

Instructor: Professor Sarah Chen | Date: March 15, 2025

Advanced Cloud Computing Final Exam

Duration: 3 hours | Total Points: 100

Comprehensive examination covering cloud architecture, microservices, and distributed systems.

INSTRUCTIONS:

- Read each question carefully and completely before answering
- For multiple choice questions, select the best answer
- Write clearly and legibly for all written responses
- Show all work for calculation problems where applicable
- Review your answers before submitting
- Ask the instructor if you have any questions

Question 1. (5 points)

Which cloud service model provides the highest level of abstraction?

- A. Infrastructure as a Service (IaaS)
- B. Platform as a Service (PaaS)
- C. Software as a Service (SaaS)
- D. Function as a Service (FaaS)

Question 2. (25 points)

Explain the benefits of microservices architecture.

Answer: (Use the space below for your complete response)

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Question 3. (3 points)

Kubernetes can automatically scale pods based on CPU usage.

- A.** True
- B.** False