## GANPAT UNIVERSITY U.V. PATEL COLLEGE OF ENGINEERING

B.Tech 5th Semester CE/IT 2CEIT5PE4: Software Packages

## **Practical-2**

## Console based node.js applications

1) Create Node.js application which allow users to perform basic mathematical operations such as addition, subtraction, multiplication, and division.

## **Description:**

- Create a Node.js script that takes command-line arguments to perform the desired mathematical operation.
- Implement a logic for each mathematical operation (addition, subtraction, multiplication and division).
- Handle invalid inputs and display appropriate error messages.
- Ensure that the application can handle both integer and floating-point numbers.
- 2) Write a node.js program to build a console application which allow users to perform the following operations:
  - Take contact details from user using ReadLine package.
  - Add a new contact details like name & phone number (Length should be 10) and store details in an array.
  - Display value of an array.
- 3) Write a Node.js program to create an object named book using object literal syntax. Add book\_title, author and publish\_year as properties to the book object and assign it's appropriate values. Now create function print\_info() to print the book object to the console so the final output looks as below:

title: Harry Potter and the Sorcerer's Stone

author: J.K. Rowling publish\_year: 1997

4) Create an array named products. Add objects to the array. Each object should be a single product, with 3 properties: name, inventory and unit\_price. Create two functions named listProducts() and totalValue(). A listProducts() function accepts a parameter -- the array of products and it should return an array of the names of the products. A function named totalValue() should accept a parameter -- the array of products and it should return the total value of all of the products in the array. To calculate the total value of one product multiply the inventory value with the unit price.