

## Student Result

**Student Name:** Sharvari Khade

**Exam:** Python , Django , Angular Programming

**Score:** 42.0/45.0

**Percentage:** 93.33%

### Question-wise Summary

| Sr.no | Question  | Selected Answer     | Correct Answer  |
|-------|---|---------------------|---|
| 1     | Which type of Programming does Python support?                                  | <i>Not Answered</i> | <b>all of the mentioned</b>   |
| 2     | What does the @staticmethod decorator do in a Python class?                     | <i>Not Answered</i> | <b>Defines a method that doesn't receive an implicit first argument</b> |
| 3     | In Django, which method is used to create database tables based on your models? | <i>Not Answered</i> | <b>manage.py makemigrations and manage.py migrate</b>                   |

|   |   |                            |                            |
|---|---|----------------------------|----------------------------|
| 4 | <p>What will be the output of the following Python code?</p> <pre>def create_multipliers():     return [lambda x: i * x for i in range(4)] functions =     create_multipliers() results =     [f(2) for f      in functions] print(results)</pre>   | <p><i>Not Answered</i></p> | <p><b>[6, 6, 6, 6]</b></p> |
| 5 | <p>What will be the output of the following Python code?</p> <pre>def create_funcs():     funcs = []     for i in range(3):         def f(x, i=i):             return x             + i         funcs.append(f)     return     funcs funcs =     create_funcs() print([f(10) for f in funcs])</pre> | <p><i>Not Answered</i></p> | <p><b>[10, 11, 12]</b></p> |

6

What will be the output of the following Python code?

```
def logger(func):  
    def wrapper(*args, **kwargs):  
        print(f"Calling {func.__name__}")  
        return func(*args, **kwargs)  
    return wrapper  
    @logger  
def add(x, y):  
    return x + y  
result = add(add(1, 2), add(3, 4))  
print(result)
```

*Not Answered*

**Calling add (3 times), then 10**

7

What will  
be the  
Output of  
the  
Following  
Code?

```
class  
Weird:  
def  
    __init__(self,  
    x): self.x  
    = x def  
    __eq__(self,  
    other):  
    return  
    self.x ==  
    other.x a  
    =  
    Weird(10)  
    b =  
    Weird(10)  
    d = {a:  
        "Hello",  
        b:  
        "World"}  
    print(len(d),  
    d[a])
```

*Not  
Answered*

**2 Hello**

8

What will  
be the  
Output of  
the  
Following  
Code?

```
def  
tricky(n,  
cache={}):  
if n in  
cache:  
return  
cache[n]  
if n <= 1:  
return 1  
cache[n]  
=  
tricky(n-1)  
+  
tricky(n-2)  
return  
cache[n]  
print(tricky(4))  
print(tricky(3))  
print(tricky(2))
```

**5, 3, 2****5, 3, 2**

9

What will  
be the  
Output  
Of the  
Following  
Code?

```
def
subgen():
    yield 1
    yield 2
    return 3
def
main():
    result =
    yield
    from
    subgen()
    print("Returned:",
    result) g
    = main()
    for val in
    g:
        print(val)
```

*Not  
Answered*

**1, 2,  
Returned:  
3**

10

What will  
be the  
Output of  
the  
Following  
Code?

```
class  
Key: def  
    __init__(self,  
    val):  
        self.val =  
        val def  
        __eq__(self,  
        other):  
            return  
            self.val  
            ==  
            other.val  
k1 =  
Key(1)  
k2 =  
Key(1)  
d  
= {k1: 'a',  
k2: 'b'}  
print(len(d))
```

*Not  
Answered*

2

11

What will  
be the  
Output of  
the  
Following  
Code?

```
def
dec1(func):
def
wrapper(*args):
print("dec1")
return
func(*args)
return
wrapper
def
dec2(func):
def
wrapper(*args):
print("dec2")
return
func(*args)
return
wrapper
@dec1
@dec2
def
hello():
print("Hello")
hello()
```

*Not  
Answered*

**dec1,  
dec2,  
Hello**

|    |   |                     |  |
|----|---|---------------------|--|
| 12 | <p>What will be the Output of the Following Code?</p> <pre>def sub():     yield 1     yield 2     return     "Done" def main(): x = yield from sub() print("Subgen returned:", x) g = main() for i in g: print(i)</pre> | <i>Not Answered</i> | <b>1 2</b><br><b>Subgen returned:</b><br><b>Done</b> |
| 13 | <p>What will be the Output of the Following Code?</p> <pre>ef func(a, L=[]):     L.append(a)     return L print(func(1)) print(func(2)) print(func(3))</pre>  | <i>Not Answered</i> | <b>[1], [1,</b><br><b>2], [1, 2,</b><br><b>3]</b>    |

