

CBCS SCHEME



USN

| | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

BAI358B

Third Semester B.E./B.Tech. Degree Supplementary Examination June/July 2024

Ethics and Public Policy for AI

Time: 2 hrs.

Max. Marks: 50

*Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.*

| | | Module – 1 | M | L | C |
|-------------------|----|--|----|----|-----|
| Q.1 | a. | With a neat diagram, explain a unified framework of principles for AI in society with respect to beneficence, non maleficence, autonomy, justice and explicability. | 10 | L2 | CO1 |
| OR | | | | | |
| Q.2 | | Explain in detail the seven essential rules for achieving trustworthy AI. And why ethics are needed first to inform legislation | 10 | L2 | CO1 |
| Module – 2 | | | | | |
| Q.3 | | What is ethics Bluewashing? With a neat diagram, explain six types of ethical concerns raised by algorithms. | 10 | L2 | CO2 |
| OR | | | | | |
| Q.4 | | Discuss the seven essential factors for successful AI4SG. | 10 | L2 | CO2 |
| Module – 3 | | | | | |
| Q.5 | | List and discuss the ethical concerns related to algorithmic use based on the map created by Mittelstadt. | 10 | L2 | CO3 |
| OR | | | | | |
| Q.6 | | Outline the connection between high level ethical principle and tangible system requirement as adopted from the methodology for ethics guidelines for trustworthy AI. | 10 | L2 | CO3 |
| Module – 4 | | | | | |
| Q.7 | | How one can propose a fairness in the financial services industry? Explain with the required graphs discuss how embedding AI governance and fairness in a financial services risk management framework design is analysed. | 10 | L2 | CO4 |
| OR | | | | | |
| Q.8 | | Give a working definition of AI and with a neat diagram of AI knowledge map. Discuss AI paradigms. | 10 | L2 | CO4 |
| Module – 5 | | | | | |
| Q.9 | a. | Discuss the ethical dilemma of AI powered decision making. | 5 | L2 | CO5 |
| | b. | Write a note on challenges and risks of AI in healthcare. | 5 | L2 | CO5 |
| OR | | | | | |
| Q.10 | | Interpret how ethical framework are built for AI development. | 10 | L2 | CO5 |
