

**ARTIFICIAL INTELLIGENCE (843)**  
**SYLLABUS OF CLASS XI**  
**SESSION: 2026-27**

**Theory : 50**

**Practical : 50**

Date/Month	Unit	Chapter/Topics
<b>PART B – SUBJECT SPECIFIC SKILLS</b>		
20 <sup>th</sup> April to 30 <sup>th</sup> April	<b>UNIT 1 - INTRODUCTION: ARTIFICIAL INTELLIGENCE FOR EVERYONE</b>	What is Artificial Intelligence? , Evolution of AI , Types of AI, Domains of AI , AI Terminologies , Benefits and limitations of AI
4 <sup>th</sup> May to 8 <sup>th</sup> May	<b>UNIT 2 - UNLOCKING YOUR FUTURE IN AI</b>	<ul style="list-style-type: none"> <li>• The Global Demand</li> <li>• Some Common Job Roles In AI</li> <li>• Essential Skills and Tools for Prospective AI Careers</li> <li>• Opportunities in AI across Various Industries</li> </ul>
11 <sup>th</sup> May to 29 <sup>th</sup> May	<b>UNIT 3 - PYTHON PROGRAMMING</b>	<b>Level 1</b> : Basics of python programming, character sets, tokens, modes, operators, datatypes,
		Control Statements (if, if –else, if-elif, nested if-else)
		<b>Level 2</b> : CSV Files, Libraries – Numpy, Pandas, Scikit-learn
1 <sup>st</sup> July to 10 <sup>th</sup> July	<b>UNIT 4 - INTRODUCTION TO CAPSTONE PROJECT</b>	<ul style="list-style-type: none"> <li>• Design Thinking</li> <li>• Empathy Map</li> <li>• Sustainable Development Goals</li> <li>• Capstone Project</li> </ul>
13 <sup>th</sup> July to 24 <sup>th</sup> July	<b>UNIT 5 - DATA LITERACY – DATA COLLECTION TO DATA ANALYSIS</b>	<ul style="list-style-type: none"> <li>• What is Data Literacy?</li> <li>• Data Collection</li> <li>• Exploring Data</li> <li>• Statistical Analysis of data</li> <li>• Representation of data, Python Programs for Statistical Analysis and Data Visualization</li> </ul>
		<ul style="list-style-type: none"> <li>• Introduction to Matrices</li> <li>• Data Pre-processing</li> <li>• Data in Modelling and Evaluation</li> </ul>
27 <sup>th</sup> July to 14 <sup>th</sup> Aug	<b>UNIT 6 – MACHINE LEARNING ALGORITHMS</b>	<ul style="list-style-type: none"> <li>• Machine Learning in a nutshell</li> <li>• Types of Machine Learning</li> <li>• Supervised Learning</li> <li>• Understanding Correlation, Regression, Finding the line, Linear Regression algorithm</li> <li>• Classification – How it works, Types, k – Nearest Neighbour algorithm</li> <li>• Unsupervised Learning</li> <li>• Clustering – How it works, Types, k –means Clustering algorithm</li> </ul>
17 <sup>th</sup> Aug to 31 <sup>st</sup> Aug	<b>UNIT 7 – LEVERAGING LINGUISTICS AND COMPUTER SCIENCE</b>	<ul style="list-style-type: none"> <li>• Understanding Human Language Complexity</li> <li>• Introduction to Natural Language Processing (NLP) – Emotion Detection and Sentiment Analysis, Classification Problems, Chatbot</li> <li>• Phases of NLP</li> <li>• Applications of NLP</li> </ul>
<b>Revision for HY exam</b>		

5 <sup>th</sup> Oct to 16 <sup>th</sup> Oct	<b>UNIT 8 – AI ETHICS AND VALUES</b>	<ul style="list-style-type: none"> <li>• Ethics in Artificial Intelligence</li> <li>• The five pillars of AI Ethics</li> <li>• Bias, Bias Awareness, Sources of Bias</li> <li>• Mitigating Bias in AI Systems</li> <li>• Developing AI Policies</li> <li>• Moral Machine Game</li> <li>• Survival of the Best Fit Game</li> </ul>
<b>PART A- EMPLOYABILITY SKILLS</b>		
19 <sup>th</sup> Oct to 30 <sup>th</sup> Oct	<b>UNIT 1: COMMUNICATION SKILLS – III</b>	<p>Methods of communication - Verbal, Non-verbal, Visual Communication styles assertive, aggressive, passive aggressive, submissive, etc. Writing skills to the following:</p> <ul style="list-style-type: none"> <li>• Sentence • Phrase • Kinds of Sentences • Parts of Sentence • Parts of Speech • Articles • Construction of a Paragraph</li> </ul>
2 <sup>nd</sup> Nov to 13 <sup>th</sup> Nov	<b>UNIT 2: SELF - MANAGEMENT SKILLS – III</b>	<p>Describe the importance of dressing appropriately, looking decent and positive body language , Describe the term grooming , Prepare a personal grooming checklist , Describe the techniques of self- exploration. Describe the important factors that influence in team building , Describe factors influencing team work Meaning and importance of time management – setting and prioritizing goals, creating a schedule, making lists of tasks, balancing work and leisure, using different optimization tools to break large tasks into smaller tasks.</p>
16 <sup>th</sup> Nov to 30 <sup>th</sup> Nov	<b>UNIT 3: INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS – III</b>	<p>Introduction to word processing. Software packages for word processing. Opening and exiting the word processor. Creating a document Editing text, Wrapping and aligning the text, Font size, type and face, Header and Footer , Auto correct, Numbering and bullet , Creating table , Find and replace, Page numbering , Printing document, Saving a document in various formats.</p>
1 <sup>st</sup> Dec to 11 <sup>th</sup> Dec	<b>UNIT 4: ENTREPRENEURIAL SKILLS- III</b>	<p>Values in general and entrepreneurial values , Entrepreneurial value orientation with respect to innovativeness, independence, outstanding performance and respect for work, Attitudes in general and entrepreneurial attitudes ,Using imagination/ intuition, Tendency to take moderate risk, Enjoying freedom of expression and action, Looking for economic opportunities, Believing that we can change the environment, Analyzing situation and planning action, Involving in activity.</p>
14 <sup>th</sup> Dec to 30 <sup>th</sup> Dec	<b>UNIT 5: GREEN SKILLS – III</b>	<p>Main sectors of green economy- ewaste management, green transportation, renewal energy, green construction, water Management, Policy initiatives for greening economy in India ,Stakeholders in green economy, Role of government and private agencies in greening cities, buildings, tourism, industry, transport,renewable energy, waste management, agriculture, water, forests and fisheries</p>
<b>Revision for Annual Exam from January 2027 onwards</b>		

