

COURSE FILE

ON

Python Programming lab

Course Code - CS201ES

I B.Tech II-SEMESTER A.Y.: 2022-2023

Prepared by Mr. P. BALU Assistant Professor

Head of the Department Department of H&S

Department of H&S SRI INDU INSTITUTE OF ENGG & TECh beriouda^(A) Ibrahimoatnam (M) R.R. Dist-501 517

PRINCIPAL

Sri Indu Institute of Engineering & Tech. Sheriguda(VIII), Ibrahimpatnam R.R. Dist. Telangana-501 510.

Main Road, Sheriguda, Ibrahimpatnam, R.R. Dist. 501 510, Telangana. Campus Ph: 9640590999, 9347187999.

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EAMCET CODE: INDI

JNTUH CODE: X3

Name of the Physical laboratory:	PYTHON PROGRAMMING LABORATORY
Course code	CS201ES
Room No	D-107
Name of the lab incharge	Mrs M. TEJASWI
Name of the faculty incharge	Mr.P.BALU Assistant Professor

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INSTITUTE VISION & MISSION

Vision:

To become a premier institute of academic excellence by providing the world class education that transforms individuals into high intellectuals, by evolving them as empathetic and responsible citizens through continuous improvement.

Mission:

- IM1: To offer outcome-based education and enhancement of technical and practical skills.
- IM2: To Continuous assess of teaching-learning process through instituteindustry collaboration.
- IM3: To be a centre of excellence for innovative and emerging fields in technology development with state-of-art facilities to faculty and students' fraternity.
- IM4: To Create an enterprising environment to ensure culture, ethics and social responsibility among the stakeholders.

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PROGRAM EDUCATIONAL OBJECTIVES

To develop trained graduates with strong academic and technical skills of modern computer science and engineering.

- **PEO2:** To promote trained graduates with leadership qualities and the ability to solve real time problems using current techniques and tools in interdisciplinary environment.
- **PEO3:** To motivate the graduates towards lifelong learning through continuing education and professional development.

PROGRAM SPECIFIC OUTCOMES

- **PSO1 : Professional Skills:** To implement computer programs of varying complexity in the areas related to Web Design, Cloud Computing, Network Security and Artificial Intelligence.
- **PSO2: Problem-Solving** Skills: To develop quality products using open ended programming environment.

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PROGRAMME OUTCOMES

PO1: Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem Analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: 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.

PO4: 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.

PO5: 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.

PO6: The Engineer & 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.

PO7: Environment & Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual & Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: 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, give and receive clear instructions.

PO11: Project Management & 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.

PO12: 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 oftechnological change.

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SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY B.Tech. in COMPUTER SCIENCE AND ENGINEERING (IOT) COURSE STRUCTURE, I YEAR SYLLABUS (BR22 Regulations)

Applicable from Academic Year: 2022-23 Batch

I Year I Semester

S. No.	Course Code	Course Title	L	Т	Р	Credits
1.	MA101BS	Matrices and Calculus	3	1	0	4
2.	AP102BS	Applied Physics	3	1	0	4
3.	CS103ES	Programming for Problem Solving		0	0	3
4.	ME102ES	Engineering Workshop	0	1	3	2.5
5.	EN104HS	English for Skill Enhancement	2	0	0	2
6.	CS106ES	Elements of Computer Science & Engineering	0	0	2	1
7.	AP105BS	Applied Physics Laboratory	0	0	3	1.5
8.	CS107ES	Programming for Problem Solving Laboratory	0	0	2	1
9.	EN107HS	English Language and Communication Skills Laboratory	0	0	2	1
10.	*MC101ES	Environmental Science	3	0	0	0
11.		Induction Programme				
		Total	14	3	12	20

I Year II Semester

S. No.	Course Code	Course Title	L	Т	Р	Credits
1.	MA201BS	Ordinary Differential Equations and Vector Calculus	3	1	0	4
2.	CH203BS	Engineering Chemistry	3	1	0	4
3.	ME201ES	Computer Aided Engineering Graphics	1	0	4	3
4.	EE201ES	Basic Electrical Engineering		0	0	2
5.	EC201ES	Electronic Devices and Circuits	2	0	0	2
6.	CH206BS	Engineering Chemistry Laboratory	0	0	2	1
7.	EE202ES	Basic Electrical Engineering Laboratory	0	0	2	1
8.	CS201ES	Python Programming Laboratory	0	1	2	2
9.	CS203ES	IT Workshop	0	0	2	1
		Total	11	3	12	20



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PYTHON PROGRAMMING LABORATORY

(Course Code: CS201ES)

B.Tech. I Year II Sem.

LTPC

0 1 2 2

Course Objectives:

- To install and run the Python interpreter
- To learn control structures.
- To Understand Lists, Dictionaries in python
- To Handle Strings and Files in Python

Course Outcomes: After completion of the course, the student should be able to

- Develop the application specific codes using python.
- Understand Strings, Lists, Tuples and Dictionaries in Python
- Verify programs using modular approach, file I/O, Python standard library
- Implement Digital Systems using Python

Note: The lab experiments will be like the following experiment examples

Week -1:

1. i) Use a web browser to go to the Python website http://python.org. This page contains information about Python and links to Python-related pages, and it gives you the ability to search the Python documentation.

ii) Start the Python interpreter and type help() to start the online help utility.

