JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- 2024

B.Tech-I Semester (IT/BI)

COURSE CODE (CREDITS): 18B11CI512(3)   MAX. MARKS: 35

COURSE NAME: INFORMATION SYSTEMS

COURSE INSTRUCTORS: Dr Ruchi Verma   MAX. TIME: 2 Hours

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	How does the UDDI technical architecture support the discovery and integration of web services and what are the key components of the UDDI data model implementation?	CO -2	4.0
Q2	In a startup environment, how digital natives are empowered to lead and drive digital transformation through collaboration tools and innovative practices? What strategies can organizations use to foster seamless collaboration between digital natives and non-digital natives to ensure effective knowledge sharing?	CO -3	5.0
Q3	Design a plan with secure coding practices in a development environment to safeguard against common attack vectors like SQL injection and buffer overflow attacks?	CO -3	4.0
Q4	How does transaction context propagate across different layers of an application, and what challenges arise when dealing with transaction context propagation in distributed systems.	CO -4	4.0
Q5	Discuss the challenges and limitations of the Two-Phase Commit protocol in terms of performance and fault tolerance in distributed systems.	CO -1	4.5
Q6	In the context of building a SOAP-based web service for an e-commerce platform, how would you implement the key components of WSDL to ensure seamless communication between the service and external partners for order processing?	CO -5	5.0
Q7	Given the Morris Internet Worm's historical impact, how would you design a network security system to prevent similar self-replicating malware from spreading within an organization?	CO -5	4.0
Q8	For a large-scale event like a concert or conference, design a location-based system to provide attendees with directions and notifications.	CO -6	4.5