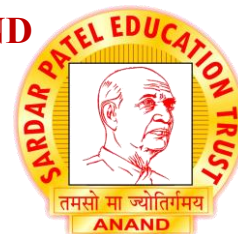




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Revised Syllabus as per NEP 2020 with effect from the Academic Year 2026-2027

Bachelor of Computer Applications (BCA)
Semester – II

Course Code	US2MIBCA13	Title of the Course	Advanced Web Application with JQuery
Total Credits	02 Credits	Hours per Week	02 Hours / Week

Course Learning Outcomes (CLOs)

CLO 1	To learn the basic concepts of scripting
CLO 2	To study fundamentals of JavaScript development.

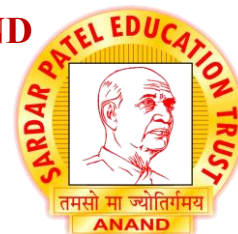
Course Content

Unit No.	Description	Weightage (%)
1.	Introduction to Scripting • Introduction to Scripting • Client Side Scripting V/S Server Side Scripting • Introduction to JavaScript • Applications and Advantages of JavaScript • JavaScript basics: Syntax, Data Types, Variables, Literals, Type Casting, Operators • User interaction through dialog boxes • Built-in functions • Flow Control statements • Arrays	50%
2.	Advanced JavaScript with JQuery • User-defined functions, String Object (length, charAt, indexOf, substr, toLowerCase, toUpperCase), Math Object (PI, abs, ceil, floor, max, min, round), Date Object (getDate, getDay, getFullYear, getMonth, getTime, getHours, getMinutes, getSeconds, setDate, setFullYear, setMonth, setTime, setHours, setMinutes, setSeconds) • Introduction to DOM • DOM Hierarchy, Understanding objects & Collections in DOM, HTML Form Hierarchy • Accessing Form elements (Text, Radio, Checkbox, Dropdown, Button), Event handling • Introduction to JQuery.	50%



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Teaching – Learning Methodology

Material for this course will be presented using multiple teaching approach: lecture and discussion, exploration and inquiry, cooperative group work, demonstrations, and presentations

Examination Evaluation Pattern

Sr. No.	Particulars	Weightage (%)
01	Continuous and Comprehensive Evaluation (CCE) (Formative Assessment)	50%
02	Semester End Evaluation (SEE) (Summative Assessment)	50%
	TOTAL	100%

Specifications for CCE and SEE

Sr. No.	Details of the Evaluation Pattern	Marks
01	Continuous and Comprehensive Evaluation (CCE) (Formative Assessment)	
	A Assignments	10
	B Active Learning Activities	05
	C Attendance	05
	D Written Examination (01 Hour)	30
	(A + B + C + D)	50 Marks
	Note: For 02 Credit Courses, the Formative Assessment for students must be from 25 Marks. Thus, the total obtained marks from A + B + C + D (50 Marks) will be divided by 02.	25 Marks
02	Semester End Evaluation (SEE) (Summative Assessment)	
	E Written Examination (01 Hour)	25 Marks
	TOTAL (For 02 Credit Courses)	50 Marks

Rubrics – Based Assessment for Assignments (10 Marks)

Excellent	09 – 10 Marks	Accurate, error-free, logically presented, timely submission
Good	07 – 08 Marks	minor errors and good conceptual clarity
Average	05 – 06 Marks	basic understanding or partially correct
Basic	03 – 04 Marks	limited clarity, noticeable mistakes, incomplete content
Poor	01 – 02 Marks	Inadequate conceptual clarity, incorrect content
Below Poor	Zero Marks / NA	content is irrelevant / Not Attempted / Not Submitted

Note: Assignments may be taken in forms of written project, computerized and online suggested courses / certificates as per the decision made by the respective faculties of the courses.

Rubrics – Based Assessment for Active Learning Activities (05 Marks)

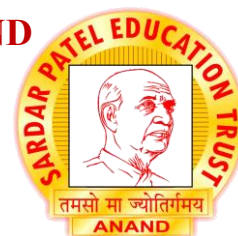
Excellent	05 Marks	explanation is clear, detailed and covered all keys
Good	04 Marks	good conceptual clarity, minor details may be missing
Average	03 Marks	basic explanation or partially correct
Basic	02 Marks	limited clarity, noticeable mistakes, lacks depth
Poor	01 Mark	Poorly presented or not understandable
Below Poor	Zero / NA	content is irrelevant / Not Attempted / Not Submitted

Note: Active Learning Activities may be taken in forms of classwork, viva, oral presentations, PowerPoint presentations, role play, collaborative problem solving, debates, group discussions, online tests, Q&A, case studies, etc. as per the decision made by the respective faculties of the courses.



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Rubrics – Based Assessment for Attendance (05 Marks)

As per the Rules and Regulations provided by the Academic Section of Sardar Patel University, Vallabh Vidyanagar, for the students studying in all departments and colleges.

Reference No.: E – 3 / 3127; dated: 07-03-2024.