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|----|--|----------------------------|--|
| 14 | <p>Which of the following operations will NOT trigger <code>model.save()</code> or signals (<code>pre_save/post_save</code>)?</p>  | <p><i>Not Answered</i></p> | <p><b>MyModel.objects.bulk_</b></p>                        |
| 15 | <p>What will be printed?</p> <pre>Component:   @Component({     selector: 'app-test',     template: `{{ value }}` })   class TestComponent   implements OnInit {     value = 'initial';     ngOnInit() {       setTimeout(() =&gt;         this.value = 'changed',         0); } }</pre> | <p><i>Not Answered</i></p> | <p><b>Initial</b></p>                                      |
| 16 | <p>What does providing a service in the component (instead of module) do?</p>  | <p><i>Not Answered</i></p> | <p><b>Creates a new service instance per component</b></p> |

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|----|---|----------------------------|--|
| 17 | <p>n a</p> <p>Django +</p> <p>Angular</p> <p>app</p> <p>using</p> <p>REST</p> <p>API,</p> <p>what is a</p> <p>good</p> <p>reason to</p> <p>disable</p> <p>CSRF</p> <p>middleware?</p>         | <p><i>Not Answered</i></p> | <p><b>Angular uses JWT Auth and doesn't send CSRF tokens</b></p> |
| 18 | <p>If an</p> <p>Angular</p> <p>frontend</p> <p>calls a</p> <p>Django</p> <p>API and</p> <p>receives</p> <p>a CORS</p> <p>error,</p> <p>what</p> <p>should</p> <p>be done?</p>                 | <p><i>Not Answered</i></p> | <p><b>Configure CORS_ORIGIN_ALLOW in Django</b></p>              |
| 19 | <p>What will</p> <p>be the</p> <p>Output of</p> <p>the</p> <p>Following</p> <p>Code?</p> <pre>stack = [] for i in range(3): stack.append(i) for i in range(2): stack.pop() print(stack)</pre> | <p><i>Not Answered</i></p> | <p><b>[0]</b></p>  |

|    |   |                     |                                   |
|----|---|---------------------|-----------------------------------|
| 20 | <p>What will be the Output of the Following Code? s</p> <pre>s = "((())" stack = [] for ch in s: if ch == '(': stack.append(ch) else: if stack: stack.pop() print(len(stack))</pre> | <i>Not Answered</i> | <b>Extra '(' remaining</b>        |
| 21 | <p>During project setup, if ng serve fails with the error "Local workspace file ('angular.json') could not be found", what is the likely issue?</p>                                 | <i>Not Answered</i> | <b>Problems with node_modules</b> |
| 22 | <p>In Angular, which file is used to define the set of modules, components, and services?</p>   | <i>Not Answered</i> | <b>app.module.ts</b>              |

|    |  |              |   |
|----|--|--------------|---|
| 23 | <p>What will be the Output of the Following Code?</p> <pre>def f(x, l=[]): for i in range(x): l.append(i*i) return l print(f(3)) print(f(2))</pre> | Not Answered | [0, 1, 4, 0, 1]   |
| 24 | <p>In Angular (<math>\geq 2+</math>), what is the difference between <code>NgModule.imports</code> and <code>NgModule.exports</code>?</p>          | Not Answered | <b>imports</b><br><b>declares</b><br><b>dependencies</b><br><b>the</b><br><b>module</b><br><b>needs,</b><br><b>exports</b><br><b>makes</b><br><b>parts</b><br><b>available</b><br><b>to other</b><br><b>modules</b> |
| 25 | <p>Which of these is a valid way to lazily load a module in Angular's router (from Angular 8+)?</p>  | Not Answered | <pre>{ path: 'admin', loadChildren: () =&gt; import('./admin/admin.module') =&gt; m.AdminModule }</pre>   |

26

Given  
the  
following  
models:  
class  
Author(models.Model):  
name =  
models.CharField(max\_length=100)  
class  
Book(models.Model):  
title =  
models.CharField(max\_length=100)  
author =  
models.ForeignKey(Author,  
on\_delete=models.CASCADE,  
related\_name='books')  
Which of  
these  
queries  
returns  
all Author  
instances  
that have  
no  
books?

