



Institute of Information Technology  
Jahangirnagar University  
Professional Masters in IT

2<sup>nd</sup> Semester Final Examination, Summer 2022

Intake : Fall 2021, Spring 2022

Duration: 3 Hours

Full Marks: 60

Course Code: PMIT – 6201

Course Title: Cloud and Mobile Computing

Do not write anything on the question paper.

There are 7 (seven) questions. Answer any 5 (five) of them.

- |    |    |                                                                                                      |   |
|----|----|------------------------------------------------------------------------------------------------------|---|
| 1. | a. | What is distributed computing? Why it is required to understand cloud computing? Explain.            | 4 |
|    | b. | How grid computing differs from clustered computing? Explain.                                        | 5 |
|    | c. | Why middleware is important for the design of distributed system. Explain.                           | 3 |
| 2. | a. | Briefly describe the essential characteristics of cloud computing.                                   | 6 |
|    | b. | Why SLA is important for cloud computing? What are the common content that must be present in a SLA? | 4 |
|    | c. | What is multi-tenancy?                                                                               | 2 |
| 3. | a. | What is the principle of paged based distributed shared memory? How it works?                        | 5 |
|    | b. | What is RPC? How it works?                                                                           | 5 |
|    | c. | What is the role of a message broker in a distributed system?                                        | 2 |
| 4. | a. | Why enterprises will chose to shift their entire system into cloud? Explain.                         | 6 |
|    | b. | What is PaaS? Briefly describe the main components that are offered to the client by PaaS vendor.    | 6 |
| 5. | a. | Why cloud architecture is important? Describe cloud reference model.                                 | 6 |
|    | b. | What is cloud migration? In how many ways cloud migration may happen? Describe each way.             | 6 |
| 6. | a. | What is SOA? Describe different components of SOA.                                                   | 6 |
|    | b. | Describe different benefits of SOA.                                                                  | 6 |
| 7. | a. | What is virtualization? What are the reason of virtualization? Explain.                              | 6 |
|    | b. | What is execution level virtualization? How it works? Explain.                                       | 6 |