

# STATE BOARD OF TECHNICAL EDUCATION BIHAR

Scheme of Teaching and Examinations for

## V<sup>th</sup> SEMESTER DIPLOMA IN MECHANICAL 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.	Production & Operations Management	2025501	03	03	10	20	70	100	28	40	03	
2.	Computer Aided Design & Manufacturing	2025502	03	03	10	20	70	100	28	40	03	
3.	Automobile Engineering	2025503	03	03	10	20	70	100	28	40	03	
4.	Elective-I		03	03	10	20	70	100	28	40	03	
Refrigeration & Air-conditioning (2025504A)			Heat Transfer (2025504B)				Power Plant Engineering (2025504C)					
5.	Open Elective / COE		02	03	10	20	70	100	28	40	02	
Industrial Engineering & Management (2025505A)			Farm Equipment & Farm Machinery (2025505B)				Artificial Intelligence (Basics) (2000505B)					
Internet of Things (Basics) (2000505C)			Drone Technology (Basics) (2000505D)				3D Printing & Design (Basics) (2000505E)					
Industrial Automation (Basics) (2000505F)			Electric Vehicles (Basics) (2000505G)				Robotics (Basics) (2000505H)					
			<b>Total:- 14</b>					<b>350</b>	<b>500</b>			<b>14</b>

### 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.	CAD/CAM Lab	2025506	04 50% Physical 50% Virtual	03	15	35	50	20	02	
7.	Elective lab-I	2025507	02 50% Physical 50% Virtual	03	07	18	25	10	01	
Refrigeration & Air-conditioning Lab (2025507A)			Heat Transfer Lab (2025507B)				Power Plant Engineering Lab (2025507C)			
8.	Elective lab / COE Lab		04 50% Physical 50% Virtual	03	20	30	50	20	02	
Automobile Engineering Lab (2025508A)			Farm Equipment & Farm Machinery Lab (2025508B)				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)			
<b>Total:- 10</b>							<b>125</b>		<b>05</b>	

### TERMWORK

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	
9.	Summer Intern- ship-II	2025509	(4 weeks continuous)	15	35	50	20	02	
10.	Major Project	2025510	04	07	18	25	10	02	
11.	Term Work		02	20	30	50	20	01	
	Course under Moocs/ NPTEL / Others (2025511)	Artificial Intelligence (Basics) (TW) (2000511 B)	Internet of Things (Basics) (TW) (2000511 C)		Drone Technology (Basics) (TW) (2000511D)				
	3D Printing (Basics) (TW) (2000511E)	Industrial Automation (Basics) (TW) (2000511F)	Electric Vehicles (Basics) (TW) (2000511G)		Robotics (Basics) (TW) (2000511H)				
<b>Total:- 06</b>							<b>125</b>		<b>05</b>
<b>Total Periods per week Each of duration One Hour</b>				<b>30</b>	<b>Total Marks = 750</b>				<b>24</b>