GUJARAT TECHNOLOGICAL UNIVERSITY

MCA INTEGRATED – SEMESTER VIII- EXAMINATION –SUMMER-2025

Subject Code: 4480606   **Date: 10/06/2025**
Subject Name: Advanced Python
Time:10:30 AM TO 01:00 PM   **Total Marks: 70**
Instructions:

   1. **Attempt all questions.**
   2. **Make Suitable assumptions wherever necessary.**
   3. **Figures to the right indicate full marks.**
   4. **Use of simple calculators and non-programmable scientific calculators are permitted.**

Q.1	**(a)**	How to use Common Regular Expression Symbols and Special Characters in python? Explain with example.	**07**
	(b)	Write a python code which will read from COVID.CSV file and write data using CSV module of Python (Data format: City, Active cases,Total Cases , No of Deaths).	**07**
Q.2	**(a)**	(i) What do you mean by JavaScript Object Notation (JSON), Python and XML?	**03**
		(ii)Differentiate between Python and XML.	**04**
	(b)	Given a list of links (and optional short description), whether user-provided on command-line, via input from another script, or from a database, generate a Web page (.html) that includes all links as hypertext anchors, which upon viewing in a Web browser, allows users to click those links and visit the corresponding site. If the short description is provided, use that as the hypertext instead of the URL.	**07**

OR

	(b)	(i)Why Global Interpreter Lock is used in multi-threading programming?	**03**
		(ii)Write a program in python to implement Threads.	**04**
Q.3	**(a)**	How are files handled in Python? List out types of files that python can handle. Explain any five modes of files.	**07**
	(b)	Explain execute( ), executemany( ), fetchone( ), fetchall( ) and fetchmany( ) cursor object methods.	**07**

OR

Q.3	**(a)**	(i) What is the Python DB-API? Is it a good thing?Why ?	**03**
		(ii) Explain various Python Web Client Tools with example.	**04**
	(b)	Write a program in python to create script to performs basic operations (Insert, Update and delete) by using a MySQL databases.	**07**
Q.4	**(a)**	List and explain web address components using suitable example.	**07**

(b) How web service works? How REST is used in web service?   **07**

OR

Q.4 **(a)** how CGI works? With neat sketch explain CGI architecture in details.   **07**

(b) (i)Explain the practical important of WSGI and CGI.   **03**

(ii)How can you use Middleware and Wrapping WSGI Applications? Explain application of WSGI .   **04**

Q.5 **(a)** Why we need a microblogging with the Twitter? Explain with example.

07

(b) What is the use of web service for web application? Create a user define web   **07** service to test temperature.

OR

Q.5 **(a)** List various visualization techniques used to get insight into data. Explain any   **07** one in details.

(b) Write down basic steps to create any simple project in Django with example.   **07**

******