

ان في ما عندنا فالله بزرنا  
عن دونا... ولنا نحن نرتق



Cairo University  
Faculty of Computers and Information  
Frist Term  
2022



Compensated Exam

|  |                   |
|--|-------------------|
| Program: Advanced Topics in Software Engineering |                   |
| Course Name: Cloud Computing                     | Date: 27/12/2020  |
| Course Code: CS466                               | Duration: 2 hours |
| Instructor(s): Prof. Fatma Omara                 | Total Marks: 30   |

Answer The Following Questions

Question 1 [10 marks]

Complete the following statements

- \_\_\_\_\_ provides computing environment to develop software systems
  - IaaS
  - SaaS
  - PaaS
  - All of the mentioned
- \_\_\_\_\_ hitting distribution from the users or programs
  - Reliability
  - Productivity
  - Transparency
  - All of the mentioned
- \_\_\_\_\_ is a System contains software / hardware components located at a network
  - Computer Network
  - Cluster System
  - Networked Computing
  - Distributed System
- Degree to which a system able to adapt workload by provisioning and de-provisioning resources automatically
  - OpEx
  - Transparency
  - Resource Provisioning
  - Elasticity
- Combination of heterogeneous, hierarchical, and distributed computing resources.
  - Jungle Computing
  - Distributed System
  - Edge Computing
  - P2P Computing

لولا لحيى لم تكن هوى اجسامنا  
لكل من اوعونا لعمرو الكرم  
ولا صبرنا على الدنيا واسرها  
قبل ان يربى شوق اقلب وركبها

- 6- \_\_\_\_\_ concerns about allocating tasks on VMs
- a) Grid Computing
  - b) Resource Provision
  - c) Task Scheduling
  - d) Cloud Computing
- 7- \_\_\_\_\_ a consumer can provision computing capabilities as needed automatically without requiring human interaction with each service provider.
- a) Resource Pooling
  - b) Measured Service
  - c) On-demand Self-Service
  - d) All of the mentioned
- 8- \_\_\_\_\_ consists of Private and Public Cloud
- a) Public Cloud
  - b) Private Cloud
  - c) Hybrid Cloud
  - d) Multi Cloud
- 9- \_\_\_\_\_ the interaction and communication between billions of devices that produce and exchange data related to real-world objects
- a) Big Data
  - b) Internet of Things
  - c) Edge Computing
  - d) All of the mentioned Fog Computing
- 10- \_\_\_\_\_ a mobility-enhanced small-scale cloud data center located at the edge of the internet.
- a) Edge Computing
  - b) Fog Computing
  - c) Cloudlets
  - d) all of the mentioned

**Question 2 [20 marks]**

**What are the similarities and differences between the following:**

1. Grid Computing and Cloud Computing ✓
2. Regular Migration and Warm Migration ✓
3. Scalability and Openness ✓
4. Virtualization and Emulation
5. P2P system and Cluster system
6. Transparent and Availability ✓
7. Tightly Coupled systems and Loosely Coupled system
8. Resource Scheduling and Resource Provisioning ✓
9. Virtual Machine and Container
10. Hybrid Cloud and Multi Cloud

هَبْ لَنَا مِنْ أَزْوَاجِنَا  
وَدِيَانَا قُرْلًا أَعْيُنَ  
وَاتَّعَدْنَا لِلْمُتَّقِينَ  
وَالْمَاهَا...



عَالَمٌ فِي  
وَدِيَانَا قُرْلًا أَعْيُنَ