EXAM NOTES SUMMARY

1. KEY TOPICS TO REVIEW
• Definitions & concrete examples of core concepts
• Fairness metrics – be able to do simple calculations from a given table
• Life-cycle of an ML system (design → development → testing → monitoring → production/deployment) and how to embed ethical principles at each stage
• Explainability: ways to integrate explainability into a chosen stage of the life-cycle
• Sentiment-analysis/NLP example – be ready to apply concepts
• Privacy issues and regulation basics

2. LIKELY QUESTION SOURCES
• Guest lectures – especially slides 1-10
• Weekly reading list – focus on “big picture” take-aways
• Gebru’s internal auditing paper
• Top-Hat quizzes (but expect more elaborated versions)

3. QUESTION FORMATS EXPECTED
• 8 one-sentence True/False items
• Short calculation task: given a table, compute one of the fairness metrics
• Hard/long questions that require an opinion or comment – combine multiple aspects in a paragraph-to-page answer
• Case-study design question: design a system, justify choices, show how ethics principles are satisfied
• Open problems: discuss challenges you might face and explain your reasoning chain

4. CHECKLIST / STUDY PLAN
□ Re-work slide decks – if you know the slides, “you are good to go”
□ Practise fairness-metric calculations
□ Review guest-lecture slides & summaries
□ Read week-1 material on ML life-cycle + Gebru paper
□ Prepare examples for sentiment-analysis
□ Skim milestone report – project question possible
□ Start the 4-page Fairness Metrics sheet ASAP