

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MCA INTEGRATED– SEMESTER VIII - EXAMINATION –SUMMER-2021**

**Subject Code: 4480606****Date: 06-08-2021****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.

- Q.1 (a)** i) Explain Terms: i) WSGI ii) Fullstack iii) tweepy **03**  
 ii) Write a regular expression that will match **04**
- a) Password (size of 8 or more) containing alphabets ( lower and upper) and digits.
  - b) Email address
  - c) Strings: hut, hit, hat.
  - d) Strings starting with vowels.
- (b)** Explain re.match() and re.search() with similarity and dissimilarity. **07**
- Q.2 (a)** Explain following methods using suitable example: findall(), finditr(), subn(),split(), group(), groups(), groupdict() **07**
- (b)** Write a python program which will read corona\_vaccination.csv (AdharNo, Name, Gender, Age, Status( Yes or No)). Display into HTML format. **07**
- OR**
- (b)** What do you mean by database adapter? Write a python program to perform basic Insert and Update operations on Student(Format: Enroll no, Subject code, Marks). **07**
- Q.3 (a)** State in your words the differences found in fetchone( ), fetchall( ) and fetchmany() methods. **07**
- (b)** i) List advantages and disadvantages of extensions. **04**  
 ii) Compare Single and Multithreaded executing in python **03**
- OR**
- Q.3 (a)** How urlparse(), urlunparse() and urljoin() functions are similar and different from each other? **07**
- (b)** i) Compare Thread module and Threading module. **04**  
 ii) What is GIL? How it works? **03**
- Q.4 (a)** Explain urlopen() and urlretrieve() functions of urllib. **07**
- (b)** i) Differentiate between CGI and WSGI. **04**  
 iii) What are the various reasons for web crawlers? **03**
- OR**
- Q.4 (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.5 (a)** What is web framework? Discuss steps to create Django project. **07**
- (b)** i) Discuss any two visualization techniques. **04**  
 ii) Why it is important to know shape of data set? **03**
- OR**
- Q.5 (a)** List various files created for Django project with its roles. **07**
- (b)** i) What are holdout and n-fold cross-validation techniques? **04**  
 ii) Why it is important to know Types of Attributes? **03**

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