JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- 2025

B.Tech-VIIth Semester (CSE/IT)

COURSE CODE (CREDITS): 19B1WCI736 (3)   MAX. MARKS: 35

COURSE NAME: Information Auditing & Risk Management   MAX. TIME: 2 Hours

INSTRUCTORS: Dr.Ruchi Verma

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	A FinTech startup experiences a 9-hour outage at AWS region X, causing financial transaction delays. a) Identify the risk treatments that were likely missing before the outage. b) Design a monitoring and review framework with KPIs, deep dives and assurance that should have been in place. c) Propose a quantitative model for assessing outage probability and impact aggregation. d) Recommend a multi-cloud mitigation plan and justify its cost–risk balance	CO4	5
Q2	Based on the Three Lines of Defense model, map each line to roles in an AI fraud detection system. Evaluate what happens when the second line over relies on automated dashboards.	CO2	5
Q3	For a Kubernetes-based environment, mathematically model treatment effectiveness over time as the vulnerabilities emerge drastically.	CO3	5
Q4	Compare and contrast, control based and outcome based assurance strategies for large-scale cloud migration using Risk Based Assurance principles.	CO4	5
Q5	A platform is accused of algorithmic bias , regulators demand a risk-reporting dossier in 5 days. a) Construct a stakeholder-mapping model for communication and consultation. b) Design a risk reporting template that includes completeness, escalation logic, and severity. c) Evaluate how human-factor biases may have influenced internal reporting. d) Recommend improved governance and assurance mechanisms	CO2	5

Q6	An AI-based diagnosis platform experiences rising false negatives, yet all risk KPIs continue showing 'green'. Discuss how misaligned KPIs create blind spots and how risk monitoring should have been redesigned.	CO5	5
Q7	A self-retraining AI model begins generating biased outcomes due to poisoned training data. Discuss how the ethical drift occurred and which deep-dive questions would have prevented escalation.	C06	5