<https://www.spuvvn.edu/orbit-cdn/uploads/circulars/Circular-NEP-InternalExamMarks-March-April24.pdf>

Excellent	05 Marks	more than 90% (Minimum 27 Hours for 02 Credits Courses)
Good	04 Marks	80% - 89% (24 to 26 Hours for 02 Credit Courses)
Average	03 Marks	70% - 79% (21 to 23 Hours for 02 Credit Courses)
Poor	Zero / NA	less than 70% (NOT ELIGIBLE TO APPEAR FOR EXAM)

Note: Students with below 70% of attendance must submit their written application to their respective class coordinators with genuine reasons and evidence (in case of working or medical emergencies). Students must not pursue dual degree programmes that clash with the college's timings.

Rubrics – Based Assessment for Mid-Semester Examination (30 Marks)

ANY ONE UNIT OR 50% OF THE SYLLABUS - 15 Marks Each Question

Excellent	13 – 15 Marks	Accurate explanation of JavaScript/jQuery concepts, correct syntax, error-free code, proper use of DOM/events, logical and well-structured answers
Good	10 – 12 Marks	Minor syntax or logical errors, good conceptual understanding, mostly correct code and explanation
Average	07 – 09 Marks	Basic understanding of concepts (JavaScript, DOM, jQuery), some coding mistakes, partially correct answers
Basic	04 – 06 Marks	Limited clarity of scripting concepts, incorrect or incomplete code, weak understanding of DOM/jQuery
Poor	01 – 03 Marks	Very low conceptual clarity, mostly incorrect answers/code, unable to apply concepts.
Below Poor	Zero Marks / NA	Not attempted or completely irrelevant answer.

Note: Written Examination questions will be based on various levels of Revised Bloom's Taxonomy.

Rubrics – Based Evaluation Pattern for End-Semester Examination (25 Marks)

Multiple Choice Questions (05 Marks) – 01 Mark Each from all Units

Excellent	01 Mark	the chosen option is correct, no errors in response
Below Poor	Zero Marks / NA	chosen option is incorrect, completely irrelevant, multiple options chosen / Not Attempted

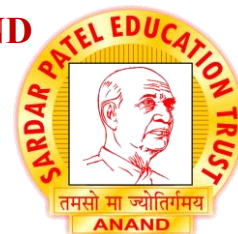
UNIT I - 10 Marks Each Question

Excellent	09 – 10 Marks	Clear & deep explanation of scripting concepts, JavaScript basics (syntax, data types, variables, operators) with correct examples
Good	07 – 08 Marks	Clear & deep explanation of scripting concepts, JavaScript basics (syntax, data types, variables, operators) with correct examples.
Average	05 – 06 Marks	Clear & deep explanation of scripting concepts, JavaScript basics (syntax, data types, variables, operators) with correct examples.



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Basic	03 – 04 Marks	Very limited understanding; explanation lacks clarity and depth.
Poor	01 – 02 Marks	Very limited understanding; explanation lacks clarity and depth.
Below Poor	Zero Marks / NA	Very limited understanding; explanation lacks clarity and depth.
UNIT II - 10 Marks Each Question		
Excellent	09 – 10 Marks	Logical and accurate use of advanced JavaScript, DOM, event handling, and jQuery with correct syntax.
Good	07 – 08 Marks	Logical and accurate use of advanced JavaScript, DOM, event handling, and jQuery with correct syntax.
Average	05 – 06 Marks	Logical and accurate use of advanced JavaScript, DOM, event handling, and jQuery with correct syntax.
Basic	03 – 04 Marks	Incomplete or incorrect implementation with major gaps.
Poor	01 – 02 Marks	Incomplete or incorrect implementation with major gaps.
Below Poor	Zero Marks / NA	Incomplete or incorrect implementation with major gaps.
Note: Multiple Choice Questions of 05 Marks will be based on Bloom's Taxonomy Level 1 & 2 and Written Examination questions will be based on various levels of Revised Bloom's Taxonomy.		

PLO – CLO Mapping						
	Advanced Web Application with JQuery					
	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6
CLO 1	01	02	01	03	02	01
CLO 2	01	03	01	03	02	01
Note: High: 03 ; Moderate: 02 ; Low: 01 ; No Mapping: 00						

Suggested References and E-Resources for Further Reading	
Sr. No.	Suggested References
1.	Ivan Bayross, "Web Enabled Commercial Applications Development using HTML, DHTML, JavaScript, Perl CGI", BPB, 2004.
2.	Douglas E Comer: The Internet, PHI, Second Edition, May 2000.
3.	Wilton P., Jeremy McPeak: Beginning JavaScript, 4th Ed., Wiley Pub.
4.	Danny Goodman, Machael Morrison: "JavaScript Bible", 6th Ed., Wiley Pub.
5.	Kogent Learning Solution Inc., "HTML5 Black Book".
Sr. No.	On-Line Resources available that can be used as Reference Material
1.	https://www.w3schools.com/
2.	https://www.tutorialspoint.com/
3.	https://www.javatpoint.com/
