory (2020509A)		Industrial Automation and Control Laboratory (2020509B)			Electric Traction Lab. (2020509C)				
	Total -		12				150		06	

TERM WORK

Sr. No.	SUBJECT	SUBJECT CODE	TEACHING SCHEME	EXAMINATION-SCHEME					
			Periods per Week	Marks of Internal (PA)	Marks of External (ESE)	Total Marks	Pass Marks in the Subject	Credits	
10.	Minor Project	2020510	04	15	35	50	20	2	
11.	Term Work		02	20	30	50	20	1	
	Course under Moocs/ NPTEL / Others (2020511)	Artificial Intelligence (Basics) (TW) (2000511B)			Internet of Things (Basics) (TW) (2000511C)		Drone Technology (Basics) (TW) (2000511D)		
	3D Printing (Basics) (TW) (2000511E)	Industrial Automation (Basics) (TW) (2000511F)			Electric Vehicles (Basics) (TW) (2000511G)		Robotics (Basics) (TW) (2000511H)		
	Total:-		06			100		03	
Total Periods per week Each of duration One Hour 33				Total Marks = 750				24	