- 2. Start a Python interpreter and use it as a Calculator.
- 3.

i) write a program to calculate compound interest when principal, rate and number of periods aregiven.

ii) Given coordinates (x1, y1), (x2, y2) find the distance between two points

4. Read name, address, email and phone number of a person through keyboard and print the details.

Week - 2:

- 1. Print the below triangle using for loop.
 - 5
 - 44
 - 333
 - 2222
 - 11111
- 2. Write a program to check whether the given input is digit or lowercase character or uppercase character or a special character (use 'if-else-if' ladder)
- 3. Python Program to Print the Fibonacci sequence using while loop
- 4. Python program to print all prime numbers in a given interval (use break)

Week - 3:

- i) Write a program to convert a list and tuple into arrays.
 ii) Write a program to find common values between two arrays.
- 2. Write a function called gcd that takes parameters a and b and returns their greatest common divisor.
- 3. Write a function called palindrome that takes a string argument and returns True if it is a palindromeand False otherwise. Remember that you can use the built-in function len to check the length of a string.

Week - 4:

- 1. Write a function called is_sorted that takes a list as a parameter and returns True if the list is sorted in ascending order and False otherwise.
- 2. Write a function called has_duplicates that takes a list and returns True if there is any element that appears more than once. It should not modify the original list.

i). Write a function called remove_duplicates that takes a list and returns a new list with only theunique elements from the original. Hint: they don't have to be in the same order.

ii).The wordlist I provided, words.txt, doesn't contain single letter words. So you might want toadd "I", "a", and the empty string.

iii). Write a python code to read dictionary values from the user. Construct a function to invertits content. i.e., keys should be values and values should be keys.

3. i) Add a comma between the characters. If the given word is 'Apple', it should become 'A,p,p,l,e'ii) Remove the given word in all the places in a string?

iii) Write a function that takes a sentence as an input parameter and replaces the first letter of everyword with the corresponding upper case letter and the rest of the letters in the word by corresponding letters in lower case without using a built-in function?

4. Writes a recursive function that generates all binary strings of n-bit length

Week - 5:

- 1. i) Write a python program that defines a matrix and prints
 - ii) Write a python program to perform addition of two square matrices
 - iii) Write a python program to perform multiplication of two square matrices
- 2. How do you make a module? Give an example of construction of a module using different geometrical shapes and operations on them as its functions.
- 3. Use the structure of exception handling all general purpose exceptions.

Week-6:

1. a. Write a function called draw_rectangle that takes a Canvas and a Rectangle as arguments and draws a representation of the Rectangle on the Canvas.

b. Add an attribute named color to your Rectangle objects and modify draw_rectangleso that ituses the color attribute as the fill color.

c. Write a function called draw_point that takes a Canvas and a Point as arguments and draws are presentation of the Point on the Canvas.

d. Define a new class called Circle with appropriate attributes and instantiate a few Circle objects.Write a function called draw_circle that draws circles on the canvas.

- 2. Write a Python program to demonstrate the usage of Method Resolution Order (MRO) in multiple levels of Inheritances.
- 3. Write a python code to read a phone number and email-id from the user and validate it forcorrectness.

Week-7

- 1. Write a Python code to merge two given file contents into a third file.
- 2. Write a Python code to open a given file and construct a function to check for given words present init and display on found.
- 3. Write a Python code to Read text from a text file, find the word with most number of occurrences
- 4. Write a function that reads a file *file1* and displays the number of words, number of vowels, blankspaces, lower case letters and uppercase letters.

Week - 8:

- 1. Import numpy, Plotpy and Scipy and explore their functionalities.
- 2. a) Install NumPy package with pip and explore it.
- 3. Write a program to implement Digital Logic Gates AND, OR, NOT, EX-OR
- 4. Write a program to implement Half Adder, Full Adder, and Parallel Adder
- 5. Write a GUI program to create a window wizard having two text labels, two text fields and two buttons as Submit and Reset.

TEXT BOOKS:

- 1. Supercharged Python: Take your code to the next level, Overland
- 2. Learning Python, Mark Lutz, O'reilly

REFERENCE BOOKS:

- 1. Python Programming: A Modern Approach, Vamsi Kurama, Pearson
- 2. Python Programming A Modular Approach with Graphics, Database, Mobile, and WebApplications, Sheetal Taneja, Naveen Kumar, Pearson
- 3. Programming with Python, A User's Book, Michael Dawson, Cengage Learning, India Edition
- 4. Think Python, Allen Downey, Green Tea Press
- 5. Core Python Programming, W. Chun, Pearson
- 6. Introduction to Python, Kenneth A. Lambert, Cengage.



