Cairo University
Faculty of Computers and Artificial Intelligence

Med Term Exam

Course Name: Advanced Topics in Software Engineering   **Date: 20/11/2022**
Course Code: CS466   **Duration:** 1 hours
Instructor(s): Prof. Fatma Omara   **Total Marks:** 20

Answer The Following Questions

Question 1: Complete the following statements   [10 marks]

1- ………. concerns about how to allocate resources of a system in Cloud Computing among users' workloads

    a. **Scheduling**
    b. Provisioning
    c. Monitoring
    d. All the above

2- ……. is a cloud service provided to the developers to develop applications

    a. SaaS
    b. **PaaS**
    c. IaaS
    d. All the above

3- ……….is the degree to which new resource can be added and made available for using by a variety of client programs

    a. Scalability
    b. **Openness**
    c. Heterogeneity
    d. Reliability

4- …………… is a combination of heterogeneous, hierarchical, and distributed computing resources

    a. Grid
    b. Cloud
    c. Clusters
    d. **Jungle Computing**

5- Which of the following service provider provides the least amount of built-in security ------------------

    a. SaaS
    b. PaaS
    c. IaaS
    d. All the above

6- Distributed systems have ------------------

    a. High security
    b. Better resource sharing
    c. Better system utilization
    d. Low system overhead

7- If one site fails in the distributed system, ------------------

    a. The remaining sites can continue operating
    b. All the sites will stop working
    c. Directly connected sites will stop working
    d. None of the mentioned

8- Attached Services is considered ------------------

    a. SaaS
    b. PaaS
    c. IaaS
    d. All the above

9- Hide that a resource may be moved to another location while in use ------------

    a. Access Transparent
    b. Relocation Transparent
    c. Migration
    d. All of the mentioned

10- Which of the following is not an advantage of Distributed ems ------------------

    a. Reliability
    b. Incremental growth
    c. Resource sharing
    d. None of the above

Question 2: **Define the following** **[10 marks]**

[1] Cloud Computing

[2] Performance miss match

[3] Live Lock

[4] Cloud Bursting

[5] SLA

2-several components run at speeds (performance) that are significantly different (mismatch).

3 -Livelock is a situation where two or more processes continually repeat the same interaction in response to changes in the other processes without doing any useful work

With My Best Wishes
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4 - Cloud bursting is an application deployment technique in which an application runs in a private cloud or data center and bursts into a public cloud when the demand for computing capacity increase

5- A service level agreement (SLA) is a contract between a service provider and a customer, defining the types and standards of services to be offered