Millia Institute of Technology
Rambagh, Purnea

Affiliated to Bihar Engineering University, Patna

NAAC Accredited & ISO 9001:2015

SYLLABUS

Department of Computer Science & Engineering

2nd SEMESTER

B.Tech in Computer Science Engineering
SESSION 2024-2028

SEMESTER –II

Sl No.	Course Code	Course Title	Hours Per Week			Total Credits
			Lecture	Tutorial	Practical	
1.	100215	Engineering Chemistry	3	0	0	3
2.	100202	Engineering Mathematics-II	3	1	0	4
3.	100216	Communicative English	3	0	0	3
4.	100220P	Sports/Yoga/NCC/NSS	0	0	2	1
5.	100218	Python Programming	2	0	0	2
6.	100219	Introduction to Web Design	3	0	0	3
7.	100215P	Engineering Chemistry Lab	0	0	2	1
8.	100216P	Communicative English Lab	0	0	2	1
9.	100218P	Python Programming Lab	0	0	2	1
10.	100219P	Introduction to Web Design Lab	0	0	2	1
TOTAL						20

Course Code-100215 Engineering Chemistry 3 0 0 3

UNIT 1.0- Atomic and Molecular Structure 8 hrs

Electromagnetic radiations, Dual nature of electron and Heisenberg uncertainty Principle. Photoelectric effect, Planck's theory. Principles for the combination of atomic orbitals to form a molecular diagram of molecular orbitals. Bent's rule, VSEPR theory (typical example) co-ordination numbers and geometries. Isomerism in transition metal compounds. Metal Carbonyls; Synthesis and Structure.

UNIT 2.0- Spectroscopy 6 hrs

Principle of rotational and vibrational spectroscopy, selection rule for application in diatomic molecules, elementary idea of electronic spectroscopy, UV-VIS spectroscopy with related to rules and its applications. Basic Principle of nuclear Magnetic resonance spectroscopy with applications.

UNIT 3.0 -Electrochemistry and Fuels 6 hrs

Nernst equation, EMF and electrochemical cell, the introduction of corrosion, corrosion mechanism, types of corrosion, water line corrosion, stress corrosion, pitting corrosion, Lead acid storage cell, leclanche cell. Calorific value of fuels, proximate and ultimate analysis of coals, fuel cells, Bio fuels.

UNIT 4.0- Water Chemistry 8 hrs

Hardness of water, estimation of water hardness by EDTA and Alkalinity method. Removal of the hardness of water- soda lime process, zeolite process, Ion exchange process, Boiler problem, sludge, and scale formation, priming and foaming, Boiler corrosion, and Caustic embrittlement.

UNIT 5.0 - Polymer and Plastics 8 hrs

Polymerization techniques (free radical, ionic, and co-ordination mechanism)Preparation properties, and technical application of phenol-formaldehyde resins, elastomers, synthetic rubbers (Buna-S, Buna-N, neoprene). Inorganic polymers, Silicones, adhesives, epoxy resins. the structural difference between thermoplastic and thermosetting Plastics, the Importance of commercially important thermoplastics and thermosets; Poly ethylene, Polyvinyl chloride, Polystyrene.

UNIT 6.0- Organic Reactions and Synthesis of A Drug Molecul 6 hrs

Introduction to intermediate and reaction involving Substitution, addition, elimination, oxidation-reduction. Diels Elder cyclization and epoxide ring opening reactions, synthesis of commonly used drug molecules like aspirin.

Test/ Reference:-

1. University Chemistry, B.H. Mahan,Pearson
2. Chemistry, principles and application, M.J. Sienko and R.A. Plane, McGraw Hill International
3. Fundamentals of molecular Spectroscopy, C.N. Banwell , McGraw Hill International
4. Engineering Chemistry (NPTEL Web- Book), B.L. Tembe, Kamaluddin and M.S. Krishnan, NPTEL
5. Physical Chemistry, P.W. Atkins, Oxford University Press
6. A text book of engineering chemistry, S. Chawala, Dhanpat Rai Publication
7. General Chemistry Part 1, R. Sarkar, New Central Book agency

