

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA Integrated- SEMESTER– VIII EXAMINATION – WINTER 2019****Subject Code: 4480606****Date:22/11/2019****Subject Name: Advanced Python****Time: 02:30 PM TO 05:00 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) Define Terms (ANY FOUR) : **04**
 1) REST 2)WSGI 3)Full Stack 4)syncdb 5)Apilevel
 ii) Explain group(), groups() and groupdict() methods of match object using suitable example. **03**
- (b) Do as directed. **01**
 i) What will be the output of the following?
 sentence = 'Sunday is Sunday'
 matched = re.match(r'(.*) (.*) (.*)', sentence)
 print(matched.groups()) **01**
 ii) What will be the output of re.split(r'(a)(t)', 'Maths')? **01**
 iii) Say TRUE or FALSE: CGI is a programming language. **01**
 iv) Write regular expression that will check email address of the format
 <word>@<word>.<word>.<word> e.g. xyz@gtu.edu.in **01**
 v) What is GIL? How it works? **03**
- Q.2** (a) What to know about data Set? Why it is important to know about data set? **07**
 (b) Discuss the difference between re.search and re.match using suitable examples. **07**
- OR**
- (b) Discuss various special symbols and characters used in Regular expression. **07**
- Q.3** (a) What are extensions? Why you need to extend python code? List steps to create extension in python. **07**
 (b) Explain following methods with suitable example: executemany(),subn(), finditr(). **07**
- OR**
- Q.3** (a) List and explain various web address (URL) components. **07**
 (b) Explain the cursor fetchone(),fetchall() and fetchmany() methods using suitable example. **07**
- Q.4** (a) Explain Basic, Simple and CGI web servers of Python. **07**
 (b) For WC2019 table (GroupName,CountryName), create a database handler that inserts data into table and outputs the contents of that table as HTML for browsers. **07**
- OR**
- Q.4** (a) Explain urlparse, urlunparse and urljoin methods with its functions. **07**
 (b) Compare Thread and threading module. Which one is better? Why? **07**
- Q.5** (a) i) List and explain purpose of various files of Django project. **04**
 ii) What is the importance of development server? **03**
 (b) Discuss holdout, n-fold and cross-validation methods. **07**
- OR**
- Q.5** (a) i) Compare Django project and Django App. **04**
 ii) What does Django template contain? **03**
- (b) Explain Q–Q and Parallel coordinates plot visualization methods. **07**