

Student Result

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Exam: Python , Django , Angular Programming

Score: 40.0/45.0

Percentage: 88.89%

Question-wise Summary

Sr.no	Question	Selected Answer	Correct Answer
1	Which type of Programming does Python support?	<i>Not Answered</i>	all of the mentioned
2	What does the @staticmethod decorator do in a Python class?	<i>Not Answered</i>	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?	<i>Not Answered</i>	manage.py makemigrations and manage.py migrate

4	What will be the output of the following Python code? <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>	Not Answered	[6, 6, 6, 6]
5	What will be the output of the following Python code? <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>	Not Answered	[10, 11, 12]

6	What will be the output of the following Python code? <pre>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)</pre>	Not Answered	Calling add (3 times), then 10
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7	What will be the Output of the Following Code? <pre>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])</pre>	Not Answered	2 Hello
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8	What will be the Output of the Following Code? <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	What will be the Output Of the Following Code? <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>	<i>Not Answered</i>	1, 2, Returned: 3
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10	What will be the Output of the Following Code? <pre>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))</pre>	Not Answered	2
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11	What will be the Output of the Following Code? <pre>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()</pre>	Not Answered	dec1, dec2, Hello
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12	What will be the Output of the Following Code? <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>	Not Answered	1 2 Subgen returned: Done
13	What will be the Output of the Following Code? <pre>ef func(a, L=[]): L.append(a) return L print(func(1)) print(func(2)) print(func(3))</pre>	Not Answered	[1], [1, 2], [1, 2, 3]

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

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

23	What will be the Output of the Following Code? <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	In Angular ($\geq 2+$), what is the difference between NgModule.imports and NgModule.exports?	Not Answered	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+)?	Not Answered	<pre>{ path: 'admin', loadChildren: () => import('./admin/admin.module') => m.AdminModule) }</pre>

26	Given the following models: <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> Which of these queries returns all Author instances that have no books?	<i>Not Answered</i>	Author.objects.filter(bo
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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?	<i>Not Answered</i>	It will do an UPDATE
28	In Django REST Framework (DRF), what is the main function of SerializerMethodField?	<i>Not Answered</i>	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?	<i>Not Answered</i>	Integrating with a task queue like Celery.
30	How would you implement real-time communication (e.g., chat) in a Django application?	<i>Not Answered</i>	Using Django Channels for WebSockets.
31	What is the primary purpose of ChangeDetectionStrategy.OnPush in Angular?	<i>Not Answered</i>	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?	<i>Not Answered</i>	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?	<i>Not Answered</i>	Implementing token-based authentication (e.g., JWT) where Django issues tokens and Angular stores and sends them.

34	What will be the Output of the Following Code? <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	What is the best data structure to implement a cache with FIFO eviction policy?	<i>Not Answered</i>	Queue + HashMap
36	What is the purpose of csrf_token in a Django form?	<i>Not Answered</i>	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?	<i>Not Answered</i>	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?	<i>Not Answered</i>	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?	<i>Not Answered</i>	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?	<i>Not Answered</i>	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?	<i>Not Answered</i>	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	<i>Not Answered</i>	B) Using @Output() and an EventEmitter.
44	In the Django MVT (Model-View-Template) architecture, what is the "T"?	<i>Not Answered</i>	Template
45	How do you pass data from a parent component to a child component?	<i>Not Answered</i>	Using the @Input() decorator.