Course Code-100215P Engineering Chemistry Lab 0 0 2 1

Perform any 10 Experiments

1. To estimate hardness of water by alkalinity method
2. To estimate hardness of water by EDTA method
3. To remove hardness of water by ion exchange method
4. Determination of pH of a given acid solution using a standard sodium hydroxide solution
5. Determination of surface tension and viscosity
6. Chemical analysis of salt (Acid radical and basic radical)
7. Adsorption of acetic acid by charcoal
8. Test of adulteration of fat butter, sugar, turmeric powder, chilli powder and pepper
9. Saponification/ acid value of an oil
10. Identification of organic substances and their functional groups
11. Potentiometric determination of redox potentials and emf
12. Synthesis of drug/ polymer like ASPRIN/ Urea- formaldehyde resin
13. Thin layer chromatography
14. Analysis of flue gas by orsatapparatus

Course Code-100216 Communicative English 3 0 0 3

Unit-1.0: Vocabulary Building **7 hrs**

Nature of Word Formation; Root Word and Morpheme; Prefix and Suffix; Foreign Expressions in English; Synonym and Antonym; Homophone and Homograph; Abbreviation and Acronym.

Unit-2.0: Basic Writing Skills **7 hrs**

Parts of Speech: Types of Words; Structures of Sentence; Kind of Sentence; Phrase and Clause; Punctuation Marks; Capitalization; Tenses: Present, Past and Future; Voices: Active and Passive; Formation of Questions using Primary Auxiliaries, Modals and Wh-Words.

Unit-3.0: Common Errors in English **7 hrs**

Articles; Prepositions; Modifiers; Subject-Verb Agreement; Noun-Pronoun agreement; Redundancies; Cliches; Spelling Error.

Unit-4.0: Principles of Appropriate Writi **7 hrs**

Defining: Describing, Classifying and Exemplifying; Introduction, Body, and Conclusion; References, Quotations and Illustrations; Organizing the Paragraphs in a Document; 7Cs of the Professional Writing: Clear, Concise, Concrete, Correct, Coherent, Complete and Courteous.

Unit-5.0: Practices of Formal Writing **7 hrs**

Formal Letter: Cover-Letter and Application; Resume Writing; Report Writing; Minutes of Meeting; Memorandum; Notice; Essay Writing: Personal and Impersonal; Email Writing Etiquettes; Article Writing; Writing for Current Social Media.

Unit-6.0: Comprehension of Written English **7 hrs**

Of Studies (Essay) by Sir Francis Bacon; *The Sun Rising* (Poem) by John Donne; *The Last Leaf* (Story) by O Henry; Unseen/Untaught Passage.

Test/ Reference:-

1. English language and communication skills for engineers, Sanjay Kumar,Pushp lata, Oxford university Press
2. Communicative English for Technical student, Dr. Bijay Bhadur Singh and Dr. Kalpana Sinha, Foundation publishing House (FPM)
3. Communication Skill (As per VRV syllabus 2018),Sanjay Kumar and Pushp lata, Oxford University Press
4. A course in Listening & Speaking, V. Sasi Kumar ,P. Kiranmai Dutt and Geetha Rajeevan, Foundation Books

Course Code-100216P Communicative English Lab 0 0 2 1

Perform any 10 Experiments

Language Lab of English includes Listening Comprehension, Reading Comprehension, Speaking Skills: Phonetics, International Phonetic Alphabet Symbols (IPAS), Sounds: Vowels and Consonants, Pronunciation, Intonation, Stress and Rhythm, Just A Minute Technique (JAM), Communication: Verbal and Non-Verbal; Ethical Usage of Artificial Intelligence, Self-Introduction: Social, Academic and Professional; Interview: Online and Offline; Oral Presentation, Debate, Group Discussion, Group-Activities, and Brainstorming Vocabulary Activities.

1. Listening Comprehension and Speed (Software)
2. Reading Comprehension and Speed (Software)
3. Pronunciation: Learning and Test (Software)
4. Self-Introduction: Social, Academic and Professional
5. English Typing: Microsoft Word Document (MS Word), and Microsoft Power Point Presentation (PPT)
6. Oral Presentation
7. Interview: Online and Offline
8. Just A Minute Technique (JAM) and Extempore
9. Debate
10. Group Discussion
11. Activities: Role Play, Peer Activities, and Group Activities
12. Anchoring and Addressing: an Assembly, a Meeting, a Seminar, a Party

Course Code-100220P Sports/Yoga/NCC/NSS 0 0 2 1

Course Objectives:

(a) Encouraging creativity and innovation: The course could aim to foster a culture of creativity and innovation among engineering students. It could provide opportunities for students to generate and develop new ideas, think critically, and come up with innovative solutions to real-worldproblems. This objective could be achieved through brainstorming sessions, design thinking exercises, and hands-on projects.

