Training — Python Training Program					
Target Group – Professors, Scientists, RA, SF, YP-II, PG and Ph.D. Students					
Date of Training	8 <sup>th</sup> Dec – 17 <sup>th</sup> Dec, 2020				
Time	3.30 p.m. – 5.00 p.m.				
Location	CAE, JNKVV, JABALPUR				

## 1. Training Objective

Python Training Program under NAHEP-CAAST-CSDA Project.

## **Participants**

Coordinator - Dr. M.K. Awasthi, Co-PI, Dr. Sourabh Nema, Dr. Minakshi Meshram, Dr. Popat Shivaji Pawar, Dr. Umakant Rawat, Dr. Devendra Vasht, Pratiman Patel, Aniket Rajput, Anjali Patel, Rachit Nema, Krishna Singh, Pratima Pathak.

## 2. Contents of event

Date	Speaker	Course Topic				
8 <sup>th</sup> Dec 2020 (Day 1)	Mr. Sathish Singh and Mr. Sagar	Anaconda Download and environment set up, Introduction to Jupyter Notebook, The Basics of Python				
9 <sup>th</sup> Dec 2020 (Day 2)	Mr. Sathish Singh and Mr. Sagar	Basics of Python Dictionary, Tuples, Sets and their examples				
10 <sup>th</sup> Dec 2020 (Day 3)	Mr. Sathish Singh and Mr. Sagar	Basics of Python Dictionary, Tuples, Sets and their examples				
11 <sup>th</sup> Dec 2020 (Day 4)	Mr. Sathish Singh and Mr. Sagar	Conditional programming (if-else, Lopping for a while, Comprehension, Functions)				
12 <sup>th</sup> Dec2020 (Day 5)	Mr. Sathish Singh and Mr. Sagar	Python functions, Map reduce, DIfy				
13 <sup>th</sup> Dec 2020 (Day 6)	Mr. Sathish Singh and Mr. Sagar	Numpy Basics, array, Slicing dicing, merging sorting and Operations of Numpy array with examples				
14 <sup>th</sup> Dec 2020 (Day 7)	Mr. Sathish Singh and Mr. Sagar	Panda Basics, Merging concatenating, Grouping and Summarizing, Lambda function pivot table, handling missing data				
15 <sup>th</sup> Dec 2020 (Day 8)	Mr. Sathish Singh and Mr. Sagar	Introduction to matplotlip, cluster dimension, market fact, order dimension				
16 <sup>th</sup> Dec 2020 (Day 9)	Mr. Sathish Singh and Mr. Sagar	Production dimension, shipping dimension, lending club				
17 <sup>th</sup> Dec 2020 (Day 10)	Mr. Sathish Singh and Mr. Sagar	Drop rows with null value, Standardizing value, Split column for more data: split address to get address to get state and city to analyze each separately.				

3. Discussion with	Thank you for a great course of training conducted by NAHEP-CAAST-
participants	CSDA. During the program the participants were trained on advanced system
	administration options in python as well as, Great presentation style with lots
	of opportunities to ask questions and talk about python.
Output of training	Registration of 274 participants received and finally 124 regularly attended the course and assigned activities. By learning python, the participants understand about the python programing, its application in data analysis and map/graph creation and capable to integrate the similar kind of analysis for their research and can use this language for short programming's. In this programme, total count of male participants were 179 and total female participants count were 95 and percentage of participants in different category were observed as UR-50%, SC- 12%, ST- 5% and OBC- 33%. As per feedback received from participants, 71% respondent found the python programming session as excellent and 14% rated the session good. They have learnt new things about programming and will be useful in their research. The resource person in this programe was Mr Satish Singh.

Distribution of participants Table: Training on Python Programme											
Number of Participants				% of participants in diff. category							
Gender	UR	SC	ST	OBC	Total	UR	SC	ST	OBC		
Male	87	20	10	62	179	48.6	11.2	5.6	34.6		
Female	51	13	3	28	95	53.7	13.7	3.2	29.5		
Total	138	33	13	90	274	50.4	12.0	4.7	32.8		