

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND**(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)****AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR**

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified

GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

BCA (Bachelor of Computer Applications)**(Semester–II)**

Course Code	US2MABCA01	Title of the Course	Problem Solving Through Advanced Programming
Total Credits of the Course	04	Hours per Week	04

Course Objectives	<ol style="list-style-type: none">1. To understand concepts of functions, structures and unions.2. The fundamentals of pointers and file handling.3. Basic concept of object oriented programming
--------------------------	---

Course Content		
Unit	Description	Weightage (%)
1.	User-Defined Functions, Structure and Union <ul style="list-style-type: none">– Introduction and need of user defined Functions– Components of user defined functions– Methods of passing parameters to functions– Recursion– Introduction to structures– Structures and arrays– Structures within structures– Structures and functions– Unions	25%
2.	Command Line Arguments and Pointers <ul style="list-style-type: none">– Command Line Arguments– Introduction, usage and understanding of pointers– Declaration and initialization of pointer variables– Accessing variables through Pointers– Chain of Pointers (Pointer to Pointer)	25%

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified

GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

	<ul style="list-style-type: none">– Pointer arithmetic expression– Pointers and arrays– Pointers as function arguments– Pointer and structure– Dynamic memory allocation	
3.	Usage of File Handling <ul style="list-style-type: none">– Introduction to File Handling– File Access Modes– Input Output Operations on files– Error Handling during I/O operations	25%
4.	Object Oriented Programming (OOP) Concepts and Introduction to C++ <ul style="list-style-type: none">– Structured programming vs. object oriented programming– Basic OOP concepts :<ul style="list-style-type: none">– Objects– Classes– Encapsulation– Data Abstraction– Inheritance– Polymorphism– Access Specifiers (Public, Private, Protected)	25%

Teaching-Learning Methodology	Multiple teaching approaches: lecture and discussion, exploration and cooperative group work, demonstrations, and presentations.
--------------------------------------	--

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written	50%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars,	

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

	Assignments, Attendance	
3.	External Examination	50%
Course Outcomes		
1.	Implement programs based on the concepts of functions, structures and unions	
2.	Implement the programs based on pointers and work with files.	
Suggested References		
Sr. No.	References	
1	E. Balagurusami: Programming in ANSIC. , Eighth Edition, Tata McGraw Hill Publication, 2019.	
2	Kernighan B., Ritchie D.:The C Programming Language, Prentice Hall, 1988.	
3	Cooper H.& Mullish H:The Spirit of C, Jaico Publication House, New Delhi,1988.	
4	E Balagurusamy: Object Oriented Programming in C++, Tata McGraw-Hill Publishing Co. Ltd. Robert Lafore: Object Oriented Programming in Turbo C++, Guide, Galgotia Pub. (P) Ltd.Books For Additional Reading :	
5	Barkakati N. : Object Oriented Programming in C++, PHI	
6	Understanding Pointers in C by Yashavant Kanetkar, BPB Publication.	
7	Programming with C (Schaum Outlines) by Byron S Gottfried, Tata McGraw-Hill Publishing Co. Ltd.	

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND**(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)****AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR**

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified

GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

Bachelor of Computer Applications (BCA)**(Semester –II)**

Course Code	US2MABCA02	Title of the Course	Practical Based On Problem Solving Through Advanced Programming
Total Credits Of the Course	4	Hours per Week	4

Course Objectives:	To understand 1. Concepts of functions, structures and unions. 2. The fundamentals of pointers and file handling.
---------------------------	---

Course Content		
	Description	Weightage*(%)
	Practical Based on Problem Solving Through Advanced Programming	100%

Teaching-Learning Methodology	Hands on training through required ICT tools.
--------------------------------------	---

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written/Practical Examination	50%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance	
3.	External Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Implement programs based on the concepts of functions, structures and unions.
2.	Implement the programs based on pointers and work with files.

