AI IN PUBLIC POLICY

SEMESTER II

Course Code: DPPG-6

Max. Marks: 100

External: 70

Internal: 30

Pass: 40%

Credits: 6

Course Outcomes (COs):

CO1: How can Artificial Intelligence be applied in public policy formulation and implementation?

Focus areas: Data analysis, predictive modeling, evidence-based decision-making, automation in governance.

CO2: Discuss the ethical and social challenges of using AI in public policy.

Focus areas: Privacy, bias, transparency, accountability, digital divide, and trust in AI systems.

CO3: Evaluate the role of AI in achieving sustainable development and improving public service delivery.

Focus areas: Healthcare, education, agriculture, smart cities, disaster management, climate policy.

CO4: What are the risks of over-reliance on AI in governance and policymaking?

Focus areas: Algorithmic bias, lack of human oversight, exclusion, security risks, dependency on technology.

CO5: Examine the institutional and regulatory frameworks required to govern AI in public policy.

Focus areas: AI ethics guidelines, global standards (EU AI Act, UNESCO recommendations), national AI strategies, accountability mechanisms.

INSTRUCTIONS FOR THE PAPER SETTER/ EXAMINER:

1) The syllabus prescribed should be strictly adhered to.

2) The Question Paper will have 70 Multiple Choice questions (MCQs) and four choices of answers will be there covering the entire syllabus. Each question will carry 1 mark. All questions will be compulsory; hence candidates will attempt all the questions.
3) Paper-setters/Examiners are requested to distribute the questions from section A and Section B of the syllabus equally i.e., 35 questions from section A and 35 questions from Section B.
4) The examiner shall give clear instructions to the candidates to attempt questions.
5) The duration of each paper will be two hours.

INSTRUCTIONS FOR THE STUDENTS

The question paper shall consist of 70 Multiple Choice questions. All questions will be compulsory and each question will carry 1 mark. There will be no negative marking. Students are required to answer using OMR (Optimal Mark Recognition) sheets.

Section-A

Unit 1: Applications of AI in Public Policy: Data analysis and big data insights, Predictive modeling for policy outcomes, Evidence-based decision-making, Automation in governance

Unit 2: AI in Policy Formulation and Implementation: Use of AI tools for agenda-setting and forecasting, AI-assisted design of policies, Implementation support through digital platforms

Unit 3: Ethical and Social Challenges of AI in Governance: Privacy and surveillance concerns, Bias, fairness, and discrimination, Transparency, accountability, and explainability

Unit 4: Public Policy and Technology: Digital divide and public trust

Section-B

Unit 5: AI for Sustainable Development and Public Service Delivery: Applications in healthcare, education, and agriculture, Smart cities and e-governance, Disaster management and climate policy, Enhancing efficiency and inclusiveness

Unit 6: Risks of Over-Reliance on AI: Algorithmic bias and unintended consequences, Lack of human oversight and ethical judgment, Exclusion of vulnerable groups, Cybersecurity threats and technological dependency

Unit 7: Institutional and Regulatory Frameworks for AI Governance: National AI strategies and ethics guidelines, Global standards (EU AI Act, UNESCO recommendations), Accountability mechanisms and oversight institutions,

Unit 8: Future directions for responsible AI governance

Suggested Readings

- Ajay Agrawal, Joshua Gans & Avi Goldfarb, *Prediction Machines: The Simple Economics of Artificial Intelligence* (Harvard Business Review Press, 2018)
- Viktor Mayer-Schönberger & Kenneth Cukier, *Big Data: A Revolution That Will Transform How We Live, Work, and Think* (Mariner Books, 2013)
- M. Govinda Rao, *Public Policy in India: Institutions, Governance and Public Choice* (Sage India, 2020)
- Rajiv Malhotra, *Artificial Intelligence and the Future of Power: 5 Battlegrounds* (Rupa Publications India, 2021)
- Shoshana Zuboff , *The Age of Surveillance Capitalism* (PublicAffairs, 2019)
- Luciano Floridi, *The Ethics of Artificial Intelligence* (Oxford University Press, 2020)
- Markku Markkula & Hank Kune, *AI for the Sustainable Development Goals* (Springer, 2022)