

FULL STACK TECHNOLOGIES LAB

Course Code	20IT3652	Year	III	Semester	II
Course Category	PC	Branch	IT	Course Type	PRACTICAL
Credits	1.5	L-T-P	0-0-3	Prerequisites	HTML,CSS,JAVASCRIPT,ANY RDBMS (SQL)
Continuous Internal Evaluation:	15	Semester End Evaluation:	35	Total Marks:	50

Course Outcomes		Blooms Taxonomy Level
Upon successful completion of the course, the student will be able to		
CO1	Develop web applications using Express JS, React JS	L2
CO2	Develop server side web applications using Node.js	L3
CO3	Design and Develop web applications using various libraries and frameworks	L3
CO4	Build web applications using MangoDB	L3

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (3:Substantial, 2: Moderate, 1:Slight)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1			3									2	3	3
CO2			3									2	3	3
CO3			3									2	3	3
CO4			3									2	3	3

Syllabus

Experiment No	Contents	Mapped CO
1	Demonstrate React Component Life cycle	CO1,CO3
2	Develop a Calculator React Application	CO1,CO3
3	Develop a Redux application.	CO1,CO3
4	Develop Website demonstrate React Routing.	CO1,CO3
5	Develop a Node.js application demonstrating handling data I/O (Buffer, Stream, Zlib modules)	CO2,CO3
6	Demonstrate accessing File system from Node.js application	CO2,CO3
7	Demonstrate Express Routing.	CO1,CO3

8	Demonstrate Express.js Authentication	CO1,CO3
9	Demonstrate Manipulating MongoDB Documents from Node.js	CO4,CO3
10	Demonstrate Accessing MongoDB from Node.js.	CO4,CO3

Learning Resources

Text book

1. React in Action, Mark Tielens Thomas, Manning Publications, 2018, ISBN:978-1617293856 ,First Edition
2. Node.js, MongoDB and Angular Web Development, Brad Dayley, Brendan Dayley Caleb Dayley, 2/e, Pearson Edu., Inc. 2018, ISBN: 978-0-13-465553-6

References

1. Pro MERN Stack, Vasan Subramanian, 2/e, Apress, 2019, ISBN: 978-1-4842-4390-9
2. FullStack React – The Complete Guide to ReactJS and Friends, Anthony Accomazzo, Nate Murray, Ari Lerner, Clay Allsopp, David Guttman, and Tyler McGinnis, 2020, \newline

e-Resources and other Digital Material

https://html5hive.org/wp-content/uploads/2018/04/The-Complete-Beginners-Guide-to-React_Dyrr.pdf