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COURSE OUTCOMES

Course Name: PYTHON PROGRAMMING LABORATORY(C128)

At the End of the course, student will be able to

CO No	DESCRIPTION
C128.1	Develop the application specific codes using python. (Applying)
C128.2	Understand Strings, Lists, Tuples and Dictionaries in Python. (Understanding)
C128.3	Understand Functions in Python. (Understanding)
C128.4	Evaluate programs using modular approach, MRO,Exception Handling.(Evaluating)
C128.5	Evaluate programs using Python standard library, file I/O. (Evaluating)
C128.6	Construct Digital Systems using Python.(Creating)

COs and POs & PSOs Mapping

PO/PSO/ CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C128.1	3	2	-	1	-	-	-	-	-	-	-	1	2	3
C128.2	3	-	-	1	2	-	-	-	-	-	-	1	-	2
C128.3	3	2	-	1	-	-	-	-	2	-	2	1	1	-
C128.4	-	3	-	1	2	-	-	-	-	-	-	1	-	-
C128.5	-	3	-	1		-	-	-	-	-	-	1	1	1
C128.6	-	-	3	1	2	-	-	-	2	-	2	1	2	1
C128	3	2.5	3	1	2	-	-	-	2	-	2	1	1.5	1.7

3-High



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LIST OF EXPERIMENTS AND THEIR CO, PO MAPPING

S. No	Name of The Experiment	СО	РО
1	 i) Use a web browser to go to the Python website http://python.org. This page contains information about Python and links to Python-related pages, and it gives ii) Start the Python interpreter and type help() to start the online help utility. Start a Python interpreter and use it as a Calculator. i) write a program to calculate compound interest when principal, rate and number of periods aregiven. ii) Given coordinates (x1, y1), (x2, y2) find the distance between two points Read name, address, email and phone number of a person through keyboard and print the details. 	CO1	PO1,PO2,PO4 ,PO12,PSO1,P SO2
2	 1.Print the below triangle using for loop. 5 4 4 3 3 3 2 2 2 2 1 1 1 1 1 2.Write a program to check whether the given input is digit or lowercase character or uppercase character or a special character (use 'if-else-if' ladder) 3.Python Program to Print the Fibonacci sequence using while loop 4.Python program to print all prime numbers in a given interval (use break) 	CO1	PO1,PO2,PO4 ,PO12,PSO1,P SO2
3	1. i) Write a program to convert a list and tuple into arrays.	CO2,CO3	PO1,PO2,PO4,

	ii) Write a program to find common values between two arrays.2. Write a function called gcd that takes parameters a and b and returns their greatest common divisor.3. Write a function called palindrome that takes a string argument and returnsTrue if it is a palindrome and False otherwise. Remember that you can use the built-in function len to check the length of a string.		PO5,PO9,PO1 1,PO12,PSO1, PSO2
4	 Write a function called is_sorted that takes a list as a parameter and returns True if the list is sorted in ascending order and False otherwise. Write a function called has_duplicates that takes a list and returns True if there is any element that appears more than once. It should not modify the original list. Write a function called remove_duplicates that takes a list and returns a new list with only the unique elements from the original. Hint: they don't have to be in the same order. The wordlist I provided, words.txt, doesn't contain single letter words. So you might want to add "I", "a", and the empty string. Write a python code to read dictionary values from the user. Construct a function to invert its content. i.e., keys should be values and values should be keys. i) Add a comma between the characters. If the given word is 'Apple', it should become 'A,p,p,l,e' Remove the given word in all the places in a string? Write a function that takes a sentence as an input parameter and replaces the first letter of every word with the corresponding upper case letter and the rest of the letters in the word by corresponding letters in lower case without using a built-in function? Writes a recursive function that generates all binary strings of n-bit length 	CO2,CO3	PO1,PO2,PO4, PO5,PO9,PO1 1,PO12,PSO1P SO2
5	 i) Write a python program that defines a matrix and prints Write a python program to perform addition of two square matrices Write a python program to perform multiplication of two square matrices How do you make a module? Give an example of construction of a module using different geometrical shapes and operations on them as its functions. Use the structure of exception handling all general purpose exceptions. a. Write a function called draw rectangle that takes a Canvas and a Rectangle as 	CO4, CO5	PO2,PO4,PO5, PO12,PSO1,PS O2
6	 a. write a function caned draw_rectangle that takes a Canvas and a Rectangle as arguments and draws a representation of the Rectangle on the Canvas. b. Add an attribute named color to your Rectangle objects and modify draw_rectangle so that it uses the color attribute as the fill color. c. Write a function called draw_point that takes a Canvas and a Point as arguments and draws a representation of the Point on the Canvas. 	CO2,CO5	PO1,PO2,PO4, PO5,PO12,PS O1,PSO2

	 d. Define a new class called Circle with appropriate attributes and instantiate a few Circle objects. Write a function called draw_circle that draws circles on the 2. Write a Python program to demonstrate the usage of Method Resolution Order (MRO)in multiple levels of Inheritances. 3. Write a python code to read a phone number and email-id from the user and validate it for correctness. 		
7	 Write a Python code to merge two given file contents into a third file. Write a Python code to open a given file and construct a function to check for given words present in it and display on found. Write a Python code to Read text from a text file, find the word with most number of occurrences 	CO2,CO5	PO1,PO2,PO4, PO5,PO12,PS O1,PSO2
8	 Import numpy, Plotpy and Scipy and explore their functionalities. a) Install NumPy package with pip and explore it. Write a program to implement Digital Logic Gates – AND, OR, NOT, EX-OR Write a program to implement Half Adder, Full Adder, and Parallel Adder Write a GUI program to create a window wizard having two text labels, two text fields and two buttons as Submit and Reset. 	CO2,CO4, CO6	PO1, PO2,PO3 ,PO4,PO5,PO9 ,PO11,PO12,P SO1,PSO2

