

G H PATEL COLLEGE OF ENGINEERING AND TECHNOLOGY DEPARTMENT OF INFORMATION TECHNOLOGY

VISION

To impart quality education in Information Technology and enable learners to cope with global challenges to build professional career benefitting the sustainable growth of an individual and the society at large.

MISSION

To propose state of the art educational environment equipped with cutting edge technology in the area of Information Technology.

To facilitate learners and faculties with every single opportunity of professional progression embedded in academic scenario itself which can cause enriched workforce contributing to the development of the nation.

To fulfill the noble cause of educating budding technocrats by accelerating the momentum of research and implementing innovative inputs in teaching-learning.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

- 1. To acquire knowledge of core area of engineering and suitable prerequisites through modern tools and techniques along with enhancing soft skills and continuing professional development.
- 2. To identify real life problems through proper investigation and to design and develop appropriate solution through systematic analysis which is economically feasible and in accordance with the need of industry, academia and society at large.
- 3. To exhibit the professional growth as an individual and a team as well; along with ethical responsibility and approach of lifelong learning.

PROGRAMME OUTCOMES (POS)

- 1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. Problem analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

- 6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- 7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and teamwork: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. Life-long learning: Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAMME SPECIFIC OBJECTIVES (PSOs)

- 1. An ability to recognize and analyse the problems being faced in the society, and design and implement the suitable solution with sound technical knowledge.
- 2. An ability to develop an efficient application using the knowledge of programming, web technology, storage, mathematics, networking, and contemporary technologies in the domain of IT.



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A.Y. 2022-23, SEMESTER 6
SUBJECT CODE: 102046701
SUBJECT NAME: ADVANCED WEB DEV.

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Sr. No	Name of the Experiment	Date	Page No.	Signature	Remarks
01	 Write HTML/Javascript code for the following: When name of the basic color is entered in the textbox and leave the textbox then it should take that color as background color. Until you enter the complete mobile number (means less than 10 digits) in the textbox, it should take red color as background and when it becomes complete then show the alert message. 				
02	Write HTML/Javacript code to change the background color of div element periodically. For example, at every 30 seconds it changes the background color. Hint: use SetInterval function.				
03	Write HTML/Javascript code to make an animation for displaying set of images. It takes frequency (in milliseconds) of image repetition as input from the user. Also, it shows button to start/stop (single button which toggles) the animation.				
04	Write AJAX script to display the student details like Enrollment number and Name (in tabular form) from XML file stored on the same web server. After displaying student details, when enrolment number is clicked then it fetches city, address, pincode and other details for the student.				
05	Write AngularJS filter to check whether the entered number in the textbox is prime or not.				
06	Write AngularJS service which makes the square of the number when it is called.				
07	Write AngularJS service which makes the addition/subtraction of two numbers entered in textboxes when Add/Sub button is clicked. Enter Number A: Enter Number B: Add Sub Result: ????				

Sr. No	Name of the Experiment	Date	Page No.	Signature	Remarks
08	Write AngularJS script to read the JSON data (Student's enrolment number and name) from the server and populate the dropdown list with enrolment number.				
09	Write AngularJS validation script to validate the password and confirm password. Password must contain at least four and maximum 10 characters and must start with number only. Content of password and confirm password box must be the same otherwise it should display the appropriate message.				
10	Write AngularJS validation script to validate the registration form and submit button gets enabled if all the validations are passed successfully. The form contains fields like First name, last name, email address, mobile number, sex (radio button) and department (select box).				
11	Write AngularJS script to implement single page web application. Make your own website which includes the pages like about you, education, hobbies, contact me etc.				
12	Write AngularJS script to implement custom directive (reusable component) for calculator with operations like add, subtraction and multiplication.				
13	Write NodeJS code to implement web server to serve the different content based on URL.				
14	Write NodeJS code to provide the file upload facility to the user. It also imposes the restriction of file size to be uploaded.				
15	Make simple form to enter the details of student using NodeJS and MongoDB. After filling the form when it gets submitted, the details are stored in the database.				



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