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND**(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)****AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR**

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified

GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

BCA (Bachelor of Computer Applications)**(Semester-II)**

Course Code	US2MIBCA03	Title of the Course	Advanced Web Application with JQuery
Total Credits Of the Course	2	Hours per Week	2

Course Objectives:	1. To learn the basic concepts of scripting. 2. To study fundamentals of JavaScript development.
---------------------------	---

Course Content		
Unit	Description	Weightage*(%)
1.	Introduction to Scripting <ul style="list-style-type: none"> – Introduction to Scripting – Client Side Scripting vs. 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 Java Script with JQuery <ul style="list-style-type: none"> – User-defined functions, String Object (length, charAt, indexOf, substr, toLowerCase, to Upper Case), 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%

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified

GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺**' UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

Teaching-Learning Methodology	Material for this course will be presented using multiple teaching approaches: lecture and discussion, exploration and inquiry, cooperative group work, demonstrations, and presentations
-------------------------------	---

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written/Practical Examination	50%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance	
3.	External Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand the basic concepts of scripting.
2.	Carry out web page development with the use of JavaScript.

Suggested References:	
Sr .No.	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.

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

5	Kogent Learning Solution Inc., “HTML5 Black Book”.
On-line resources to be used if available as reference material	
On-line Resources	
https://www.w3schools.com/	
https://www.tutorialspoint.com/	
https://www.javatpoint.com/	

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND**(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)****AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR**An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺**' UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

BCA (Bachelor of Computer Applications)**(Semester–II)**

Course Code	US2MIBCA04	Title of the Course	Practical Based On Advanced Web Application with JQuery
Total Credits Of the Course	2	Hours per Week	4

Course Objectives:	1. To learn the basic concepts of scripting. 2. To study fundamentals of JavaScript development.
--------------------	---

Course Content		
	Description	Weightage*(%)
	Practical Based on Advanced Web Application with JQuery	100%
Teaching-Learning Methodology	Demonstrating through required ICT tools.	

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written/Practical Examination	50%
2.	Internal Continuous Assessment in the form of practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance	
3.	External Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Design and Develop web pages using HTML, HTML5 ,DHTML AND CSS

BCA (Bachelor of Computer Applications)**(Semester–II)**

Course Code	US2MDBCA05	Title of the Course	Mathematics
Total Credits Of the Course	2	Hours per Week	2

Course Objectives:	<ol style="list-style-type: none"> 1. To teach basic concepts of vectors and matrices. 2. To introduce determinants of matrices. 3. To introduce students to elementary data analysis with different methods like discrete and continuous frequency distribution, graphical representation
--------------------	---

Course Content		
Unit	Description	Weightage*(%)
1.	Vectors and Matrices <ul style="list-style-type: none"> – Vectors in \mathbb{R}^n – Dot product and norm – Matrix addition and scalar multiplication, Matrix multiplication, transpose of matrix – Square matrices: Row, column, Zero, Diagonal, upper and lower triangular, Orthogonal, symmetric and skew-symmetric matrices – Determinants of matrices up to order 3, Adjoint of Matrix, Inverse of Matrix 	50%
2	Elementary Data Analysis <ul style="list-style-type: none"> – Discrete and continuous frequency distribution – Cumulative frequency distribution – Graphical representation, Measure of central tendency: Mean, Median, Mode, Geometric mean, Harmonic mean, weighted mean, combined mean. 	50%

Teaching-Learning Methodology	Material for this course will be presented using multiple teaching approaches: lecture and discussion, exploration and inquiry, cooperative group work, demonstrations, and presentations
-------------------------------	---

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified

GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written/Practical Examination	50%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance	
3.	External Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Solve problems based on vector and matrices.
2.	Understand and solve problem based on elementary data analysis.

Suggested References:	
Sr. No.	References
1.	S. Lipschitz and Marc Lars Lipson : Discrete Mathematics, Schaum's series (International editions,1992)
2.	S. C. Gupta, Fundamental of Statistics, Himalaya Publishing House, 2004

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND**(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)****AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR**An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺**' UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

BCA (Bachelor of Computer Applications)**(Semester–II)**

Course Code	US2MDBCA06	Title of the Course	Practical Based Mathematics
Total Credits Of the Course	2	Hours per Week	4

Course Objectives:	<ol style="list-style-type: none"> 1. To teach basic concepts of matrices. 2. To introduce determinants of matrices. 3. To introduce students to elementary data analysis with different methods like discrete and continuous frequency distribution, graphical representation
--------------------	---

