



Institute of Information Technology
Jahangirnagar University
Professional Masters in IT

2nd Semester Final Examination, Spring 2023

Duration: 3 Hours

Intake: Fall 2022, Summer 2022

Full Marks: 60

Course Code: PMIT – 6201

Course Title: Cloud and Computing

Do not write anything on the question paper.

There are 7 (Seven) questions. Answer any 5 (Five) of them.

Figures in the right margin indicate marks.

[Follow the question order]

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| 1. | a. | What is cloud computing? How can we discriminate whether a service is delivered as cloud computing style or not? | 5 |
| | b. | Briefly describe the paradigm of cloud computing. | 5 |
| | c. | Write down the challenges of cloud computing. | 2 |
| 2. | a. | Write down the distinct characteristics of client-server model. | 4 |
| | b. | How two-tier architecture differs from three tier architecture? Explain with an example. | 4 |
| | c. | What is distributed system? Write down the properties of a distributed system. | 4 |
| 3. | a. | How mobile computing differs from ubiquitous computing? Explain with example. | 4 |
| | b. | Why transparency is important for the design of a distributed system? Briefly explain different types of transparency. | 4 |
| | c. | Briefly describe the hardware architecture of parallel processing. | 4 |
| 4. | a. | Why would software developers prefer to choose PaaS model instead of IaaS? Explain. | 4 |
| | b. | What is IaaS? Briefly describe about different components of IaaS model. | 6 |
| | c. | What are the potential drawbacks of using PaaS model? | 2 |
| 5. | a. | Briefly describe the reason why industry should migrate to cloud environment. | 6 |
| | b. | What is SOA? Briefly describe how SOA works. | 6 |
| 6. | a. | What is system monitoring? What should be monitored in cloud? | 3 |
| | b. | What is accessibility and portability? How these can be the essential characteristics of cloud computing? Explain. | 3 |
| | c. | What is virtualization? Briefly describe the reasons of virtualization. | 6 |
| 7. | a. | Briefly describe about different layers of cloud architecture. | 4 |
| | b. | Write down the distinct features of cloud applications that make them different from web applications. | 4 |
| | c. | While migrating to cloud environment what options are there for the companies to adopt for migration? Explain each option. | 4 |