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Class: IOT		Semeste	<u>r</u> : II	W.E.F	-03-04-202	3	LI	<u>H</u> :-D-110		
	I 9:40- 10:30	II 10:30 - 11:20	III 11:20- 12:10	12:10- 12.45	IV 12.45- 1.35	V 1.35- 2.25	VI 2.25- 3.15	VII 3.15-4.00		
MON		ITWS LAB		ODE	EDC	EC	ODE(T)/EC(T)			
TUE	C.	AEG PRACTIO	CE		BEE	BEE	ODE	EDC(T)/ BEE(T)		
WED	EC	ODE	EDC	C N	EC	BEE LAE	EC(T)/ODE(T)			
THU	BEE	EC	ODE	н	CAE	J PRACTI	CE	LIBRARY		
FRI	BEE	EDC	EC		PY	THON LA	BEE(T)/EDC(T)			
SAT		EC/BEE LAB		_	ODE	EDC	BEE	PYTHON(T)		

Course Code	Course Name	Name of the Faculty	Course Code	Course Name	Name of the Faculty
MA201B S	OrdinaryDiffer entialEquation sandVectorCal culus	V.SUJATHA	CH206B S	Engineering ChemistryLa boratory	V.MOUNIKA/O.SUBHASHI NI
CH203B S	EngineeringCh emistry	V.MOUNIKA	EE202ES	BasicElectric alEngineerin gLaboratory	S.NISCHALA/M.NAGARAJ U
ME201E S	ComputerAide dEngineeringG raphics	M.YADHAGI RI	CS201ES	PythonProgr ammingLabo ratory	P.BALU/M.TEJASWI
EE201ES	BasicElectrical Engineering	S.NISCHALA	CS203ES	ITWorkshop	B.RAJITHA/N.KEERTHI CHANDANA
EC201ES	ElectronicDevi cesand Circuits	P.SRILATHA			

V. Sugatha **Class In-Charge**

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Head of The Department

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X3	
BR22	

Python Programming Lab

Year & Semester: I YR II sem Branch: CSE (IOT) Subject Name: **Python Programming Lab** Faculty Name: P. BALU

Python Programming Lab External

SET-1

- 1. i) Write a python program that defines a matrix and prints
- ii) Write a python program to perform addition of two square matrices
- iii) Write a python program to perform multiplication of two square matrices
- 2. How do you make a module? Give an example of construction of a module using different geometrical shapes and operations on them as its functions.

SET-2

- 1. Use the structure of exception handling all general purpose exceptions.
- 2. Write a function called draw_rectangle that takes a Canvas and a Rectangle as arguments and draws a representation of the Rectangle on the Canvas.

SET-3

- 1. Add an attribute named color to your Rectangle objects and modify draw_rectangle so that ituses the color attribute as the fill color.
 - 2. Write a function called draw_point that takes a Canvas and a Point as arguments and draws a representation of the Point on the Canvas.

SET-4

- 1. Define a new class called Circle with appropriate attributes and instantiate a few Circle objects.Write a function called draw_circle that draws circles on the canvas.
- 2. Write a Python program to demonstrate the usage of Method Resolution Order (MRO) in multiplelevels of Inheritances.

SET-5

- 1. Write a python code to read a phone number and email-id from the user and validate it forcorrectness.
- 2. Write a Python code to merge two given file contents into a third file.

SET-6

- 1. Write a Python code to open a given file and construct a function to check for given words present init and display on found.
 - 2. Write a Python code to Read text from a text file, find the word with most number of occurrences

SET-7

- 1. Write a function that reads a file *file1* and displays the number of words, number of vowels, blankspaces, lower case letters and uppercase letters.
- 2. Import numpy, Plotpy and Scipy and explore their functionalities.
- 3. a) Install NumPy package with pip and explore it.

SET-8

- 1. Write a program to implement Digital Logic Gates AND, OR, NOT, EX-OR
- 2. Write a GUI program to create a window wizard having two text labels, two text fields and two buttonsas Submit and Reset.

SET 9

1. Start a Python interpreter and use it as a Calculator.

2.

- i) Write a program to calculate compound interest when principal, rate and number of periods aregiven.
- ii) Given coordinates (x1, y1), (x2, y2) find the distance between two points
- iii) Read name, address, email and phone number of a person through keyboard and print the details.

