

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MCA - SEMESTER– IV EXAMINATION – WINTER - 2018

Subject Code: 3640014

Date: 29/11/ 2018

Subject Name: Advance Python

Time: 10:30 am to 01:30 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) Short Question. Explain in one or two sentence. **07**

- 1) In Regular Expression of python, which sign indicates the match of an expression in the start of a string ?
- 2) As per regular expression which expression indicates matching of Y, y, N or n ?
- 3) If we write `print(re.sub("Technosavy", "Technological", "Gujarat Technosavy University"))`, what will be the output.
- 4) Which of the modules of python allows us to create and manage threads in Python ?
- 5) What is DB-API in Python ?
- 6) What is “urlparse” module in Python ?
- 7) Which is the django project file where we store all the models of django MVC ?

(b) State True or False. Give Justification for FALSE statement. **07**

- 1) In Django “views.py”, which is used for admin interface.
- 2) The default `split()` character is space.
- 3) “numpy” module of python can be used for generating random numbers in different ways using `choice()`, `random()`, etc. functions.
- 4) After writing “`from math import sqrt`”, we can say `math.sqrt(16)`.
- 5) `re.compile()` slows down the process of compiling regular expressions.
- 6) The command to create the project in django can be written as “`django-admin startproject gtuproject`”
- 7) GIL stands for Global Interrupt Lock which is used for Thread handling in Python.

Q.2 (a) Briefly explain Java Script Object Notation with any small example. **07**

(b) Explain “Thread” object methods. **07**

OR

(b) Explain Lock, RLock and Condition module objects with small example. **07**

Q.3 (a) Explain special characters which are used in Python Regular Expression. **07**

(b) You are supposed to use “view” from MVC in Django. Explain with example **07**

OR

Q.3 (a) Explain how the data is processed in JSON ? Explain with diagram. **07**

(b) You are supposed to do administration of a web site. Which MVC patten can be used in Django. Explain with example. **07**

Q.4 (a) Explain different cursor objects attributes for database handling in Python. **07**

(b) You are exploring “urlparse” module. Explain any 3 functions of this module. **07**

OR

- Q.4** (a) What are Type Objects for database handling ? Explain any 5 type objects with some example. **07**
(b) Explain steps to create a project in Django named “HelloPython”. Write any other assumptions if required. **07**
- Q.5** (a) What is machine learning ? How to load and summarize the dataset ? **07**
(b) Consider a table called “student” with “rollno”, “name”, “age”, “gender” and “city” columns. Write a python code to accept “search city” and “target city”. Replace the city of “search city” with “target city” **07**

OR

- Q.5** (a) Explain how to set, retrieve and remove the cookie in CGI ? Give example. **07**
(b) Consider a table called “student”. Write a python code to accept “rollno” of a student and delete specific student with given rollno. Give appropriate message whether record is deleted or not. **07**