*Not  
Answered*

**Author.objects.filter(book\_\_author=None)**

|    |   |                            |  |
|----|---|----------------------------|--|
| 27 | <p>What happens when you call <code>save()</code> on a Django model instance without specifying <code>force_insert</code> or <code>force_update</code>, and the instance has a primary key that already exists in the database?</p> | <p><i>Not Answered</i></p> | <p><b>It will do an UPDATE</b></p>   |
| 28 | <p>In Django REST Framework (DRF), what is the main function of <code>SerializerMethodField</code>?</p>   | <p><i>Not Answered</i></p> | <p><b>It enables custom read-only fields whose value is computed by a method</b></p> |

|    |   |                            |   |
|----|---|----------------------------|---|
| 29 | <p>Which of the following is the most efficient way to handle a large number of background tasks in Django?</p> | <p><i>Not Answered</i></p> | <p><b>Integrating with a task queue like Celery.</b></p>  |
| 30 | <p>How would you implement real-time communication (e.g., chat) in a Django application?</p>                    | <p><i>Not Answered</i></p> | <p><b>Using Django Channels for WebSockets.</b></p>   |
| 31 | <p>What is the primary purpose of ChangeDetectionStrategy.OnPush in Angular?</p>                                | <p><i>Not Answered</i></p> | <p><b>To improve performance by only checking for changes when input properties change or an event is explicitly triggered.</b></p> |

|    |   |                            |   |
|----|---|----------------------------|---|
| 32 | <p>How can you ensure proper communication between two unrelated Angular components without a direct parent-child relationship?</p>                         | <p><i>Not Answered</i></p> | <p><b>Utilizing a shared service with a Subject or BehaviorSubject.</b></p>   |
| 33 | <p>When integrating Django as a backend and Angular as a frontend, what is the recommended approach for handling user authentication and authorization?</p> | <p><i>Not Answered</i></p> | <p><b>Implementing token-based authentication (e.g., JWT) where Django issues tokens and Angular stores and sends them.</b></p> |

|    |   |                     |   |
|----|---|---------------------|---|
| 34 | <p>What will be the Output of the Following Code?</p> <pre>Python x = 10 def outer_func(): x = 5 def inner_func(): print(x) inner_func() outer_func()</pre> | <i>Not Answered</i> | 5   |
| 35 | <p>What is the best data structure to implement a cache with FIFO eviction policy?</p>  | <i>Not Answered</i> | Queue + HashMap   |
| 36 | <p>What is the purpose of csrf_token in a Django form?</p>  | <i>Not Answered</i> | To prevent Cross-Site Request Forgery (CSRF) attacks by ensuring the request comes from your own site |

|    |  |                            |   |
|----|--|----------------------------|---|
| 37 | <p>What is the main advantage of lazy loading feature modules in Angular?</p>    | <p><i>Not Answered</i></p> | <p><b>It allows for loading modules on demand, which reduces the initial application load time.</b></p>             |
| 38 | <p>What is the main purpose of the RouterModule.forRoot() method in Angular?</p> | <p><i>Not Answered</i></p> | <p><b>To register the routing service and provide the router configuration for the root application module.</b></p> |

|    |   |  |  |
|----|---|--|--|
| 39 | <p>What is the difference between constructor and ngOnInit in an Angular component?</p> | <p><i>Not Answered</i></p>   | <p><b>constructor is for dependency injection and simple initializations, while ngOnInit is for more complex logic that should run after the component's inputs are available.</b></p> |
| 40 | <p>What does the queryset attribute in a Django generic ListView define?</p>            | <p><i>Not Answered</i></p>   | <p><b>The list of objects that the view will display</b></p>   |
| 41 | <p>In the context of exception handling, what is the purpose of the finally block?</p>  | <p><b>It is always executed, regardless of whether an exception occurred or not.</b></p> | <p><b>It is always executed, regardless of whether an exception occurred or not.</b></p>   |

|    |  |                            |  |
|----|--|----------------------------|--|
| 42 | <p>What does the pass statement do in Python?</p>                                | <p><i>Not Answered</i></p> | <p><b>It acts as a placeholder where code is syntactically required but no action is needed.</b></p> |
| 43 | <p>How do you pass data from a child component back up to a parent component</p> | <p><i>Not Answered</i></p> | <p><b>B) Using <code>@Output()</code> and an <code>EventEmitter</code>.</b></p>                      |
| 44 | <p>In the Django MVT (Model-View-Template) architecture, what is the "T"?</p>    | <p><i>Not Answered</i></p> | <p><b>Template</b></p>   |
| 45 | <p>How do you pass data from a parent component to a child component?</p>        | <p><i>Not Answered</i></p> | <p><b>Using the <code>@Input()</code> decorator.</b></p>   |