SET 10

- 1. Print the below triangle using for
 - loop.5 4 4 3 3 3 2 2 2 2 1 1 1 1 1
- 2. Write a program to check whether the given input is digit or lowercase character or uppercasecharacter or a special character (use 'if-else-if' ladder)
- 3. Python Program to Print the Fibonacci sequence using while loop

SET 11:

1. Python program to print all prime numbers in a given interval (use break)

2. i) Write a program to convert a list and tuple into arrays.

ii) Write a program to find common values between two arrays.

3. Write a function called gcd that takes parameters a and b and returns their greatest common divisor.

SET 12:

- 1. Write a function called palindrome that takes a string argument and returnsTrue if it is a palindromeand False otherwise. Remember that you can use the built-in function len to check the length of a string.
- 2. Write a function called is_sorted that takes a list as a parameter and returns True if the list is sorted in ascending order and False otherwise.
- 3. Write a function called has_duplicates that takes a list and returns True if there is any element thatappears more than once. It should not modify the original list.
- i). Write a function called remove_duplicates that takes a list and returns a new list with only theunique elements from the original. Hint: they don't have to be in the same order.
- ii). The wordlist I provided, words.txt, doesn't contain single letter words. So you might want to add"I", "a", and the empty string.
- iii). Write a python code to read dictionary values from the user. Construct a function to invert its content. i.e., keys should be values and values should be keys.

SET 13:

- 1 i) Add a comma between the characters. If the given word is 'Apple', it should become 'A,p,p,l,e'
- ii) Remove the given word in all the places in a string?
- iii) Write a function that takes a sentence as an input parameter and replaces the first letter of everyword with the corresponding upper case letter and the rest of the letters in the word by corresponding letters in lower case without using a built-in function?
- 2. Writes a recursive function that generates all binary strings of n-bit length





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Examination Branch

A.Y.: 2022-23

SEM-II

DATE	Day	Branch	Session	HT.No	Total No of Students
19-08-2023	SATURDAY	CSE-B	FN	22X31A0566 TO 22X31A05D0	65
21-08-2023	MONDAY	CYBER SECURITY	FN	22X31A6201 TO 22X31A6262	62
21-08-2023	MONDAY	AI&ML-A	AN	22X31A6601 TO 22X31A6650	50
22-08-2023	TUESDAY	DS	FN	22X31A6701 TO 22X31A6764	64
22-08-2023	TUESDAY	AI&DS	AN	22X31A7201 TO 22X31A7264	64
23-08-2023	WEDNESDAY	CSE-A	FN	22X31A0501 TO 22X31A0565	65
23-08-2023	WEDNESDAY	CIVIL	AN	22X31A0101 TO 22X31A0103	02
24-08-2023	THURSDAY	CSE-C	FN	22X31A05D1 TO 22X31A05J1	61
25-08-2023	FRIDAY	IOT	FN	22X31A6901 TO 22X31A6963	63

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PRINCIPAL

Sri Indu Institute of Engineering & Tech. Sheriguda(Vill), Ibrahimpatnam R.R. Dist. Telangana-501 510.



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Khalsa Ibrahimpatnam, Sheriguda(V), Ibrahimpatnam(M), Ranga Reddy Dist., Telangana – 501 510

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PYTHON Programming Lab External Time Table Examination Branch

A.Y.: 2022-23

SEM-II

					Total	Remarks		
DATE	Day	Branch	Sessio n	HT.No	No of Student s	Internal Examiner	External Examiner	
19-08-2023	SATURDAY	CSE-B	FN	22X31A0566 TO 22X31A05D0	65	D.SWAPNA	MD.SIRAJULHUQ	
21-08-2023	MONDAY	CYBER SECURITY	FN	22X31A6201 TO 22X31A6262	62	P.BALU	CHANDRA SHEKAR	
21-08-2023	MONDAY	AI&ML-A	AN	22X31A6601 TO 22X31A6650	50	M.TEJASWI	CHANDRA SHEKAR	
22-08-2023	TUESDAY	DS	FN	22X31A6701 TO 22X31A6764	64	P.BALU	G.SWAPNA	
22-08-2023	TUESDAY	AI&DS	AN	22X31A7201 TO 22X31A7264	64	M.TEJASWI	G.SWAPNA	
23-08-2023	WEDNESDAY	CSE-A	FN	22X31A0501 TO 22X31A0565	65	D.SWAPNA	A.SUNITHA	
23-08-2023	WEDNESDAY	CIVIL	AN	22X31A0101 TO 22X31A0103	02	B.RAJESHWARI	A.SUNITHA	
24-08-2023	THURSDAY	CSE-C	FN	22X31A05D1 TO 22X31A05J1	61	J.PUJITHA	G.SWAPNA	
24-08-2023	THURSDAY	AI&ML-B	AN	22X31A6651 TO 22X31A6697	47	M. TEJASWI	CHAINTANYA BHARATHI	
25-08-2023	FRIDAY	ЮТ	FN	22X31A6901 TO 22X31A6963	63	P.BALU	S.SHIVA SHANKAR	

FN : 9.40 am to 12.25 pm

AN : 1.00 pm to 4.00 pm

EXAM BRANCH



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Khalsa Ibrahimpatnam, Sheriguda (V), Ibrahimpatnam (M), Ranga Reddy Dist., Telangana – 501 510 Website: https://siiet.ac.in/

