

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**MCA - SEMESTER- IV • EXAMINATION – WINTER - 2017**

**Subject Code: 3640014**

**Date: 06/01/2018**

**Subject Name: Advanced Python**

**Time: 02:30PM TO 05:00PM**

**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 following methods with suitable example: `executemany()`, `subn()`, `finditr()` **03**  
ii) Give any two differences between Thread and Threading **02**  
iii) What is GIL? **02**  
(b) Discuss special symbols and characters used in Regular expression. **07**
- Q.2** (a) Explain Searching and matching with suitable examples **07**  
(b) Explain how to process comma separated values in Python using suitable example. **07**
- OR**
- (b) Explain how to process data using JSON in Python using suitable example. **07**
- Q.3** (a) What are extensions? What is the importance of extensions? List advantages and disadvantages of it. **07**  
(b) For Employee (fields: Empno, Ename) database table, and Create a database handler that outputs the contents of that table as HTML for browsers. **07**
- OR**
- Q.3** (a) Define Terms: REST, WSGI, Full Stack, syncdb, Apilevel, CGI, Django Shell **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) Explain in brief web crawler and web services. **07**
- OR**
- Q.4** (a) Explain 3 functions(methods) of `urlparse` module. **07**  
(b) List and explain various web address (URL) components. **07**
- Q.5** (a) What is the web framework? Compare Django project and Django App. **07**  
(b) Discuss holdout, n-fold and cross-validation methods. **07**
- OR**
- Q.5** (a) Discuss visualization techniques: Q-Q, Parallel coordinates plot. **07**  
(b) Discuss steps to create Hello world project in Django. **07**

\*\*\*\*\*