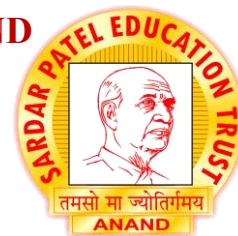




C P PATEL AND F H SHAH COMMERCE COLLEGE, ANAND
(AUTONOMOUS)

(Managed by Sardar Patel Education Trust, Anand)
(Affiliated to Sardar Patel University, Vallabh Vidyanagar)
NAAC Reaccredited CGPA – 3.30 – Grade A+



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

Post Graduate Diploma in Computer Application (PGDCA)
Semester – I

Course Code	PGDCAN1C06	Title of the Course	Practical – I
Total Credits	04	Hours per Week	04 Hours / Week

Course Learning Outcomes (CLOs)

CLO 1	Demonstrate proficiency in Python programming by developing and debugging programs.
CLO 2	Demonstrate proficiency in Microsoft Word, Excel, and PowerPoint by creating professional documents, performing data analysis, and developing effective presentations.
CLO 3	Apply fundamental DBMS concepts to design, create, query, and manage databases using SQL while ensuring data integrity and efficient data retrieval.

Unit	Course Content	Learning Pedagogies*	CLO(s)
1.	Practical training and hands-on sessions on Python	Problem-Based Learning, Self Directed Learning	CLO1
2.	Practical training and hands-on sessions on Word, Excel and Power Point	Problem-Based Learning, Self Directed Learning	CLO2
3.	Practical training and hands-on sessions on DBMS	Problem-Based Learning, Self Directed Learning	CLO3

Assessment Methodologies

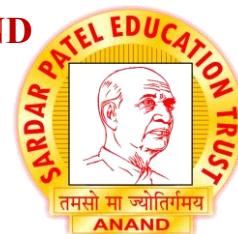
(U)	Internal Assessment (a) Internal Formative assessment (20 Marks) i. Assignment ii. Quizzes (b) Internal Summative Assessment (30 Marks) i. Mid-term Test
(V)	External Examination (50 Marks)



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

**(Managed by Sardar Patel Education Trust, Anand)
(Affiliated to Sardar Patel University, Vallabh Vidyanagar)**

NAAC Reaccredited CGPA – 3.30 – Grade A+



	(a) Term-end Examination
(W)	Weightage of Learning Efforts for External Assessment

Unit	Aligned COs	Total Learning Hours	Approximate weightage (Marks) to Learning levels (BT)			Total Marks
			Remember (R)	Understanding (U)	Application/ Analyse & above (A)	
I	CLO1	40	4	6	8	18
II	CLO2	40	3	5	8	16
III	CLO3	40	3	5	8	16
		120	10	16	24	50

Assessment and Evaluation			
Sr. No	Assessment/Evaluation	Component	Weightage (%)
1	Continuous Internal Evaluation	Assignments, Quizzes, Laboratory Regularity, Internal test	50
2	End-Semester Examination	Practical Examinations	50

PLO – CLO Mapping								
Practical - I								
	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8
CLO 1	3	3	2	1	0	0	0	1
CLO 2	3	3	3	2	1	0	0	1
CLO 3	3	3	3	2	2	2	0	2
Note: High: 03; Moderate: 02; Low: 01; No Mapping: 00								

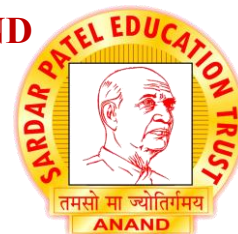
Suggested References and E-Resources for Further Reading
- Python Data Science Handbook: Essential Tools for Working with Data — Jake VanderPlas (2016) - Python for Data Analysis: Data Wrangling with Pandas, NumPy, and IPython (2nd Edition) — Wes McKinney (2017) - Elmasri And Navathe: Fundamentals of Database Systems, Addison-Wesley Publishing Co. 1994. - John G. Hughes: Database Technology A Software Engineering Approach, Prentice Hall International Series 1993.



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

**(Managed by Sardar Patel Education Trust, Anand)
(Affiliated to Sardar Patel University, Vallabh Vidyanagar)**

NAAC Reaccredited CGPA – 3.30 – Grade A+



- | |
|---|
| • Ivan Bayross: SQL, PL/SQL BPB Publications. 2009 |
| • Taxali R K : PC Software made simple for Windows, Tata McGraw-Hill Publishing Co.Ltd., 2000. |
| • https://www.w3schools.com/datascience/ds_python.asp |
| • https://www.geeksforgeeks.org/data-science-with-python-tutorial/ |
| • https://www.tpointtech.com/dbms-tutorial |
| • DBMS Tutorial |