Course Content		
	Description	Weightage*(%)
	Practical Based on Mathematics	100%

Teaching-Learning Methodology	Hands on training through required ICT tools.
-------------------------------	---

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written/Practical Examination	50%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance	
3.	External Examination	50%
Course Outcomes: Having completed this course, the learner will be able to		
1.	Solve problems based on vector and matrices	

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

2.	Understand and solve problem based on determinants of matrices
3.	Understand and solve problem based on central tendency

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND**(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)****AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR**

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified

GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

BCA (Bachelor of Computer Applications)**(Semester–II)**

Course Code	US2MABCA07	Title of the Course	Foundation of Communication Skills in English-II
Total Credits Of the Course	2	Hours per Week	2

Course Objectives:	<ol style="list-style-type: none"> 1. To process information using a variety of media 2. To use appropriate phrases for performing language functions 3. To edit, select and present information in a format/ perspective 4. To listen and reduce information to a point 5. To read and to expand from points to paragraph 6. To predict, comprehend, infer and synthesize information 7. To question, probe, and arrive at information through discussions, dialogues and interviews.
--------------------	---

Course Content		
Unit	Description	Weightage*(%)
1.	Effective Oral Communication Skills & Business Job Skills <ul style="list-style-type: none"> – Effective presentation Skills; Putting the message across, Body Language, – Proxemics and Kinesics, dealing with Nearves, Using Visual Aids – Language of Meetings and participating in a seminar Telephone Techniques – Writing Job Application and CV – Interview Skills i.e., General Preparation for an Interview, Types of Questions generally asked in interviews, Types of interviews, Importance of non-verbal aspect. – Self-development Skills: i.e., Assertiveness, Stress Management, Time Management – Interpersonal Skills: Team Development Skills i.e., Team Talk Dynamics, Communication in Teams, Leadership Skills, Giving Feedback (Johari Window etc.) 	50%

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified

GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

2.	Writing Skills in Business Communication and Individual Project <ul style="list-style-type: none">– Issues in Writing Business Letters i.e., Structure and Types of Business– Letters, Letters of Inquiry, Complaint, Adjustment and Regret– Report Writing Skills i.e., Types of Reports, Characteristics of a Good Report, Preparing and Organizing a Report and Individual reports (a report about the need to computerize the activities of your department)– Students can be made to work individually on detailed projects based on the following topics. However, the list given below is not exhaustive and thus any topic related to the areas of Communication and Personality Development can be worked upon in the interest of the students:<ul style="list-style-type: none">– Process of Communication, Barriers of Communication, Types of Communication– Objectives of Communication– Stress Management, Time Management– Leadership Quality, Teamwork– Body Language, Presentation Skills– Group Discussion Skills– Personal Interview Skills– Feedback Skills	50%
----	--	------------

Teaching-Learning Methodology	Role Play, Discussion and Debate, Think Pair Share, Traditional classroom teaching as well as usage of ICT tools.
--------------------------------------	---

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination	50%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	
3.	External Examination	50%

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

Course Outcomes:- Having completed this course, the learner will be able to	
1.	Understand and use notions and functions of language for communicative purpose
2.	Prepare reports of various events.
3.	Draft e-mails efficiently.
4.	Prepare effective job application and resume and face interviews confidently
5.	Make healthy discussion by actively participating in debates or group discussions.
6.	Prepare and make power point presentation on various occasions.
Suggested References	
Sr. No.	References
1	Rajendra Pal and J S Korlahalli, essentials of Business Communication, Sultan Chand and sons www.britishcouncil.com
2	Chrissie Wright, Communication Skills, Jaico Publication
3	Sunita Mishra and C. Murali Krishna, Communication Skills for Engineers Education.
4	Meenakshi Raman and Sangita Sharma, Technical Communication; Principles and Practice, Oxford University Press.
5	On We Go, BBC's Audio--Visual Course.

