

Modules Mock Test - PPT Program

Q1. Implement a decorator function called 'timer' that measures the execution time of a function. The 'timer' decorator should print the time taken by the decorated function to execute. Use the 'time' module in Python to calculate the execution time.

Sol:

```
import time
```

```
def timer(func):
```

```
    def wrapper(*args, **kwargs):
```

```
        start_time = time.time()
```

```
        result = func(*args, **kwargs)
```

```
        end_time = time.time()
```

```
        execution_time = end_time - start_time
```

```
        print(f"Execution time: {execution_time:.5f} seconds")
```

```
        return result
```

```
    return wrapper
```

Example:

```
@timer
```

```
def my_function():
```

```
    # Function code goes here
```

```
    time.sleep(2)
```

```
my_function()
```

Output:

Execution time : 2.00123 seconds