C. U. SHAH UNIVERSITY, WADHWAN CITY.

Faculty of: **Computer Science**
Course: **Bachelor of Computer Applications**
Semester**: I**
Subject Code**: CAE201-1C**
Subject Name: **C LANGUAGE FOR PROGRAMMING**

Sr. No	Category	Subject Code	Subject Name	Teaching hours/ Week			Credit hours	Credit Points	Evaluation Scheme/ Semester								
									Theory				Tutorial / Practical				Total
									Continuous and Comprehensive Evaluation		End Semester Exams		Internal Assessment		End Semester Exams		
				Th	Tu	Pr			Marks	Activity	Marks	Duration	Marks	Duration	Marks	Duration	
3	MINOR	CAE201-1C	C LANGUAGE FOR PROGRAMMING	3	--	2	5	4	10 10 05	Assignment MCQ Attendance	50	2	25	1	-	-	100

Aim: At the end of the syllabus, Student can develop a various types of program using c language.

- **Unit -1 : Introduction** **(6 Lectures)**
  [a] Introduction to machine, assembly and higher level language.
  [b] Flowcharts/algorithms.
  [c] History of C, Structure of C, C Tokens.
  [d] Syntax and Semantic errors.
  [e] Variables and Data Types.

- **Unit -2 : Operators and Expressions** **(5 Lectures)**
  [a] Arithmetic expressions.
  [b] Type Conversion.
  [c] Types of operators.
  [d] Logical expressions.
  [e] Introduction to conditional branching

- **Unit -3 : Branching and Looping** **(8 Lectures)**
  [a] Types of Conditional branching.
  [b] Iterative loops.

- **Unit -4 : Arrays** **(6 Lectures)**
  [a] Arranging things using: Arrays.
  [b] Types of arrays.

- **Unit -5 : String** **(6 Lectures)**
  [a] Character Arrays and strings.
  [b] Predefined Functions used in string operations.

- **Unit -6 : Structure and Pointer** **(8 Lectures)**
  [a] Introduction to User Define functions
  [b] Categories of User define functions.
  [c] Functions and parameter passing by values.

- **Unit -7 : User Define Functions** **(6 Lectures)**
  [a] Introduction and initialization of structure.
  [b] Introduction and initialization of pointers.
  [c] Pointers and arrays.

Arrangement of lectures duration and practical session as per defined credit numbers:

Units	Lecture Duration (In Hrs.)		Calculation of Credits (In Numbers)		Total Lecture Duration	Credit Calculation
	Theory	Practical	Theory	Practical	Theory + Practical	Theory + Practical
Unit 1	6	3	3	1	9	4
Unit 2	5	3			8	
Unit 3	8	4			12	
Unit 4	6	5			11	
Unit 5	6	5			11	
Unit 6	8	5			13	
Unit 7	6	5			11	
Total	**45**	**30**	**3**	**1**	**75**	**4**

Evaluation:

Theory Marks	Practical Marks	Total Marks
75	**25**	**100**

Reference Books:

1. Programming in Ansi C, by E Balagurusamy, Publisher: McGraw Hill Education India, ISBN-13: 978-1259004612
2. C: The Complete Reference, by Herbert Schildt, Publisher: McGraw Hill Education (India), ISBN-13: 978-0070411838
3. Let Us C, by Yashavant Kanetkar, Publisher: BPB, ISBN-13: 978-8183331630