III. ADVANCED MAJOR COURSE- AMJ 2: ARTIFICIAL INTELLIGENCE FOR BUSINESS

Marks: 25 (5 Attd. + 20 SIE: 1Hr) + 75 (ESE: 3Hrs) = 100

Pass Marks: Th (SIE + ESE) = 40

(Credits: Theory-04) Theory: 60 Lectures

Course Objectives:

1 This course aims to equip the learners with the basic ideas and techniques underlying the usage of Artificial Intelligence in Business. The course illustrates both the potential and current limitations of these techniques with examples from a variety of applications.

Course Learning Outcomes:

After the completion of the course, the learners will be able to:

- 1 Identify how the AI is being leveraged by start-ups as a success tool;
- 2 Analyse and interpret the applicability of AI in HR functions;
- 3 Explain how algorithms is changing the board room landscape;
- 4 Discuss the customer services provided by various banks using AI;
- 5 Demonstrate the role of AI in transforming the retail sector;
- 6 Develop case study on the success story of AI driven business processes.

Course Content:

UNIT-I: Introduction

- 1. Artificial Intelligence: Concept, benefits, and scope. Differences between AI, Machine Learning (ML) and Deep Learning (DL) AI applications, capabilities and competitive advantage; Industry drivers.
- 2. AI strategy for the enterprise Considerations for an AI strategy, AI & Startups. Internet of Things (IoT), Introduction to mobile computing and Cloud computing.

UNIT-II: AI Led Strategic Interventions

- 1. Algorithm: New member in the boardroom, Accelerated decision making with real time analytics, AI in operational models in an organisation.
- 2. AI: future of AI in HR, Talent sciences, Algorithms & Talent Acquisitions (TA), AI & transformation in Finance & Accounting.
- 3. CFO of tomorrow, Changing role of Chief Information Officer (CIO): Industry 4.0.

UNIT- III: AI in Banking & Insurance

- 1. Redefined banking industry adoption of Analytics, AI powered financial services, Fraud mitigation in banks with AI, Reorienting customer retention, Risk management with AI.
- 2. AI driven transformation in Insurance, Digital based insurance model.

UNIT- IV AI in Retail

- 1. AI interventions in Retail Outlets. Emergence of smart customers, ad content predictions, Evolution of smart retailers, Omni channel experience, AI in consumer packaged goods, Fluid supply chain transformation with AI.
- 2. AI-Led marketing transformations, Data to Clusters Ad content prediction AI based Ad buy and CPC optimization, AI driven campaign management.
- 3. AI for Sales: Data to Classes Insides Sales Rep workflow automation Improved Lead, Opportunity Ranking and Reminder.

UNIT- V: Exponential Technologies

- 1. Beating cyber-attacks with Analytics, AI in automotive industry: driverless cars and drones, IoT Analytics: extracting value and transforming business, Real time streaming analytics.
- 2. Cryptocurrency Analytics, AI for customer service-data to scores, AI for Portfolio Management, Chatbots, Call center rep automation.

Practical Exercises: Learners are required to:

- 1. Identify a startup using AI and prepare a report on how it is leveraging AI for its business processes.
- 2. Analyse, interpret, and present key learnings of case study titled Making the business case for AI in HR (Altemeyer, 2019)

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