(b) Enhancing problem-solving skills: The course could focus on enhancing the problem-solving skills of engineering students. It could provide training on various problem-solving techniques, such as root cause analysis, critical thinking, and decision-making. Students may learn how to identify and analyse complex problems, develop feasible solutions, and implement them effectively.

(c) Developing project management skills: The course could aim to develop project management skills among engineering students. It could cover topics such as project planning, scheduling, budgeting, and risk management. Students may learn how to manage resources, communicate effectively, and work collaboratively in a project-based environment.

(d) Promoting interdisciplinary collaboration: The course could encourage interdisciplinary collaboration among engineering students. It could provide opportunities for students from different engineering disciplines to work together on innovative projects. This could foster cross-disciplinary learning, encourage diverse perspectives, and promote teamwork and collaboration skills.

(e) Facilitating practical application of engineering concepts: The course could focus on the practical application of engineering concepts and principles. It could provide students with opportunities to apply their theoretical knowledge to real-world projects, prototypes, or simulations. Students may learn how to translate engineering theories into practical solutions and develop hands-on experience in implementing innovative projects.

Pre-requisite: Nil

Course Outcome:

1. Developed innovative projects: Students may have successfully developed innovative projects that demonstrate their creativity, problem-solving skills, and technical competence. These projects could be prototypes, models, simulations, or practical solutions to real-world problems, showcasing their ability to apply engineering concepts in a creative and innovative manner.

2. Improved critical thinking and problem-solving skills: Students may have honed their critical thinking and problem-solving skills through various course activities, such as brainstorming, design thinking, and project development. They may have learned to analyse complex problems, identify viable solutions, and make informed decisions based on technical, economic, and social considerations.

3. Enhanced project management and teamwork skills: Students may have gained practical experience in managing projects, including planning, scheduling, budgeting, and risk management. They may have learned how to work effectively in a team, collaborate with diverse team members, and communicate project progress and results professionally.

4. Increased interdisciplinary knowledge and collaboration: Students may have gained exposure to interdisciplinary concepts and collaborated with peers from different engineering disciplines. They may have learned to appreciate diverse perspectives, leverage interdisciplinary knowledge, and work collaboratively to develop innovative solutions that integrate multiple domains of engineering.

5. Cultivated a mindset of innovation and entrepreneurship: Students may have developed a mindset of innovation and entrepreneurship, recognizing the importance of creativity,

Course Code-100202 Engineering Mathematics– II 3 1 0 4

Unit- 1.0 Complex Analysis – I **6 hrs**

Functions of complex variable, limit, Continuity, Differentiability, Analytic function, Cauchy-Riemann Equations in Cartesian and polar form, harmonic function and harmonic conjugate.

Unit- 2.0 Complex Analysis – II **8 hrs**

Line Integral, contour integrals, Cauchy theorem, Cauchy's Integral formula(without proof), Taylors series, zero of analytic functions, singularities, Laurent's series, residue, Cauchy residue theorem(without Proof) and its applications.

Unit- 3.0 Ordinary Differential Equations **8 hrs**

Linear differential equations of nth Order with constant coefficients, solution of Homogeneous and Non-Homogeneous Equations, Equations with variable coefficients, Cauchy- Euler Equations, Method of Variation of Parameters.

Unit- 4.0 Sequence and Series **6 hrs**

Introduction of Sequence and Series, Nature of series Tests of convergence of Series: Comparison test, D'Alembert ratio test, Cauchy's Root test, Raabe's test, Logarithmic test, Cauchy's condensation test.

Unit- 5.0 Laplace Transform **8 hrs**

Laplace Transform, Existence theorem, properties of Laplace Transform, Laplace Transform of Periodic functions, Inverse Laplace Transform, convolution theorem. Application of Laplace Transform to solve Ordinary differential equations.

Unit- 6.0 Fourier Series **6 hrs**

Fourier Series, Fourier Series for odd and even functions, Half range sine and cosine series, Parseval's theorem.

