

Student Result

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Exam: Python , Django , Angular Programming

Score: 39.0/45.0

Percentage: 86.67%

Question-wise Summary

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

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>[6, 6, 6, 6]</p>	<p>[6, 6, 6, 6]</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>[10, 11, 12]</p>	<p>[10, 11, 12]</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)
```

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

**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])

1 World

2 Hello

8	<p>What will be the Output of the Following Code?</p> <pre>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))</pre>	5, 3, 2	5, 3, 2
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9	<p>What will be the Output Of the Following Code?</p> <pre>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)</pre>	<p>1, 2, Returned: 3</p>	<p>1, 2, Returned: 3</p>
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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))

1

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()
```

dec2,
dec1,
Hello

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>	<p>1 2 Subgen returned: Done</p>	<p>1 2 Subgen returned: Done</p>
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>	<p>[1], [1, 2], [1, 2, 3]</p>	<p>[1], [1, 2], [1, 2, 3]</p>

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

17	n a Django + Angular app using REST API, what is a good reason to disable CSRF middleware?	Angular uses JWT Auth and doesn't send CSRF tokens	Angular uses JWT Auth and doesn't send CSRF tokens
18	If an Angular frontend calls a Django API and receives a CORS error, what should be done?	Configure CORS_ORIGIN_ALLOW_ALL in Django	Configure CORS_ORIGIN_ALLOW_ALL in Django
19	What will be the Output of the Following Code? stack = [] for i in range(3): stack.append(i) for i in range(2): stack.pop() print(stack)	[1]	[0]

20	<p>What will be the Output of the Following Code? s = "((())"</p> <pre> stack = [] for ch in s: if ch == '(': stack.append(ch) else: if stack: stack.pop() print(len(stack)) </pre>	Zero always	Extra '(' remaining
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>	The angular.json file is missing or misplaced	Problems with node_modules
22	<p>In Angular, which file is used to define the set of modules, components, and services?</p>	app.module.ts	app.module.ts

23	What will be the Output of the Following Code? def f(x, l=[]): for i in range(x): l.append(i*i) return l print(f(3)) print(f(2))	[0, 1, 4, 0, 1]	[0, 1, 4, 0, 1]
24	In Angular (≥2+), what is the difference between NgModule.imports and NgModule.exports?	imports declares dependencies the module needs, exports makes parts available to other modules	imports declares dependencies the module needs, exports makes parts available to other modules
25	Which of these is a valid way to lazily load a module in Angular's router (from Angular 8+)?	{ path: 'admin', loadChildren: () => import('./admin/admin.module').then(m => m.AdminModule) }	{ path: 'admin', loadChildren: () => import('./admin/admin.module').then(m => m.AdminModule) }

26	<p>Given the following models:</p> <pre>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')</pre> <p>Which of these queries returns all Author instances that have no books?</p>	<p><code>Author.objects.filter(books__isnull=False)</code></p>	<p><code>Author.objects.filter(books__isnull=False)</code></p>
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27	What happens when you call save() on a Django model instance without specifying force_insert or force_update, and the instance has a primary key that already exists in the database?	It will do an UPDATE	It will do an UPDATE
28	In Django REST Framework (DRF), what is the main function of SerializerMethodField?	It enables custom read-only fields whose value is computed by a method	It enables custom read-only fields whose value is computed by a method

29	Which of the following is the most efficient way to handle a large number of background tasks in Django?	Integrating with a task queue like Celery.	Integrating with a task queue like Celery.
30	How would you implement real-time communication (e.g., chat) in a Django application?	Using Django Channels for WebSockets.	Using Django Channels for WebSockets.
31	What is the primary purpose of ChangeDetectionStrategy.OnPush in Angular?	To improve performance by only checking for changes when input properties change or an event is explicitly triggered.	To improve performance by only checking for changes when input properties change or an event is explicitly triggered.

32	How can you ensure proper communication between two unrelated Angular components without a direct parent-child relationship?	Utilizing a shared service with a Subject or BehaviorSubject.	Utilizing a shared service with a Subject or BehaviorSubject.
33	When integrating Django as a backend and Angular as a frontend, what is the recommended approach for handling user authentication and authorization?	Implementing token-based authentication (e.g., JWT) where Django issues tokens and Angular stores and sends them.	Implementing token-based authentication (e.g., JWT) where Django issues tokens and Angular stores and sends them.

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>	5	5
35	<p>What is the best data structure to implement a cache with FIFO eviction policy?</p>	Queue + HashMap	Queue + HashMap
36	<p>What is the purpose of csrf_token in a Django form?</p>	To prevent Cross-Site Request Forgery (CSRF) attacks by ensuring the request comes from your own site	To prevent Cross-Site Request Forgery (CSRF) attacks by ensuring the request comes from your own site

37	What is the main advantage of lazy loading feature modules in Angular?	It allows for loading modules on demand, which reduces the initial application load time.	It allows for loading modules on demand, which reduces the initial application load time.
38	What is the main purpose of the RouterModule.forRoot() method in Angular?	To register the routing service and provide the router configuration for the root application module.	To register the routing service and provide the router configuration for the root application module.

39	What is the difference between constructor and ngOnInit in an Angular component?	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.	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.
40	What does the queryset attribute in a Django generic ListView define?	The list of objects that the view will display	The list of objects that the view will display
41	In the context of exception handling, what is the purpose of the finally block?	It is always executed, regardless of whether an exception occurred or not.	It is always executed, regardless of whether an exception occurred or not.

42	What does the pass statement do in Python?	It acts as a placeholder where code is syntactically required but no action is needed.	It acts as a placeholder where code is syntactically required but no action is needed.
43	How do you pass data from a child component back up to a parent component	B) Using @Output() and an EventEmitter.	B) Using @Output() and an EventEmitter.
44	In the Django MVT (Model-View-Template) architecture, what is the "T"?	Template	Template
45	How do you pass data from a parent component to a child component?	Using the @Input() decorator.	Using the @Input() decorator.