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND**(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)****AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR**

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified

GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺**' UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

BCA (Bachelor of Computer Applications)**(Semester–II)**

Course Code	US2SEBCA08	Title of the Course	Multimedia Technologies
Total Credits Of the Course	2	Hours per Week	2

Course Objectives:	1. To introduce fundamental concepts related to multimedia technology. 2. To provide basic understanding of working with text, audio, video and graphics. 3. To impart basic knowledge of multimedia
--------------------	--

Course Content		
Unit	Description	Weightage* (%)
1.	Introduction <ul style="list-style-type: none">– Multimedia : meaning– Various facets of multimedia : text, audio, video, animation graphics– Classification of multimedia technology– Multimedia : hardware/software essentials– Different categories of multimedia software.	50%
2.	Working with Text, Audio <ul style="list-style-type: none">– Multimedia Text: Introduction, designing text for multimedia, hypermedia, hypertext– Multimedia Audio : Introduction, digital audio and sound card fundamentals, sound card functionalities, audio jacks, connectors, digital audio playback, audio editing– Multimedia text : introduction, designing text for multimedia, hypermedia, hypertext Multimedia graphics : introduction, basic concepts of colour displays, monitor video modes, colour monitors and their parameters, graphics in multimedia projects	50%

Teaching-Learning Methodology	Blended learning approach incorporating both traditional classroom teaching as well as usage of ICT tools
-------------------------------	---

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination	50%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance	
3.	External Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand fundamental concepts related to multimedia technology
2.	Understand how to work with text, audio, video and graphics.

Suggested References:	
Sr. No.	References
1.	Multimedia Magic. By S. Gokul, BPB Publications, 1998 and (Revised and updated Second Edition) 2005.
2.	Introduction to Multimedia: By Ana Weston Solomon, Tata McGraw-Hill Publishing Company Limited, 2005.
3.	On-line resources to be used if available as reference material

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND**(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)****AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR**An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

BCA (Bachelor of Computer Applications)**(Semester-II)**

Course Code	US2VABCA01	Title of the Course	Environmental Studies
Total Credits Of the Course	2	Hours per Week	2

Course Objectives	<ol style="list-style-type: none">1. To make younger generation environment conscious.2. To expose the students to the fundamental concepts of environment so that they can appreciate the importance of individual efforts to protect and preserve our environment.3. To encourage them to make judicious use of our resources so that it will not only help present generation but also the future generations in meeting their needs.
--------------------------	--

Course Content		
Unit	Description	Weightage*(%)
1	Introduction to Environmental studies, Ecosystem and Natural Resources <ul style="list-style-type: none">– Definition, Scope and importance of Environmental Studies (ES)– Component of Environment:- Atmosphere, Hydrosphere, Lithosphere & Biosphere– Biogeochemical cycles: Carbon cycle and Nitrogen cycle– Structure of ecosystem – Abiotic and Biotic components (Producers, Consumers & Decomposers)– Functions of Ecosystem:- Energy flow in an ecosystem , Food chains, Food webs with examples– Classification - Renewable & Non Renewable Resources	50%
2	Biotic(BIOLOGICAL) Interactions <ul style="list-style-type: none">– Positive Interactions with suitable examples<ul style="list-style-type: none">A. MutualismB. CommensalismC. Proto-cooperation– Negative Interactions with suitable examples<ul style="list-style-type: none">A. ExploitationB. CompetitionC. Antibiosis	50%

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified

GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

Teaching-Learning Methodology	Blended learning approach incorporating both traditional classroom teaching as well as usage of ICT tools and also outdoor activity.
-------------------------------	--

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written/Practical Examination Internal Continuous Assessment in the form of Practical, Viva voce, Quizzes, Seminars, Assignments, Attendance	50%
2.	External Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand the fundamental concepts of Environment so that they can appreciate the importance of individual efforts to protect and preserve our environment.
2.	Make judicious use of our resources that will not only help present generation but also the future generations in meeting their needs.

Suggested References	
Sr. No.	References
1.	Textbook of Environmental Studies for Under graduate Courses- Erach Bharucha
2.	Ecology and Environment by P. D.Sharma
3.	Fundamentals of Ecology by E. P. Odum.
4.	Ecology by Mohan P. Arora.
5.	Fundamentals of Ecology by M. C. Dash.

