

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- 2025

PhD - HSS

COURSE CODE (CREDITS): 18P1WGE101

MAX. MARKS: 25

COURSE NAME: Research Methodologies including Quant. Methods and Computer App.

COURSE INSTRUCTORS: RKT

MAX. TIME: 2 Hours

Note: (a) All questions are compulsory.

Q.No	Question	CO	Marks
Q1	<p>Out of the given research topics, identify one of your choice. Design a research methodology which will have both qualitative and quantitative components.</p> <ol style="list-style-type: none"> A study on the challenges of identifying, mitigating, and eliminating systemic bias in AI algorithms used for sensitive HR decisions (e.g., candidate screening, promotions), focusing on the need for fairness, transparency, and explainability Investigation into the complex challenges related to collecting, securing, and ensuring the quality of vast HR data sets required for AI, and the risks associated with data breaches and non-compliance with evolving global privacy regulations An analysis on the challenges stemming from employee and managerial resistance to AI adoption, lack of trust in automated decision-making, and the critical skill deficit requiring HR professionals to acquire new competencies for managing AI tools An examine of significant technical hurdles and financial obstacles in integrating diverse AI systems with existing, often proprietary, legacy HR Information Systems, including issues of interoperability, scalability, and high initial investment costs. Identify the challenges posed by the fragmented and evolving legal landscape, focusing on issues of algorithmic accountability, liability for AI errors, and the enforcement of non-discrimination laws in a context where AI decisions can be opaque. Research the risks of dehumanization in core HR processes, the potential erosion of employee trust, and the challenge of maintaining essential human connection, empathy, and organizational culture when relying heavily on AI for interactions and support. <p style="text-align: right;">PTO</p>		8

Q2	<p>Read the three questions provided below. Are they good research questions according to you? Explain your reasoning for all the three questions.</p> <ul style="list-style-type: none"> a) How effectively do fairness audits and diverse training data mitigate algorithmic bias in AI-powered recruitment systems used by public universities in Punjab? b) How do the aviation companies of Kenya address the issue of accountability-challenges of AI integration in HRM? c) What training interventions are most effective in addressing the data literacy and technical skill gaps among existing HR professionals in Global South as their organizations integrate AI systems? 		6
3	A thorough and rigorous literature review is a foundational aspect of a good research. Do you agree with this statement? Explain your take.		4
4	<p>Out of the questions provided below, which ones require a qualitative approach and which ones quantitative approaches? Explain why.</p> <ul style="list-style-type: none"> a) Does participation in a specific AI literacy training program improve job performance ratings of HR managers? b) How does the time-to-hire metric impact the quality of new hires in the IT department? c) How do employees perceive the current organizational culture and its effect on their engagement and well-being? d) Is there a statistically significant difference in promotion rates between male and female employees in senior management roles? e) What are the lived experiences and motivations of high-performing remote employees, and what support systems do they value? f) What is the correlation between salary levels and employee turnover rates across different departments? g) Why do top-performing employees choose to leave the company, and what specific factors contributed to their decision? 		7