COMMON ANNUAL EXAMINATION (2024-2025)
SYLLABUS

CLASS: **SUBJECT: AI**
TEXTBOOKS:
1. CBSE REFERENCE MATERIAL
2. AI CLASS 11(ORANGE PUBLICATION)

ANNUAL EXAMINATION

S.NO.	UNIT/ CHAPTER / TOPIC	SUBTOPICS	WEIGHTAGE
	Employability Skills	- Communication Skills - Self-Management Skills - Basic Information and Communication Technology Skills - Entrepreneurial Skills - Green Skills	10
	Unit 1: Introduction to AI for Everyone	What is Artificial Intelligence? • Evolution of AI • Types of AI • Domains of AI • AI Terminologies • Benefits and limitations of AI	4
	Unit 2: Unlocking your future in AI	The Global Demand • Some Common Job Roles In AI • Essential Skills and Tools for Prospective AI Careers • Opportunities in AI across Various Industries	5
	Unit 3: Python Programming	Level 1 : Basics of python programming, character sets, tokens, modes, operators, datatypes, Control Statements Level 2 : CSV Files, Libraries – Numpy, Pandas, Scikit-learn	5
	Unit 4: Introduction to Capstone Project	• Design Thinking • Empathy Map • Sustainable Development Goals • Capstone Project	5
	Unit 5: Data Literacy	• What is Data Literacy?	6

		• Data Collection • Exploring Data • Statistical Analysis of data • Representation of data, Python Programs for Statistical Analysis and Data Visualization • Introduction to Matrices • Data Pre-processing • Data in Modelling and Evaluation	
	Unit 6: Machine Learning Algorithms	Machine Learning in a nutshell • Types of Machine Learning • Supervised Learning • Understanding Correlation, Regression, Finding the line, Linear Regression algorithm • Classification – How it works, Types, k – Nearest Neighbour algorithm • Unsupervised Learning • Clustering – How it works, Types, k - means Clustering algorithm	6
	Unit 7: Leveraging Linguistics and computer Sc	• Understanding Human Language Complexity • Introduction to Natural Language Processing (NLP) - Emotion Detection and Sentiment Analysis, Classification Problems, Chatbot • Phases of NLP • Applications of NL	5
	Unit 8: AI Ethics and Values	Ethics in Artificial Intelligence • The five pillars of AI Ethics • Bias, Bias Awareness, Sources of Bias • Mitigating Bias in AI Systems • Developing AI Policies • Moral Machine Game • Survival of the Best Fit Game	4
			TOTAL MARKS=50

NOTE: The above syllabus is for assessment purpose and remaining chapters/topics may be taught as subject-learning enrichment.

For the annual exams, schools may consider the following suggestions:

- Make sure you are thorough with the entire syllabus before allocating weightage.

- Please rationalize the syllabus based on the Annual Examination Schedule.

- Please mention the chapters which are not meant for evaluation/assessment purpose and should be done for learning enrichment.

- Classes (IX-XII) subject teachers to adhere to the instructions as per the CBSE Curriculum.