TIME TABLE FOR A.Y 2022-23

LAB OCCUPANCY CHART

PYTHON PROGRAMMING LAB

Class: I-B.Tech CSE(IOT) Semester: II

Semester: II LH. NO: D-107

W.E.F:03-04-2023

Period/	1	2	3	12:	4	5	6	7
Day	9:40- 10:30	10:30- 11:20	11:20- 12:10	10- 12: 45	12:45- 1:30	1:30-2:20	2:20-3:10	3:10-4:00
Monday	I-II DS	S-PYTH	ON LAB		I-II CSE-CYBER – PYTHON LAB			
Tuesday	I-II CSE	-C-PYT	HON LAB	L	I-II AI&ML -A-PYTHON LAB			
Wednesday	I-II AI&ML -B –PYTHON LAB		U	I-II CSE-A – PYTHON LAB		ON LAB		
Thursday	I-II EC	E –PYTH	ION LAB	N	LAB	MAINTEN	ANCE	
Friday	I-II CSE-B – PYTHON LAB		C	I-II CSE-IOT –PYTHON LAB		HON LAB		
Saturday	LAB N	AAINTEN	NANCE	H	I-II AI	&DS –PYTH	ON LAB	

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Sri Indu Institute of Engineering & Tech Sheriguda(VIII), Ibrahimpatnam R.R. Dist. Telangana-501 510.

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PYTHON PROGRAMMING LAB

PHYSICAL LAB-12 FLOOR PLAN

ROOM NO: D-107

BLOCK: D

FLOOR: GROUND FLOOR



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Do's

- 1. Come with completed observation and record.
- 2. Remove your shoes or wear foot socks before you enter the lab.
- 3. Always keep quiet. Be considerate to other lab users.
- 4. Report any problems with the computer to the person in charge.
- 5. Shut down the computer properly.
- 6. Wear ID card before entering into the lab.
- 7. Read and understand how to carry out an activity thoroughly before coming to the lab.
- 8. Write In time, Out time and system details in the login register

Don'ts

- 1. Do not touch any part of the computer with wet hands.
- 2. Do not change system settings.
- 3. Do not hit the keys on the computer too hard.
- 4. Don't damage, remove, or disconnect any labels, parts, cables or equipment.
- 5. Do not install or download any software or modify or delete any system files on any lab computers
- 6. Do not disturb your neighbouring students. They may be busy in completing tasks.
- 7. Do not remove anything from the computer laboratory without permission.
- 8. Do not use pen drives.



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Lab manual link:

https://drive.google.com/file/d/1ZAv1g7UzRzYoDoZrAqmvDoqRKzSnJvOr/view?usp=sharing



Department of Humanities and Sciences

The second of th						
Course Outcome Attainment (Internal Examination-1)						
Name of the faculty :	P.BALU	Academic Year:	2022-23 LAB			
Branch & Section:	CSE(IOT)	Examination:	INTERNAL			
Lab Course Name:	PYTHON PROGRAMMING	Y ear/semester	1 -11 SEM			

S.No	HT No.	R+O+A	V+V	E+E+R
Max. Marks ==>		10	10	10
1	21X3A6901	10	10	10
2	21X3A6902	6	10	10
3	21X3A6903	4	10	10
4	21X3A6904	6	10	10
5	21X3A6905	10	10	10
6	21X3A6906	10	10	10
7	21X3A6907	9	10	10
8	21X3A6908	8	8	10
9	21X3A6909	10	10	10
10	21X3A6910	10	10	10
11	21X3A6911	10	10	10
12	21X3A6912	10	10	10
13	21X3A6913	10	10	10
14	21X3A6914	4	10	10
15	21X3A6915	7	10	10
16	21X3A6916	6	9	10
17	21X3A6917	3	9	10
18	21X3A6918	AB	AB	AB
19	21X3A6919	7	9	10
20	21X3A6920	10	10	10
21	21X3A6921	10	9	10
22	21X3A6922	3	9	10
23	21X3A6923	10	10	10
24	21X3A6924	10	10	10
25	21X3A6925	10	10	10
26	21X3A6926	10	10	10
27	21X3A6927	10	10	10
28	21X3A6928	10	10	10
29	21X3A6929	10	10	10
30	21X3A6930	10	10	10
31	21X3A6931	10	10	10
32	21X3A6932	10	10	10
33	21X3A6933	4	10	10
34	21X3A6934	10	10	10

