## ASSIGNMENT 1:

| Names | ID |
| --- | --- |
| Reda Roshdy Awd | 20196022 |
| Mariam Mahmoud Atitto | 20196070 |
| Aliaa Ehab | 20196081 |
| Mohamed Ahmed Shafei | 20196041 |

# Lecture 1

1) Interoperability is a software quality factors that belongs to …………:

| A) revision requirements | C) operation requirements |
| --- | --- |
| B) transition requirements | D) security requirements |

2) Quality Factors are………......:

| A) Functionality, Reliability | C) Usability, Efficiency |
| --- | --- |
| B) Maintainability, Portability | D) All of the mentioned above |

3) Measure for maintainability is……:

| A) MTTC | C) Defects per KLOC |
| --- | --- |
| B) Attacks | D) None of the above |

4) Process of checking that the developer is building the ‘right’ product ….......:

| A) Validation | C) Testing |
| --- | --- |
| B) Verification | D) None of the above |

5) Identify the incorrect testing technique….......:

| A) Integration testing | C) Collaboration testing |
| --- | --- |
| B) System testing | D) Unit testing |

# Lecture 2

1)      Measure Complexity by …………. .

| 1. Lines-of-code metric | 1. a and b |
| --- | --- |
| 1. McCabe’s cyclomatic-complexity metric | 1. None of the above |

2)     Object-oriented systems require ……….. levels of complexity metric.

| 1. 2 | 1. 4 |
| --- | --- |
| 1. 5 | 1. 1 |

3)     ………….. is the largest number of hops through an object’s super classes, where the starting class is numbered 0.

| 1. Coupling-between-objects (CBO) metric | 1. Depth-of-inheritance-tree (DIT) metric |
| --- | --- |
| 1. Number-of-children (NOC) metric | 1. None of the above |

4)     …………… we design test cases by looking at the detail of the implementation of the system to be tested.

| 1. Black Box Testing | 1. White Box Testing |
| --- | --- |
| 1. grey Box Testing | 1. Automated Box Testing |

5)     Basis-path testing technique is Based on the ……………. Metric.

| 1. Lines-of-code metric | 1. All Of Them |
| --- | --- |
| 1. Cyclomatic-complexity | 1. None of the above |

# Lecture 3

1.      Which of the following view is the view that describes the environment into which the system will be deployed, including processing nodes, network interconnections and disk storage facilities required.

| 1. The functional view | 1. The logical view |
| --- | --- |
| 1. The process view | 1. The deployment view |

2.      The Main advantages of The Layers pattern are..............

| 1. Separation Of Concerns | 1. High Coupling |
| --- | --- |
| 1. Reusability | 1. A,C Together |

3.      The basic Layers pattern includes................

| 1. Two | 1. Three |
| --- | --- |
| 1. Four | 1. Five |

4.      Use this pattern to separate the presentation from the model. The advantages of this separation are many, including: separation of concerns,  ease of testing, Maintainability.

| 1. MVC Pattern | 1. Master-slave pattern |
| --- | --- |
| 1. Client-server pattern | 1. Pipe-filter pattern |

5.      .......................is an approach to build enterprise systems that deliver application functionality either as services to end-user applications or to build other services.

| 1. REST | 1. OOP |
| --- | --- |
| 1. SOA | 1. IEEE |

# Lecture 4

1)

from flask import Flask

app = Flask(\_\_name\_\_)

@app.route("/hello")

def hello():

    return "Hello, World!"

if \_\_name\_\_ == "\_\_main\_\_":

    app.run()

To check the output of this code the link of local address is …………

| 1. http://127.0.0.1:5000/hello | 1. http://127.0.0.1/hello |
| --- | --- |
| 1. http://127.0.0.1:5000/helo | 1. http://localhost/hello |

2)

{

    "Score": "8",

    "Name": "Dune",

}

the data is represented in …….. Language.

| 1. XML | 1. JSON |
| --- | --- |
| 1. YAML | 1. CSV |

3- ………….. is a lightweight web application framework

| 1. speedtest | 1. Secrets |
| --- | --- |
| 1. Flask | 1. sqlalchemy |

Essay

1- What is the relation between Provider and the service

| Answer: | the software entity that implements the service |
| --- | --- |

2- What is the Registry ?

| Answer: | Software entity allows the services and the service providers to be found by consumers |
| --- | --- |