Test/ Reference:-

1. Advanced Engineering Mathematics, Kreyszig Erwin, John Wiley and Sons,10th Edition,2020 ISBN:978-0470-45836-5
2. Advanced Engineering Mathematics, Dass H.K., S Chand and Company pvt.Ltd.,22nd Edition,2018 ISBN:978-93-5283-718-2
3. Higher Engineering Mathematics, Grewal B.S., Khanna Publishers,44th Edition,2023 ISBN:9788174091154
4. Complex Variables (Theory and Applications), Kasana H.S., PHI,2nd Edition.2015 ISBN:978-81-203-2641-5
5. A Text Book of Engineering Mathematics, Bali N.P., Goyal Manish Laxmi Publications,9th Edition,2014
6. Higher Engineering Mathematics, Ramana B.V., Tata McGraw Hill New Delhi, 11th Reprint, 2010, ISBN-10 007063419X ISBN-13978- 0070634190
7. Differential Equations, Ross S.L.,Wiley Publications,3rd edition,2016 ISBN:978-81-265—1537-0
8. Advanced Differential Equations, Raisinghania M.D., S.Chand and Company PVT.LTD.,18th Edition,2015 ISBN:978-81-219-0893-1
9. Schaum's Outlines Complex Variables, Spiegel Murray R, Lipschutz Seymour, Schiller J John and Spellman Dennis, MC Graw Hill Education Private Ltd.2nd Edition,2010 ISBN:978-0-07-008538-1

Course Code-100218 Python Programming 2 0 0 2

Module 1: Input and Output **6 Hrs**

Identifiers, Keywords, Statements and Expressions, Variables, Operators, Precedence and Associativity, Data Types, Indentation, Comments, Reading Input, Print Output, Type Conversions, The type() Function and Is Operator, Dynamic and Strongly Typed Language

Module 2: Control Flow statements, Function and Loops **6 Hrs**

Control Flow Statements, The if Decision Control Flow Statement, The if…else Decision Control Flow Statement, The if…elseif…else Decision Control Statement, Nested if Statement, Built-InFunctions, Commonly Used Modules, Function Definition and Calling the Function, The return Statement and void Function, Scope and Lifetime of Variables, Default Parameters, The while Loop, The for Loop, The continue and break Statements.

Module 3:Strings **3 Hrs**

Creating and Storing Strings, Basic String Operations, Accessing Characters in String by Index Number, String Slicing and Joining, String Methods, Formatting Strings.

Module 4 : Lists **3 Hrs**

Creating Lists, Basic List Operations, Indexing and Slicing in Lists, Built-In Functions Used on Lists, List Methods, The del Statement.

Module 5:Dictionaries, Tuples and Sets **5 Hrs**

Creating Dictionary, Accessing and Modifying key value Pairs in Dictionaries, Built-In Functions Used on Dictionaries, Dictionary Methods, The del Statement, Tuples and Sets, Creating Tuples, Basic Tuple Operations, Indexing and Slicing in Tuples, Built-In Functions Used on Tuples, Relation between Tuples and Lists, Relation between Tuples and Dictionaries, Tuple Methods, Using zip() Function, Sets, Set Methods, Traversing of Sets, Frozen set.

Module 6: Files **5Hrs**

Types of Files, Creating and Reading Text Data, File Methods to Read and Write Data, Reading and Writing Binary Files, The Pickle Module, Reading and Writing CSV Files, Python os and os.path Modules.

Test/ Reference:-

1. Introduction to Python Programming, Gowrishankar S, Veena A ,1st Edition, CRC Press/Taylor & Francis, 2018. ISBN-13: 978-0815394372
2. Python Data Science Handbook: Essential Tools for Working with Data, Jake VanderPlas, 1st Edition, O'Reilly Media, 2016. ISBN-13: 978-1491912058
3. Core Python Applications Programming, Wesley J Chun, 3rd Edition, Pearson Education India, 2015. ISBN-13: 978-9332555365
4. Python Programming A Modular Approach, SheetalTaneja, Pearson Publications
5. Programming and Problem Solving with Python, Ashok NamdevKamathane and Amit Ashok Kamathane Tata McGraw Hill Education (India) Private Limited

