

# Nirma University

## Institute of Technology

Semester End Examination (IR), December - 2021  
B. Tech. in Computer Science and Engineering, Semester-VII  
2CSDE86 Application Development Frameworks

Roll/

Supervisor's initial  
with date

Exam No.

**Time: 2 Hours**

**Max.Marks:50**

**Instructions:**

1. Attempt all questions.
2. Figures to right indicate full marks.
3. Draw neat sketches wherever necessary.
4. Do not alter the sequence of questions while attempting.
5. Fill all student details on main answerbook and supplementary taken.
6. Assume suitable data wherever required and mention those
7. To the point precise answers to the asked questions are expected.
8. Ensure all parts of code for all relevant files related to Django/Kivy Application are written as applicable to the asked programming question

**Q1 Answer the Following**

[15]

- A** Discuss the Django's Request Response Cycle in detail. How it differs from the HTTP Request Response Cycle? Support the answer with the diagram and discuss in detail. [10]

**OR**

- A** Discuss the significance of templates in Django. Also, discuss the templates inheritance concept. [10]

- B** What is the significance of Forms in Django? Discuss the form rendering process of Django. [05]

**OR**

- B** Compare and Contrast atleast two Web Application Development frameworks. Compare those based on various parameters and list them too. [05]

- Q2** In context to Django discuss the significance of CRUD (Create, Retrieve, Update, and Delete). Demonstrate the concept of CRUD using Function Based Views for the scenario given below: [15]

Create a Django project named CSE\_Document\_Management\_System and an app named Personal\_Information in it.

For the app create a model that represents the authors information in the database. The fields for the model are as mentioned below:

F\_First\_Name, F\_Middle\_Name, F\_Last\_Name, F\_Address, F\_EmailId,  
F\_Mobile\_Number, F\_Department\_Name, F\_Designation,  
F\_Cabin\_Location.

**Ensure that you mention all steps, code for all relevant files and all necessary commands in appropriate sequence.**

**Q3** Create Django with SQLite database application on following criteria: [10]

1. Create the User signup and login page using AbstractBaseUser model which as following information from the user during the signup page. User Name, Password, Retype Password, Birthdate, Email address.
2. As soon as user click on the signup page, send email verification mail to the user mail id. User has to verify his email address.
3. After verification of email id, user is redirected to upload his profile pic and resume. Store this file as static data.
4. Using email address and password, user can login into the system.
5. When user login into the system after uploading photo and resume, he can see all the information on the screen. Also make sure he can change the profile pic, resume and password any time he wants.

**Q4** Create a Kivy application based on following scenario: [10]

1. Design a marks acceptance form using kivy for the teacher.
2. Create table in database, named as "Marks" which store the marks enter by the teacher for the following exam  
Class Test (35 marks)  
Session (35 marks)  
Additional test marks (35 marks)  
Innovative assignment (30 marks)
- As soon as submit button is clicked store the information into database with following fields:

Class Test	Sessional Marks	Additional Exam	Final Marks (best of 2)	Innovative Assignment	Total of CE marks

3. Once the display button is clicked, all the store information should be display in data table.

\*\*\*\* Best of Luck \*\*\*\*