



Department of Artificial Intelligence and Machine Learning

Course Code : 21AI74H4
Semester : VII Semester
Max Marks : 10 + 50

Date :
Time :
Duration : 120 mins

Artificial Intelligence Product Management

PART A QUIZ 2

Note: Answer all the Questions

Q. No	Quiz-Scheme and Solutions	M	B T	C O
1 a)	What is the purpose of autoML, and how does it benefit different industries? Ans: AutoML, or Automated Machine Learning, is designed to simplify and accelerate the machine learning process, making it accessible to both experts and non-experts alike. (1M) It benefits various industries by increasing efficiency, improving model accuracy, and enabling faster prototyping, ultimately driving innovation and better decision-making. (1M)	2	1	1
b)	What is the primary reason that causes an AI project to fail? Ans: The primary reason that causes an AI project to fail is often a lack of clear objectives and alignment with business goals.	1	1	1
c)	Give any two considerations in implementing Ethical AI. Ans: Bias and Fairness, Transparency (1+1)	2	1	1
d)	Write any two tools used for need understanding. Ans: Buying Journey Map/Building in Public/Feedback forms/Pre-order Test/Questionnaire/User Interview/Prototyping/User Persona Analysis/UX Testing (ANY TWO)	1	1	1
e)	Give the meaning of AI inside. Ans: AI inside deals with the integration of AI that's embedded into operations. The ultimate goal is to help inform or even automate decision-making.	1	1	2
f)	Write an example to show the creative capability of AI. Ans: Any one example like, GPT generating the poetry, short-stories, etc.	1	1	2
g)	How does AI help in software development? Ans: Automated code generation/Testing/etc. (ANY TWO)	2	1	2

PART B – