



MUHAMMAD NAWAZ SHAREEF UNIVERSITY OF AGRICULTURE, MULTAN
Department of Computer Science

No-CS/5
Date: 03-01-2020

The Director ORIC,
MNS-University of Agriculture, Multan

Subject: Report about workshop on Data Analysis and Visualization using Python

Respected Sir,

It is to submit proceedings of workshop on "Data Analysis and Visualization using Python" held on 24.09.2019 (Notification Attached).

The workshop started in time at 10.30 am and **18 participants** attended the workshop.

At first python with its libraries were introduced to the participants.

After introduction, data analysis portion started and workshop proceeded with participants **hands-on practice of data import, data slicing, cleaning, sorting, grouping and aggregation.**

There was a short lunch break of about 25 minutes from 1pm to 1.25pm.

After break workshop proceeded towards **plotting and line plot, bar chart, pie chat, area chart, histogram and subplots** were practiced.

At the end a case study was given to participants for evaluation which was conducted by Dr. Abdul Razzaq and Dr. Ayesha Hakim. After result compilation by them prizes were distributed to top 3 position holders.

It is gladly shared that each participant practiced by hand each function/method of python that was discussed in workshop today. This has surely improved their data analysis and visualizations skills and enabled them to explore python further for data science and machine learning.

Workshop material, a book on 'data analysis using python' and related case studies were also shared with all the participants in soft.

I am thankful to organizers Mr. Adnan Altaf and Mr. Hannan(internee) for managing all the stuff for the workshop.

update pl.

Mariam

7/1/2020

Israr Hussain
03/01/2020
Lecturer CS/IT