L-T-P: 0-0-2 **Credit: 1**

List of Experiments-

S.No.	Name of program
Input and Output	
1	Write a program to demonstrate different number data types in Python.
2	Write a program to perform different Arithmetic Operations on numbers in Python.
3	Write a program to create, concatenate and print a string and accessing sub-string from a given string.
4	Create a variable "number" and assign an Integer to the number. Check the assigned Integer is "Positive" or "Negative".
5	Write a program to find the largest element among three Numbers.
6	Write a program to print the sum of all the even numbers in the range 1 - 50 and print the even sum.
7	Write a Program to display all prime numbers within an interval of 20 and 50.
Variables and Functions	
8	Write a program to swap two numbers without using a temporary variable.
9	Write a program to define a function with multiple return values.
10	Write a python program to find factorial of a number using Recursion.
11	Write a python script to print the current date in the following format “WED 09 02:26:23 IST 2020”.
12	Write a Python program to convert temperatures to and from Celsius, Fahrenheit [Formula: c/5 = f-32/9].
13	Write a Python script that prints prime numbers less than 20.
Loops and Conditionals	
14	Write a program to print the following patterns using loop: * ** *** ****
15	Write a program to print multiplication tables of 8, 15, 69.
16	Write a program to check whether the given input is digit or lowercase character or uppercase character or a special character (use 'if-else-if' ladder).
17	Write a python Program to print the Fibonacci sequence using while loop.
Strings	
18	Write a program to find the length of the string without using any library functions.
19	Write a program to check if two strings are anagrams or not.
20	Write a program to check if the substring is present in a given string or not. (use regular expressions)
Lists	
21	Write a program to perform the given operations on a list: i. add ii. Insert iii. slicing
22	Write a program to perform any 5 built-in functions by taking any list.
23	Write a program to get a list of the even numbers from a given list of numbers.(use only comprehensions).
24	Write a program to implement round robin.
	Note: This routine to take a variable number of sequences and return elements from them in round robin till each sequence is exhausted. If one of the input sequences is infinite, this is also infinite. e.g. if input is [1,2,3], (4,5) -> yield 1,4,2,5,3 one after the other. Use exception control and comprehensions to write elegant code. Hint: This requires you to understand variable arguments, lists, list copy, comprehensions, iterators, generators, exception handling, control flow etc.

Tuples	
25	Write a program to create tuples (name, age, address, college) for at least two members and concatenate the tuples and print the concatenated tuples.
26	Write a program to return the top 'n' most frequently occurring chars and their respective counts. e.g. aaaaabbbbcccc, 2 should return [(a 5) (b 4)]
Sets	
27	Write a program to count the number of vowels in a string (No control flow allowed).
28	Write a program that displays which letters are present in both strings.
29	Write a program to sort given list of strings in the order of their vowel counts.
Dictionaries	
30	Write a program to generate a dictionary that contains numbers (between 1 and n) in the form of (x, x*x).
31	Write a program to check if a given key exists in a dictionary or not.
32	Write a program to add a new key-value pair to an existing dictionary.
33	Write a program to sum all the items in a given dictionary.
Files	
34	Write a program to sort words in a file and put them in another file. The output file should have only lower case words, so any upper case words from source must be lowered. (Handle exceptions)
35	Write a program to find the most frequent words in a text. (read from a text file).

Additional Programs:

1. Write a program to check whether a given number has an even number of 1's in its binary representation (No control flow allowed).
2. Write a program to implement user defined map() function.
3. Write a program to return a list in which duplicates are removed and the items are sorted from a given input list of strings.
4. Write a program to implement left binary search.
5. Write a program to change days to hours, hours to minutes and minutes to seconds using currying of composition of functions.
6. Write a program to generate an infinite number of even numbers (Use generator)
7. Write a program to convert a given iterable into a list. (Using iterator)
8. Write a program that accepts a sequence of whitespace separated words as input and prints the words after removing all duplicate words and sorting them alphanumerically.

TextBooks:

1. Y. Daniel Liang, Introduction to programming using Python, 1st Edition,Pearson Publications, 2017.
2. Sheetal Taneja, Python Programming A Modular Approach ,1st Edition Pearson Publications, 2017.
3. Brett Slatkin (C), Effective Python: 59 Specific Ways to Write Better Python, I/C, 1st Edition Pearson Publications, 2015.

Course Code-100219 Introduction to Web Designing 3 0 0 3

Unit- 1.0

Fundamentals of Internet and Web Technologies Lecture [51 Web Basics and Overview: Introduction to Internet, World Wide Web, History of the web, Website, Homepage, Domain Narne, Web Brolvsers and Web server, Web Server Working, Client-Server Architecture, 3-Tier Web Architecture, Web hosting, URL, MIME, HTTP protocol, Web Programrners Toolbox.

