

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2025

B.Tech-VIII Semester (CSE/IT)

COURSE CODE (CREDITS): 19B1WCI835 (3)

MAX. MARKS: 15

COURSE NAME: Cloud Computing Security

COURSE INSTRUCTORS: Nitika

MAX. TIME: 1 Hour

Note: (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Q.No	Question	CO	Marks
Q1	Compare Software as a Service (SaaS), Platform as a Service (PaaS), and Infrastructure as a Service (IaaS) in terms of functionality, user control, and typical use cases. Provide an example of each model.	CO1	[2.5+2.5]
Q2	Explain the guiding security design principles for cloud computing. How do secure isolation, comprehensive data protection, and end-to-end access control contribute to mitigating common cloud security risks?	CO2	[5]
Q3	A company uses an IaaS provider that charges \$0.12 per GB for storage and \$0.05 per hour for compute resources. If the company stores 500 GB of data and runs a virtual machine for 200 hours, what will be the total cost?	[CO2]	[3]
Q4	A cloud server processes 1,000 transactions per second. If a workload increases by 40%, how many transactions per second will the server need to handle?	[CO1]	[2]