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND
(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)
AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

6.	Environmental Science by S. C. Santra.
7.	An Introduction to Environmental Engineering & Science by Gilbert N Master.
8.	Encyclopedia of Environmental Pollution and Control by R. K. Trivedi.
9.	Ecology and Sustainable development by P.S. Ramkrishana.
10.	Environmental Conservation; Fundamentals of Forestry Vol 5 by S.S. Negi, Bishen Singh, Mahendrapal Singh.
11.	Environmental Studies For Undergraduate Courses – UGC

On-line resources to be used if available as reference material

On-line Resources

Environmental Studies For Undergraduate Courses - UGC

<https://oceanservice.noaa.gov/economy/>

<https://www.greenmountainenergy.com/why-renewable-energy/protect-the-environment>

<https://education.nationalgeographic.org/resource/ecosystem/>

<https://www.futurelearn.com/info/courses/introduction-to-environmental-science/0/steps/269824#:~:text=Natural%20resources%20are%20the%20raw,in%20between%20are%20natural%20resources.>

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND**(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)****AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR**An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

BCA (Bachelor of Computer Applications)**(Semester-II)**

Course Code	US2VABCA02	Title of the Course	NCC -1
Total Credits of the Course	02	Hours per Week	02

Course Objectives	<ul style="list-style-type: none"> ❖ Course Content Part (I) Theory ❖ Course Content Part (II) Practical ❖ Course Objectives: <ul style="list-style-type: none"> ➤ Cadets will be able to: - Know about the history of NCC and Awareness of Nation. ➤ Its organization and incentives of NCC for their career prospects.
	<ul style="list-style-type: none"> ➤ Acquire knowledge of duties and conduct of NCC cadets ➤ Understand about different NCC camps and their conducts.
	<ul style="list-style-type: none"> ➤ Understand the concept of national integration and its importance. ➤ Understand the concept of self-awareness and emotional intelligence.
	<ul style="list-style-type: none"> ➤ Understand the concept of critical & creative thinking. ➤ Understand the process of decision making & problem solving.
	<ul style="list-style-type: none"> ➤ Understand the concept of team and its functioning. ➤ Understand the concept and importance of Social service.

Course Content Course Content Part (I)Theory		
Unit	Description	Weightage (%)
1.	Unit 1- NCC General & National Integration Awareness (NI). <ul style="list-style-type: none"> ❖ Incentives of NCC, Duties of NCC Cadet. NCC Camps: Types & Conduct. ❖ National Integration: Importance & Necessity, Factors Affecting 	25 %

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

	National Integration, Unity in Diversity & Role of NCC in Nation Building, Threats to National Security.	
2.	Unit 2- Personality Development & Military History. <ul style="list-style-type: none">❖ Intra & Interpersonal skills - Self-Awareness- & Analysis, Empathy, Critical & creative thinking, Decision making and problem solving.❖ Study of Battles of Indo-Pak Wars 1965 & 1971, Acquire awareness about the basic weapon system in use in the Armed Forces.	25 %

Course Objectives	<ul style="list-style-type: none">❖ Course Content Part (I) Theory❖ Course Content Part(II)Practical❖ Course Objectives:
	➤ Understand that drill as the foundation for discipline and to command a group for common goal.
	➤ Understand the importance of a weapon its detailed safety precautions necessary for prevention of accidents.
	➤ Develop awareness about different types of terrain and how it is used in battle craft.
	➤ Develop the concept of various markings on the map and how they are co-related to the ground features.

	Course Content Course Content Part (II)Practical	
Unit	Description	Weightage (%)

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

1.	Unit 1. Drill, Weapon Training <ul style="list-style-type: none">❖ Foot Drill Dahine, Baen, Aage aur Piche Kadam Lena, Chal se Murdna, Tej Chal se Salute Karna, Tej Kadam Taal aur Tham, Tej Kadam Taal se Kadam Badalna. Teeno Teen se Ek File aur ek file se Teeno Teen Banana❖ Weapon Training Range procedure & Theory of group, Short Range firing.	25 %
2.	Unit 2. Map Reading & Field Craft & Battle Craft <ul style="list-style-type: none">❖ Protractor Bearing and its conversion methods, Service protractor and its uses. Prismatic compass and its uses and GPS, Navigation by compass and GPS.❖ Field Craft & Battle Craft indications of landmarks and Targets, Intro, Definitions, Types of Ground, Indication of Landmarks, Methods of ident of targets, difficult targets.	25 %

