# Data Ethics and Responsible AI: Key Notes

## 1. Privacy Protection
- o Ensure all data used respects privacy laws (e.g., GDPR, HIPAA).
- o Anonymize sensitive personal information to prevent identification.
- o Use data only for the intended purpose with informed consent where applicable.

## 2. Bias Mitigation
- o Actively identify and reduce bias in datasets to avoid unfair outcomes.
- o Validate models across diverse demographic groups to ensure fairness.
- o Continuously monitor for unintended biases during deployment.

## 3. Transparency and Explainability
- o Design models whose decisions can be explained in understandable terms.

- o Document data sources, preprocessing steps, and model limitations.
- o Enable stakeholders to audit and question AI predictions.

## 4. Accountability

- o Establish clear responsibility for data handling and model outcomes.
- o Implement mechanisms for correcting errors or harmful outputs.
- o Engage multidisciplinary teams including ethicists and domain experts.

## 5. Social Impact Awareness

- o Assess how AI deployment affects communities, especially vulnerable groups.
- o Prioritize applications that promote social good and public welfare.
- o Avoid exacerbating inequalities or causing harm.

## 6. Sustainability

- o Consider environmental impact of large-scale model training.
- o Optimize computational resources for efficiency.