Unit- 2.0

Introduction to HTML: Elements and Structure Lecture [7] lntroduction to html: Fundamentals of HTML elements, History of HTML, Document body, Different tags, sections, text, heading, paragraphs, hyperlink, lists, tables, color coding and images, Div and Span Tags for grouping, character entities, URL Encoding, frames, and frame sets.

Unit - 3.0

HTML Forms and Multimedia Integration Lecture [51 HTML form, Form Elements, Form Attributes, HTML canvas, embedding audio and video in a webpage, HTML Vs XHTML.

Unit- 4.0

Introduction to CSS: Styling and Layouts Lecture [8] Need for CSS, introduction to CSS, basic syntax and structure, External Style Sheets, Internal Style Sheets, lnline Style, CSS Selectors, div & span tag, CSS Color, CSS Backgrounds, Borders, Margins, Padding. Box Model, Heightiwidth, outline, Text, Font, Tables, CSS Buttons, CSS Display, CSS Float & Clear, CSS Overflow.

Unit- 5.0

JavaScript Basics: Scripting and Control Lecture [8] Java Script: [ntroduction to Client-side Scripting, w-hat can JavaScript Do, Need of JavaScript, Enhancing HTML Documents with JavaScript; the Building Blocks: Data types, variables, Types of Operators, Operator Precedetrce, Type conversion; Conditional statement irr .lavaScript: if else, and else il, Switch statement; Loops in JavaScript: for, while, do/while, break, continue.

Unit- 6.0

Advanced JavaScript: Objects and Events Lecture [9] Advanced JavaScript: Objects in JavaScript (array, number, string. Boolean); event handling (e.g., onclick, onsubniit); error liandling: JavaScript scope; responsive modal forrns; form validation.

Test/ Reference:-

1. Beginning Web Prograrnming with HTML, XHTML, and CSS., Jon Duckett, Publisher(s): WROX ISBN:9780470259313
2. JavaScript: The Definitive Guide, 6th Edition, David Flanagan, Publisher(s): O'Reilly Media, Inc. ISBN: 978059680552
3. lnternet & World Wide Web: How to Program, Fourth Edition, H. M. Deitel- Deitel& Associates, Inc., P. J. Deitel - Deitel & Associates, Inc, Publisher(s): Pearson ISBN: 9780 I 36085645
4. Internet and Web Technologies, Kamal Raj, Publisher: McGraw Hill Education India ISBN: 9780070472969, 9180070472969

Course Code-100219P Introduction to Web Designing Lab 0 0 2 1

1. Design a home page which displays information about your college department using heading, HTML entities and paragraphs. Implement diffbrent types of list tags in the college department home page. Create a webpage for any clinic using marquee and HTML formatting ta-es. Create an image(s) and iframe in a webpage.
2. Create a Hyperlink in home page connecting it to 3 different pages. Design a webpage using HTML that includes an image map, and embeds audio and video. Design a time-table and display it in a tabular format. iv. Design an admission form for any course in your college with text, password fields, drop-down list, check-boxes, radio button, submit, and reset button.
3. Design a static webpage using HTML to co-2, co-3 create a frameset with header, navigation, and content sections. Create a webpage with a frameset divided into 3 frames: 20oh onthe left for page contents, 60% tt the center for the main body, and 20o/o on the right for remarks. Create a web page multiple types of style sheet used in a single page
4. Create a catalogue for an online shopping company that sells electronic items using CSS. Design a webpage of your hornetown with an attractive background color, text font, and an image using inline CSS formatting Create a student web form for enterning student information. Design a library webpage using different CSS border styles and the CSS box model.
5. Write a JavaScript program: Find the largest among three numbers. Calculate the factorial of a number. Check whether a given number is an Armstrong number. Find the sum of natural numbers using recursion. v. Check whether a string is a palindrome. Convert a decimal number to binary.
6. Write a JavaScript program: To design a scientific calculator with event handling for each button. To compute the squares and cubes of numbers ffom 0 to 10, and display the results in an HTML table format.
7. Write JavaScript to validate the following fields of the registration page: Name: Must contain only alphabets and be at least 6 characters long. Password: Must be at least 6 characters long. E-mail ID: Must follow the standard pattern name@domain.com and not contain inval id characters. Phone Number: Must contain exactly l0 digits