Teaching-Learning Methodology	Classroom teaching and learning Ground –Based learning (Practical) Project-Based Learning Problem-Based Learning Inquiry-Based Learning Group Discussion. Collaborative Learning Ground work practical. Army Wing Camps Taring.
--------------------------------------	---

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND**(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)****AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR**An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written	50%
2.	Internal Continuous Assessment in the form of Practical & Viva	
3.	External Examination Written	50%
4.	External Examination Practical & Viva	

Course Outcomes	
1.	After completing this course, the cadets will be able to: - Imbibe the conduct of NCC cadets.
2.	Respect the diversity of different Indian culture.
3.	Practice togetherness and empathy in all walks of their life.
4.	Do their own self-analysis and will work out to overcome their weakness for better performance in all aspects of life.
5.	Understand creative thinking & its components.
6.	Think divergently and will try to break functional fixedness.
7.	Make a team and will work together for achieving the common goals.
8.	Do the social services on different occasions.

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

Suggested References	
Sr. No.	References
1	NCC Hand Book
2	DG NCC App
3	NCC DG Pressy
4	NATIONAL CADET CORPS (S.GAUR)

On-line resources to be used if available as reference material
On-line Resources
https://indiancc.nic.in/ncc-general-elective-subject-course-design/

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND**(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)****AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR**An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

BCA (Bachelor of Computer Applications)**(Semester–II)**

Course Code	US2VABCA03	Title of the Course	NSS - 1
Total Credits of the Course	02	Hours per Week	02

Course Objectives	1. Develop among students a Sense of Social and Civil Responsibility
	2. Develop Competence required for group-living and Sharing of Responsibilities.
	3. Development of the personality of students through Community Service.
	4. Understand the Community in which they work.
	5. To know the basic concept, Philosophy, objectives and various advisory Committees of NSS.
	6. To understand the basic programmes and activities of NSS.

Course Content		
Unit	Description	Weightage (%)
1.	National Service Scheme: Introduction and Basic Concepts: (Theory) <ul style="list-style-type: none">• Introduction of National Service Scheme• History & Philosophy of NSS• Mission, Objective, Symbol, NSS Badge, Flag, NSS Songs and NSS Day• Maintenance of daily Record	50%
2.	Activity Based Programmes : (Practical) <ul style="list-style-type: none">• Various NSS Programmes, Activities and it's Aims.• Orientation of NSS volunteers.• Regular Activities, One Day Camp and Special Camp• Celebrations of important days recognized by united nations, Central Govt., State Govt.	50%

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺**' UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

Teaching-Learning Methodology	<ul style="list-style-type: none">• Lecture Method• Online Lectures• Group Discussion• Practical Activities
--------------------------------------	--

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage (%)
1.	Internal Written /Practical (Written 25% + Practical 25%)	50%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance, Practical	
3.	External Examination (Written 25% + Practical 25%)	50%

Course Outcomes: Having Completed this course, the students will be able to	
1.	Familiar with the basic concept, Philosophy, objectives and various advisory Committees of NSS
2.	Understand the community in which they work.
3.	Understand themselves in relation to their community.
4.	Make them a sense of Social and Civil Responsibility.
5.	Develop Competence required for group-living and Sharing of Responsibilities.
6.	Have development of the personality of them through Community Service.
7.	Understand the basic programmes and activities of NSS.

Suggested References	
Sr. No.	References
1	NATIONAL SERVICE SCHEME MANUAL

On-line resources to be used if available as reference material

<https://nss.gov.in>

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND**(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)****AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR**An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺**' UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

BCA (Bachelor of Computer Applications)**(Semester-II)**

Course Code	US2VABCA04	Title of the Course	Yoga, Meditation and Fitness-I
Total Credits of the Course	02	Hours per Week	02

Course Objectives	1. To maintain physical fitness and wellness among the students.
	2. To guide the students about the concept of health and happiness through Yoga.
	3. To guide the students about mental health.
	4. To prepare the students to maintain the mental and physical health.
	5. To guide the students to lead a happy life with Yoga and meditation.

