3MCA-A&B Advanced PYTHON Programming(MCA372A)

02-04-2025(Thursday 11AM-12.45PM)

ETE -3 Lab Test(Part-2)

Max Marks: 25 TIME: 1.Hr 45 Mins

StreamLit App Development(CHRISPO '25- Inter-College Tournament)

As the Website Development team for **CHRISPO '25**, you are responsible for providing key insights to the core team. This project assesses your ability to build a **data-driven web application** using **Streamlit** for **CHRISPO '25 Inter-College Tournament participation analysis**. Your tasks include generating a dataset, analyzing participation trends, analyse feedback, processing images, and presenting results through an interactive dashboard. Ensure that all components are functional, user-friendly, and visually engaging.

Guidelines:

1. Each student's work must be unique. Any identical or similar submissions will evaluated for zero.
2. Only use the libraries covered in class.
3. Develop a **single Streamlit app** integrating all tasks, deploy it, and submit the working link.

Question	Objectives	Task
1. Dataset generation	Generate a dataset with a maximum of 10 relevant columns of 300 participants over **5 days**, covering **10 sports events** and feedback text from each participant.	Write a Python script to generate this dataset using the relevant library.
2. Dashboard Development	Analyze participation trends for the CHRISPO '25. Develop an interactive dashboard for data visualization.	• Develop a **Dashboard** that visualizes the participation data using various charts(Min 5). Sports-wise, Day-wise, College-wise, State-wise. • User Interactivity- filters to view data for specific

		sports, states, and colleges
3. Text Analysis	**Process** participant feedback using text analysis techniques	• Generate a word cloud based on Sports-wise feedback. • Compare feedback within each sports.
4. Image Processing	**Implement** an image processing module for sport-related photos.	• Day-wise Image Gallery • Custom Image Processing Component

Evaluation Rubrics:
Execution - Each Question 5 marks [4 * 5 = 20]
UI Design - 5 Marks

Submission Guideline:
App file(all files Python file, dataset .csv file, ect) as ZIP
Deployed working Link/Screen recording of execution