

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA INTEGRATED - SEMESTER-VIII • EXAMINATION – WINTER 2020****Subject Code:4480606****Date:05-01-2021****Subject Name:Advanced Python****Time:02:00 PM to 04:00 PM****Total Marks: 56****Instructions:**

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1 (a)** i) Explain Terms (**Any THREE**) : **03**
 i) Training ii) GIL iii) json.dump iv) Web framework
- ii) Write a regular expression that will match **04**
 a) Password (size of 8) containing alphabets (lower and upper) and digits.
 b) 9 digits Enrollment numbers starting with 20, 21 and 22 with all digits.
 c) Strings: bat, cat, hat.
 d) Strings starting with “the”.
- (b) Do as directed.** **07**
 i) Why is unique id not used in Machine Learning algorithm?
 ii) Which file format is better, binary or CSV?
 iii) Give one reason behind WSGI creation.
 iv) What is SQLAlchemy?
 v) What will be the output of below :

```
str = 'USA Russia India'
str1 = re.match(r'(.*) (.*) (.*)', str)
print(str1.group())
```


 vi) **Say TRUE or FALSE:** Uniform Resource Locators are part of a larger set of Uniform Resource Identifiers.
 vii) **Say TRUE or FALSE:** Django is a MVC framework.
- Q.2 (a)** Discuss similarity and dissimilarity of below methods using suitable example: **04**
 i) re.match() and re.search() **03**
 ii) re.sub() and re.subn()
- (b)** Write a python program which will read corona_testing.csv (Patient Name, Gender, Age, Result(Yes or No)) and display into HTML format. **07**
- Q.3 (a)** How is connect() function used to access database? Discuss any three connection object methods. **07**
- (b)** i) What is extension? List advantages and disadvantages of extensions **04**
 ii) Explain locked(), release() and acquire() of thread module. **03**
- Q.4 (a)** Discuss thread management using threading model. **07**
- (b)** i) List 3 steps for creating extension in python. Discuss any one in brief. **04**
 ii) How to execute a database query using execute()? **03**
- Q.5 (a)** List the various functions of urlparse module used to manipulate URL strings. Explain in brief any two functions using suitable example. **07**
- (b)** i) Differentiate between CGI and WSGI. **04**
 iii) What are the various reasons for web crawlers? **03**
- Q.6 (a)** What is CGI? How to create a CGI application in Python? **07**
- (b)** i) What are BaseHTTPRequestHandler, SimpleHTTPRequestHandler, and CGIHTTPRequestHandler? **04**
 ii) Explain any three web address components. **03**
- Q.7 (a)** What are the things to notice about new data set? Why? **07**
- (b)** i) Discuss steps to create automatic back-end admin application in Django. **04**

	ii) What is the importance of development server in Django?	03
Q.8	(a) Discuss content of the directory created on execution of “django-admin.py startproject mysite” command with roles of each files created.	07
	(b) i) How different Types of Attributes and Labels Drive Modeling Choices?	04
	ii) How is a data set divided up for training and testing with n-fold cross-validation?	03