Course Content		
Unit	Description	Weightage (%)
1.	Yoga :- Introduction and Basic concepts: Meaning, Definition, Importance and Types of Yoga Origin and Development of Yoga. Meaning, Concept, Steps and Importance of Ashthang Yoga. How Yoga is different from Physical exercise. Yoga practice in daily life and its benefits.	50%
2.	A. Yoga & Meditation for Fitness: (Practical& Theory) <ul style="list-style-type: none">• Music & Meditation, Omkar Mantra & Meditation, Benefits of Meditation	50%

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

	B. Practical Aspect: (Practical& Theory) <ul style="list-style-type: none">• Prayer, Suryanamskar with Mantra, Subtle Exercise• Pranayams: Anulom-Vilom, BhramriPranayam, 3SR Breathing Technique-practice and Benefits• Aasans with their names, Practical and Benefits:• Standing Position: Vir bhadrasan, Trikonasan, Garudasan, Ardhchandrasan, Tadasan, Vrikshasan• Sitting Position: Sukhasan, Lolasan, Yog mudras, ArdhMatsyendrasan, Janu sirasan, Paschhimotasan• Relaxation Position: Bhujangasan, Sarvangasan, Naukasan, Matsyasan, Setubandhasan, Dhanurasan, Shalbhasan• Yog Nindra	
--	---	--

Teaching-Learning Methodology	Teaching learning methodology: Student Centric teaching learning methodology with practical and theory sessions with demonstration, group discussion and practical sessions along with traditional methods of teaching.
--------------------------------------	---

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weight age
1.	Internal Written	50%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance, Practical	
3.	External Examination	50%

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

Course Outcomes:	
1.	Students will increase in concentration & will power through Yoga & Meditation
2.	Students will learn how to lead a balanced life.
3.	Students will understand the basic body system, root of diseases and remedies from Yoga
4.	Students will experience the positive change in their life with the practices of Yoga.
5.	Students will receive the grand Yoga story of India.

Suggested References	
Sr. No.	References
1	Yoga Sukshma Vyayama by Dharendra Brahmachari
2	Asana Pranayama Mudra Bandha by Swami Satyananda Saraswati. Publisher: Yoga Publication Trust, Munger, Bihar, I
3	Karma Yoga, Bhati Yoga, Raja Yoga, Jnana Yoga by Swami Vivekananda
4	Yoga Sutras of Patanjali by Swami Satyananda Saraswati. Publisher: Yoga Publication Trust, Munger, Bihar, India
5	Hatha Yoga by Swami Sivananda. Publisher: The Divine Life Society, Uttarakhand, India
6	Gheranda Samhita by Swami Nirjanananda Saraswati. Publisher: Yoga Publication Trust, Munger, Bihar, India
7	Essence of Yoga by Swami Shivananda Saraswati. Publisher: The Divine Life Society
8	Yoga and Kriya by Swami Shivaananda Saraswati. Publisher; Yoga Publication Trust, Munger, Bihar, India

C P PATEL AND F H SHAH COMMERCE (AUTONOMOUS) COLLEGE, ANAND

(Managed by SARDAR PATEL EDUCATION TRUST, ANAND)

AFFILIATED TO SARDAR PATEL UNIVERSITY, V V NAGAR

An ISO 9001 2015 Certified / An ISO 14001-2015 Certified / An ISO 21001-2018 Certified
GUJARAT INSTITUTIONAL RATING FRAMEWORK (4 STAR)

AAA Reaccredited CGPA 3.56 – GRADE **A⁺** KCG-Dept of Edu. Govt of Gujarat-April 2017

NAAC Reaccredited - CGPA 3.30 - GRADE **'A⁺'** UGC – MHRD, Govt of India – June 2022

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

On-line resources to be used if available as reference material

On-line Resources

<http://lyu.ac.in/yoga/>

<http://www.whenlifeisgood.com/iyengar-yoga-home-practice-sequences-a-resource-page>
