## HAK-003-1083002
## M. Sc. (IT & CA) (Sem.-III)
## (CBCS) (W.E.F. 2016) Examination
### May - 2023
## Web Application Development
## Using Django : CS-14

**Faculty Code : 003**

**Subject Code : 1083002**

Time : $2\frac{1}{2}$ Hours / Total Marks : **70**

**Instructions :** (1) All main questions are compulsory.

(2) Draw diagrams wherever necessary.

### UNIT - I

1 (a) Answer the following : 4

    (1) Full form of IDLE _____.

    (2) The colon (:) allows multiple statements single line in Python (True/false).

    (3) _____ is default database used in Django framework.

    (4) Python is object oriented, modular and dynamic programming language. (true/false)

(b) Answer in brief : (any 1 out of 2) 2

    (1) What is dynamically typed language ?

    (2) Explai list data type with example.

(c) Answer in detail : (any 1 out of 2) 3

    (1) Write difference between List and Dictionary data types.

    (2) Explain tuple data type with example.

(d) Write short notes : (any 1 out of 2) 5

    (1) Write advantage and disadvantage of python language.

    (2) How to define users function in python ? Explain with example.

## UNIT - II

**2** (a) Write the use of following commands :      **4**
    (1) http is connectionless and stateless protocol. (True/false)
    (2) Full form of DTL.
    (3) Python manage.py startproject
    (4) Python manage.py flush

    (b) Answer in brief : (any 1 out of 2)      **2**
    (1) What is web application ? Explain in brief.
    (2) Explain Django framework lifecycle.

    (c) Answer in detail : (any 1 out of 2)      **3**
    (1) Write short note on MVC architecture framework.
    (2) Write use of admin.py and url.py file in Django framework.

    (d) Write short note : (any 1 out of 2)      **5**
    (1) Write short note on Django Template system.
    (2) Write advantages and disadvantages of Django Framework.

## UNIT - III

**3** (a) Answer in one word/line.      **4**
    (1) What is the use of command python manage.py migrate.
    (2) Django models are stored in _____ file located inside Django App folder.
    (3) model.AutoFields()
    (4) model.URLFields()

    (b) Answer in brief : (any 1 out of 2)      **2**
    (1) Explain any two Django Model data types.
    (2) Explain model.DateField () and model.TimeField() model data types.

    (c) Answer in detail : (any 1 out of 2)      **3**
    (1) What is the use of Django validator methods ? Explain any two built in validator methods.
    (2) How to define primary key and foreign key in model.

    (d) Write short note : (any 1 out of 2)      **5**
    (1) Write steps to configure and migrate MySQL database in Django.
    (2) Write steps to create model file and migrate into database.

## UNIT - IV

**4**    (a)    Answer one word/line.      **4**
       (1)    admin.site.register ()
       (2)    form.is_valid ()
       (3)    _____ command is used to create admin user in Django admin panel.
       (4)    When a page is requested, Django creates an HttpRequest object (true/false)

   (b)    Answer in brief : (any 1 out of 2)      **2**
       (1)    What is use of HttpRequest and HttpResponse object ?
       (2)    Explain the use of_all_ with example.

   (c)    Answer in detail : (any 1 out of 2)      **3**
       (1)    Write short note on Form validation in Django.
       (2)    Explain the use of forms.CharField and forms.decimalField.

   (d)    Write short note : (any 1 out of 2)      **5**
       (1)    How to activate and configure admin panel in Django ?
       (2)    List only basic setting of Django model forms.

## UNIT - V

**5**    (a)    Answer in one word/line :      **4**
       (1)    Python manage.py test.
       (2)    Unit Test
       (3)    What is PIP ?
       (4)    The classed needed to write tests are to be found in the 'Unitest' module (True/false)

   (b)    Answer in brief : (any 1 out of 2)      **2**
       (1)    What is an automated test ?
       (2)    How to setting up Cache in File System ?

   (c)    Answer in detail : (any 1 out of 2)      **3**
       (1)    Explain set_expiry() and clear_expired() methods.
       (2)    How to manage cookie and sessions in Django ? Explain with example.

   (d)    Write short note : (any 1 out of 2)      **5**
       (1)    Write advantage of testing application Django
       (2)    Describe steps are involved in writing simple unit test.

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