|  |  |  |  |
| --- | --- | --- | --- |
| **Syllabus for Diploma in “IT, Networking and Cloud”** | | | |
| **Elective Subject 3: Web Development using JS Frameworks : 320 Hrs.** | | | |
| **Hour No.** | **Learning outcome** | **Professional Skills (Trade Practical)** | **Professional**  **Knowledge**  **(Trade Theory)** |
| * **(with indicative Hours)** | |
| 1-200 | Able to develop the real time scenarios based on Node JS applications. | * Install Angular JS * Create an Angular application which add, multiply, divide the two input numbers from textbox * Create an Angular application which can validate the email accepted from user * Create an Angular application with form validation * Create an Angular application which can create Captcha * Create Responsive Web Application using Angular * Create an Angular application using Node JS with complete templating system * Create a basic JS Program with Node * Create Module (Function) & export, import using Node * Create a Web Application using Express JS * Create restapi using express JS * Create Restapi & testing rest api postman * Create application with CRUD operations using Mongo DB * Web Application Integration Using Express+Angular+Mongo | * Introduction to mean stack * Introduction to Angular JS and UI benefits in Angular JS * Usage of Angular JS with HTML * Event Handling in Angular JS * Introduction to Angular & difference b/w angular-1 to angular-5 * Type Script Datatype & Operator * Type Script String & Tuple, Oops * Object & Class * Inheritance & Interface * Angular js Child Component * Angular js Data Binding, Event Binding,2 Way Binding * Angular js Pipe, Pipe Chaining * Angular js Routing * Angular js Services * Angular js Http Request * Node Introduction * Blocking & Nonblocking code * Create Module & export, import * Introduction package.json file * File Handling * Create Event Driven Programming * Socket Programming * Create Own web server * Create Web App using express * Introduction Middleware Concepts * Express Routing * Express JS Template Engine * Handling Query string parameter * Cookies parser & body parser, * Session Handling (express session), Mailer * database operation with MySQL * Introduction Mongo * Features of Mongo * Create database, collection, Document & Data * Simple Query, Insert select data, filter data * Capped collection, Update & delete Collection * Index and Relationship, Aggregation & grouping, JOIN * Import & export mongo database, Backup restore * database operation with Node +Mongodb |
|  | Able to develop  Website using Mean Stack and deploy in cloud | **Projects: (120 Hrs)**  Create a simple HRM System web application for employees registration and login | |
|  | Revision | | |
|  | Examination | | |