

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

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

ETE -3 Lab Test(Part-2)

Max Marks: 25

TIME: 1.Hr 45 Mins

StreamLit App Development(INBLOOM '25 Inter-College Cultural Events)

As the Website Development team for **INBLOOM '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 **INBLOOM '25 Inter-College Cultural Events 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:

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

Question	Objectives	Task
5. Dataset generation	Generate a dataset with a maximum of 10 relevant columns of 250 participants over over 5 days , covering 10 cultural events and feedback text from each participant.	Write a Python script to generate this dataset using the relevant library.
6. Dashboard Development	Analyze participation trends for the INBLOOM '25 . Develop an interactive dashboard for data visualization.	<ul style="list-style-type: none">Develop a Dashboard that visualizes the participation data using various charts(Min 5). Event-wise, Day-wise, College-wise, State-wise.User Interactivity- filters to

		view data for specific sports, states, and colleges
7. Text Analysis	Process participant feedback using text analysis techniques	<ul style="list-style-type: none"> • Generate a word cloud based on event-wise feedback. • Compare feedback within each events.
8. Image Processing	Implement an image processing module for event-related photos.	<ul style="list-style-type: none"> • 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