35	21X3A6935	10	10	10
36	21X3A6936	10	10	10
37	21X3A6937	10	10	10
38	21X3A6938	10	10	10
39	21X3A6939	10	10	10
40	21X3A6940	10	10	10
41	21X3A6941	10	10	10
42	21X3A6942	10	10	10
43	21X3A6943	3	9	10
44	21X3A6944	10	10	10
45	21X3A6945	10	10	10
46	21X3A6946	AB	AB	AB
47	21X3A6947	3	9	10
48	21X3A6948	10	10	10
49	21X3A6949	10	10	10
50	21X3A6950	10	10	10
51	21X3A6951	10	10	10
52	21X3A6952	10	10	10
53	21X3A6953	10	10	10
54	21X3A6954	10	10	10
55	21X3A6955	AB	10	10
56	21X3A6956	10	10	10
57	21X3A6957	10	10	10
58	21X3A6958	10	10	10
59	21X3A6959	10	10	10
60	21X3A6960	0	0	0
61	21X3A6961	10	10	10
62	21X3A6962	3	9	10
63	21X3A6963	10	10	10
	•			
		6.00	6.00	6.00
Target set by the fac	culty/HoD			
Number of students	performed above	57	57	57
the target				
		58	58	58
Number of student	s attempted			
Percentage of stude	nts scored more	98%	98%	98%
than target				

CO Mapping with Exam Questions:

CO - 1	У	У	Y
CO - 2	У	У	Y
CO - 3	У	У	Y
CO - 4			
CO - 5			
CO - 6			

CO Attainment based on Exam Questions:

CO - 1	98%	98%	98%
CO - 2	98%	98%	98%
CO - 3	98%	98%	98%
CO - 4			
CO - 5			
CO - 6			

СО	Intrnal practical	E+E+R	OveralI	Level	At Le	ttain evel
CO-1	98%	98%	98%	3	1	
CO-2	98%	98%	98%	3	2	
CO-3	98%	98%	98%	3	3	
CO-4						
CO-5						
CO-6						

At Le	tainment vel
1	40%
2	50%
3	>60%

Attainment (Internal 1 Examination) =

3



Department of Humanities and Sciences

Course Outcome Attainment (Internal Examination-2)

Name of the faculty :	P.BALU	Academic Year:	2022-23
Branch & Section:	CSE(IOT)	Examination:	LAB INTERNAL
Lab Course Name:	PYTHON PROGRAMMING	Year/semester	I -II SEM

S.No	HT No.	R+O+A	V+V	E+E+R	ppt
Max. Marks ==>		10	10	10	10
1	22X31A6901	10	8	7	10
2	22X31A6902	8	8	7	10
3	22X31A6903	8	8	7	10
4	22X31A6904	7	7	5	10
5	22X31A6905	8	7	6	10
6	22X31A6906	8	8	7	10
7	22X31A6907	9	6	7	10
8	22X31A6908	7	7	7	10
9	22X31A6909	6	7	7	10
10	22X31A6910	10	7	10	10
11	22X31A6911	7	7	8	10
12	22X31A6912	7	7	6	10
13	22X31A6913	10	8	7	10
14	22X31A6914	9	8	8	10
15	22X31A6915	10	9	9	10
16	22X31A6916	9	7	9	10
17	22X31A6917	AB	AB	AB	10
18	22X31A6918	AB	AB	AB	10
19	22X31A6919	9	8	10	10
20	22X31A6920	9	8	7	10
21	22X31A6921	9	8	9	10
22	22X31A6922	AB	AB	AB	10
23	22X31A6923	9	8	7	10
24	22X31A6924	9	8	8	10
25	22X31A6925	10	7	8	10
26	22X31A6926	10	7	9	10
27	22X31A6927	10	5	9	10
28	22X31A6928	10	7	8	10
29	22X31A6929	10	7	8	10
30	22X31A6930	9	7	7	10
31	22X31A6931	10	8	9	10
32	22X31A6932	9	6	8	10
33	22X31A6933	9	7	7	10
34	22X31A6934	9	7	9	10
35	22X31A6935	9	7	7	10
36	22X31A6936	9	8	8	10

37	22X31A6937	9	7	8	10
38	22X31A6938	10	7	10	10
39	22X31A6939	10	8	7	10
40	22X31A6940	10	8	8	10
41	41 22X31A6941		8	8	10
42	22X31A6942	9	8	7	10
43	22X31A6943	9	7	8	10
44	22X31A6944	10	8	9	10
45	22X31A6945	9	7	8	10
46	22X31A6946	9	8	8	10
47	22X31A6947	9	8	9	10
48	22X31A6948	9	7	10	10
49	22X31A6949	9	8	8	10
50	22X31A6950	9	8	9	10
51	22X31A6951	9	8	8	10
52	22X31A6952	10	7	8	10
53	22X31A6953	9	7	8	10
54	22X31A6954	10	8	8	10
55	22X31A6955	9	7	8	10
56	22X31A6956	10	7	7	10
57	22X31A6957	9	7	8	10
58	22X31A6958	9	8	9	10
59	22X31A6959	7	8	8	10
60	22X31A6960	9	7	8	10
61	22X31A6961	7	7	9	10
62	22X31A6962	9	7	8	10
63	22X31A6963	9	7	7	10
64					
65					
Target set by the faculty / He	oD	6.00	6.00	6.00	6.00
Number of students and	and always the target	58	57	53	58
number of students perform					

Number of students attempted	58	58	58	58
Percentage of students scored more than target	100%	98%	91%	100%

CO Mapping with Exam Questions:

CO - 1				
CO - 2				
CO - 3				
CO - 4	У	У	Y	у
CO - 5	У	У	Y	у
CO - 6	У	У	Y	у

CO Attainment based on Exam Questions:

