

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA INTEGRATED– SEMESTER-VIII EXAMINATION –SUMMER-2020****Subject Code:4480606****Date:07-11-2020****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)** Explain Terms : WSGI, GIL, SAX, Web Framework **04**
- (b)** Explain following methods (any three): **06**
i) sub() ii) subn() iii) finditr() iv) executemany() v) re.compile()
- (c)** Write regular expression **04**
i) to match strings : mon, son, Mon, Son.
ii) to match dot (“.”)
iii) to match mobile numbers starting with 70,71 or 74 and have 10 digits.
iv) to match email address.
- Q.2 (a)** Discuss a checklist to know about data Set with its importance. **07**
- (b)** Explain similarity and dissimilarity of re.search() and re.match(). **07**
- OR**
- (b)** Explain how to read and write CSV data in python (File format: RollNo, Name, CPI). **07**
- Q.3 (a)** Write a python program to perform basic CRUD operations (Format: ProductId, ProductName, Quantity,Rate). **07**
- (b)** i) What are extensions? Why extensions are needed ? **04**
ii) What is the role of PyObject*, PyArg_Parse* and Py_BuildValue*? **03**
- OR**
- Q.3 (a)** Explain various cursor methods using suitable example. **07**
- (b)** List and discuss 3 steps for creating extensions in python **07**
- Q.4 (a)** Explain urlopen and urlretrieve methods of urllib. **07**
- (b)** i) Differentiate between thread and threading module **04**
ii) Compare SQLAlchemy and SQLAlchemy ORM **03**
- OR**
- Q.4 (a)** Discuss urlparse(), urlunparse() and urljoin() methods of urlparse. **07**
- (b)** Explain how threading is implemented in python. **07**
- Q.5 (a)** List and explain web address components using suitable example. **07**
- (b)** What is the difference between Django Project and Django App? List steps to create “Hello world” Project. **07**
- OR**
- Q.5 (a)** Explain Basic, Simple and CGI web servers of Python. **07**
- (b)** List various visualization techniques used to get insight into data. Explain any one in details. **07**
