GUJARAT TECHNOLOGICAL UNIVERSITY
MCA Integrated – SEMESTER – VIII • EXAMINATION – SUMMER 2018

Subject Code: 4480606   **Date: 09-May-2018**
Subject Name: Advanced Python
Time: 10.30 am to 1.00 pm   **Total Marks: 70**
Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Do as directed.	**07**
		i) Write a regular expression for Phone Number matching (Format: 123-456-7890).	
		ii) What is the importance of re.compile()?	
		iii) What is WSGI?	
		iv) Say TRUE or FALSE: CGI is a programming language.	
		v) Why threading is more appropriate for I/O-bound applications than for CPU-bound applications?	
		vi) What is the impact of number of rows and columns found in data sets?	
		vii) What is the difference between sub() and subn() method?	
	(b)	i) Give one similarity and difference between Twython and Tweepy Python libraries.	**02**
		ii) What is wrapper? List 3 steps to create extension in python.	**02**
		iii) Explain GIL with its working.	**03**
Q.2	**(a)**	What is the difference between the search() and match() functions in the Python "re" module.	**07**
	(b)	Compare CSV and JSON file formats. Which one is good for data management? Why?	**07**

OR

	(b)	Write a python HTML generator program which will read CSV file (format: ID,Name, Gender, Salary) using CSV module and create tabular output.	**07**
Q.3	**(a)**	Discuss various visualization techniques used to get insight into data.	**07**
	(b)	Explain execute( ), executemany( ), fetchone( ), fetchall( ) and fetchmany( ) cursor object methods.	**07**

OR

Q.3	**(a)**	Discuss two approaches used to measure performance of Predictive Models.	**07**
	(b)	What is database adapter? Write a python program to perform basic CRUD operations (Format: LICNo, Name, Amount, PaymentMode).	**07**
Q.4	**(a)**	Explain urlparse(), urlunparse() and urljoin() functions of urlparse module.	**07**
	(b)	Discuss various web address components with suitable example.	**07**

OR

Q.4	**(a)**	Explain urlopen() , urlretrieve(), quote() and quote_plus() functions of urllib.	**07**
	(b)	What is CGI? How CGI works? What are the differences between CGI and typical application? List limitations of CGI .	**07**
Q.5	**(a)**	List and explain directory structure and files of Django project.	**07**
	(b)	Discuss Queue module with its classes, exceptions and function.	**07**

OR

Q.5	**(a)**	Discuss `basic steps to create a simple Django Project.	**07**
	(b)	Explain in brief any 3 objects and 3 methods of threading module.	**07**

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