NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA
(An Autonomous Institute Affiliated to AKTU, Lucknow)
B.Tech
SEM: V - THEORY EXAMINATION (2023 - 2024)
Subject: Python Web Development with Django

Time: 3 Hours   **Max. Marks: 100**

General Instructions:

IMP: *Verify that you have received the question paper with the correct course, code, branch etc.*
*1. This Question paper comprises of **three Sections -A, B, & C.** It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.*
2. Maximum marks for each question are indicated on right -hand side of each question.
3. Illustrate your answers with neat sketches wherever necessary.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.
6. No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.

SECTION-A   20

1. Attempt all parts:-

1-a.   Which of these is not a core data type? (CO1)   1

    (a)   List

    (b)   Tupple

    (c)   Dictionary

    (d)   Class

1-b.   Django supports the _____ pattern. (CO1)   1

    (a)   MVI

    (b)   MVP

    (c)   MVC

    (d)   MVZ

1-c.   Django is a web framework written in ? (CO2)   1

    (a)   Java

    (b)   Ruby On Rail

    (c)   C++

    (d)   Python

1-d.   Django by default Supports the which database .(CO2)   1

    (a)   PostgreSQL

    (b)   MySQL

    (c)   Oracle

	(d)	SQLite	

1-e. Django authorization system gives. (CO3)   1

   (a)   Authentication

   (b)   Authorization

   (c)   Access to user group

   (d)   To all of the above

1-f. On execution of this command : > python manage.py createsuperuser will provide you. (CO3)   1

   (a)   It will ask for name and password of the superuser.

   (b)   It will create an admin superuser.

   (c)   Both A and B

   (d)   None of the above

1-g. Migrations in Django are _____. (CO4)   1

   (a)   They are files saved in migrations directory.

   (b)   They are created when you run make migrations command.

   (c)   Migrations are files where Django stores changes to your models.

   (d)   All of the above

1-h. Database Django officially supports is_____. (CO4)   1

   (a)   PostgreSQL

   (b)   MySQL

   (c)   Oracle

   (d)   All of the above

1-i. Which is Distributed version control system? (CO5)   1

   (a)   Perforce

   (b)   CVS

   (c)   SVN

   (d)   GIT

1-j. Gunicorn 'Green Unicorn' is a Python____ (CO5)   1

   (a)   WSGI

   (b)   ASGI

   (c)   MSGI

   (d)   NSGI

2. Attempt all parts:-

2.a. write any five feature of python. (CO1)   2

2.b. What architecture does Django use? (CO2)   2

2.c. Describe the role of ssl/https in django security. (CO3)   2

2.d. Describe Database migration. (CO4)   2

2.e.	Explain the term repo or repositories ? (CO5)	2

SECTION-B — 30

3. Answer any <u>five</u> of the following:-

3-a.	Explain Zappa and Fask in detail. (CO1)	6
3-b.	Explain Websrapping with example. (CO1)	6
3-c.	Discuss django MVC architecture in details with diagram ? (CO2)	6
3-d.	Why is Django called a loosely coupled framework? (CO2)	6
3.e.	Write the steps to add an email feild in django form.How different fiels can be added in UserCreationForm. (CO3)	6
3.f.	Discuss the ways you can set up the database in Django. (CO4)	6
3.g.	List some popular applications using Heroku ? (CO5)	6

SECTION-C — 50

4. Answer any <u>one</u> of the following:-

4-a.	Explain Tkinter-GUI applications in detail with example. (CO1)	10
4-b.	Write short notes on : a.)ChainMap b.)Counter c.)Deque. (CO1)	10

5. Answer any <u>one</u> of the following:-

5-a.	What are the various files that are created with a Django Project? Explain briefly. (CO2)	10
5-b.	What is Django ? Define its convenient features in details. (CO2)	10

6. Answer any <u>one</u> of the following:-

6-a.	Explain the authentication and authorization system in django.Discuss the difference between them. (CO3)	10
6-b.	Explain Django's Top 10 Vulnerabilities in details . (CO3)	10

7. Answer any <u>one</u> of the following:-

7-a.	Explain how do you send data from view to template. (CO4)	10
7-b.	Explain Django ORM in brief. How it is used to map object in database. (CO4)	10

8. Answer any <u>one</u> of the following:-

8-a.	Write complete steps to Creating a functional website in Django. (CO5)	10
8-b.	Explain Version control system. What are the advantages and disadvantages of Git and GitHub. (CO5)	10