CO - 1				
CO - 2				
CO - 3				
CO - 4	100%	98%	91%	91%
CO - 5	100%	98%	91%	91%
CO - 6	100%	98%	91%	91%

СО	Intrnal practical	E+E+R	ppt	OveralI	Level
CO-1					
CO-2					
CO-3					
CO-4	99%	91%	91%	94%	3
CO-5	99%	91%	91%	94%	3
CO-6	99%	91%	91%	94%	3

Attainment (Internal 2 Examination) = 3



Department of Humanities and Sciences

Course Outcome Attainment (University Examinations)

Name of the faculty:	P. BALU
Branch & Section:	CSE(IOT)
Lab Course Name:	PYTHON PROC

Academic Year:	2022-23
Year / Semester:	I -II SEM

GRAMMING

S.No	Roll Number	Marks Secured
1	21X3A6901	57
2	21X3A6902	41
3	21X3A6903	56
4	21X3A6904	55
5	21X3A6905	43
6	21X3A6906	56
7	21X3A6907	38
8	21X3A6908	39
9	21X3A6909	54
10	21X3A6910	56
11	21X3A6911	58
12	21X3A6912	44
13	21X3A6913	55
14	21X3A6914	36
15	21X3A6915	54
16	21X3A6916	56
17	21X3A6917	38
18	21X3A6918	32
19	21X3A6919	52
20	21X3A6920	35
21	21X3A6921	38
22	21X3A6922	58
23	21X3A6923	55
24	21X3A6924	53
25	21X3A6925	51
26	21X3A6926	48
27	21X3A6927	57
28	21X3A6928	58
29	21X3A6929	57
30	21X3A6930	41
31	21X3A6931	56
32	21X3A6932	55
33	21X3A6933	43
34	21X3A6934	56

S.No	Roll Number	Marks Secured
35	21X3A6935	53
36	21X3A6936	58
37	21X3A6937	45
38	21X3A6938	46
39	21X3A6939	57
40	21X3A6940	55
41	21X3A6941	54
42	21X3A6942	48
43	21X3A6943	49
44	21X3A6944	53
45	21X3A6945	55
46	21X3A6946	37
47	21X3A6947	56
48	21X3A6948	55
49	21X3A6949	57
50	21X3A6950	39
51	21X3A6951	47
52	21X3A6952	49
53	21X3A6953	48
54	21X3A6954	49
55	21X3A6955	47
56	21X3A6956	48
57	21X3A6957	56
58	21X3A6958	57
59	21X3A6959	56
60	21X3A6960	38
61	21X3A6961	48
62	21X3A6962	49
63	21X3A6963	57

Class Average mark				
	47			
Number of students performed above the target				
Number of successful students				
Percentage of students scored more than target				
Attainment level				

47	Attainment Level	% students
25	1	40%
58	2	50%
43%	3	>60%
1		

Department of Humanities and Sciences

Course Outcome Attainment



P.BALU CSE(IOT) PYTHON PROGRAMMING

Academic Year: 2022-23 Year / Semester:

I -II SEM

Course Outcomes	1st Internal Exam	2nd Internal Exam	Internal Exam	University Exam	Attainment Level
CO1	3.00		3.00	1.00	2.40
CO2	3.00		3.00	1.00	2.40
CO3	3.00		3.00	1.00	2.40
CO4		3.00	3.00	1.00	2.40
CO5		3.00	3.00	1.00	2.40
CO6		3.00	3.00	1.00	2.40
Internal & University Attainment:			3.00	1.00	
Weightage			70%	30%	
CO Attainment for the course (Internal, University)			2.10	0.30	
CO Attainment for the course (Direct Method)			2.40		

Overall course attainment level

2.40



Department of Humanities and Sciences
Program Outcome Attainment (from Course)

Name of Faculty: Branch & Section: Course Name:

P. BALU	
CSE(IOT)	
PYTHON PROGRAMMING	

Academic Year: 2022-23 Year / Semester: I -II SEM

CO-PO mapping

PO/PSO/ CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2
C128.1	3	2	-	1	-	-	-	-	-	-	-	1	2	3
C128.2	3	-	-	1	2	-	-	-	-	-	-	1	-	2
C128.3	3	2	-	1	-	-	-	-	2	-	2	1	1	-
C128.4	-	3	-	1	2	-	-	-	-	-	-	1	-	-
C128.5	-	3	-	1		-	-	-	-	-	-	1	1	1
C128.6	-	-	3	1	2	-	-	-	2	-	2	1	2	1
C128	3	2.5	3	1	2	-	-	-	2	-	2	1	1.5	1.7

СО	Course Outcome Attainment	
	2.40	
CO1		
	2.40	
CO2		
	2.40	
CO3		
	2.40	
CO4		
	2.40	
CO5		
CO6	2.40	
Overall course		
attainment level	2.40	

PO-ATTAINMENT

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2
CO Attainment	2.40	2.00	2.40	0.80	1.60							0.80

CO contribution to PO - 33%, 67%, 100% (Level 1/2/3)