

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA INTEGRATED - SEMESTER-VIII • EXAMINATION – SUMMER - 2017

Subject Code: 4480606**Date: 05/05/ 2017****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) (1) Write regular pattern/expression which will match **04**
 i) the dot (period) character
 ii) strings: bat, bit, bet, but.
 iii) any pair of characters
 iv) credit card numbers start with 34 or 37 and have 16 digits
 (2) How Python Virtual machine executes code in multiple thread? **04**
- (b) (1) Explain role of indent, sort_keys and separators properties of json.dump(). **03**
 (2) Define WSGI. List reasons behind WSGI creation. **03**
- Q.2** (a) Discuss a checklist to know about data Set with its importance. **07**
 (b) Explain processing of comma separated values in Python using split() and CSV module. What is the difference between split() method and CSV Module. **07**
- OR**
- (b) i) Explain re.match() and re.search() methods using suitable example. **04**
 ii) Explain sub() and subn() methods for search-and-replace functionality with suitable example. **03**
- Q.3** (a) List various module attributes of DB-API. Explain connection function to access database. **07**
 (b) List 3 steps for creating extension in python. Discuss the process of wrapping code in boilerplate. **07**
- OR**
- Q.3** (a) Compare between thread and threading module. **07**
 (b) Explain execute(), executemany(), fetchone(), fetchall() and fetchmany() cursor object methods. **07**
- Q.4** (a) Explain urlopen and urlretrieve methods of urllib. **07**
 (b) Discuss Server Integration and External Processes approaches to handle performance issue. **07**
- OR**
- Q.4** (a) Discuss urlparse(), urlunparse() and urljoin() methods of urlparse. **07**
 (b) Discuss various web address components with suitable example. **07**
- Q.5** (a) Discuss basic steps to create “Hello World!” project in Django. **07**
 (b) Explain in brief visualization techniques used for data visualization. **07**
- OR**
- Q.5** (a) What is web framework? List and explain purpose of various project files of Django. What is the importance of development server? **07**
 (b) Discuss approaches for measuring the Performance of Predictive Models. **07**
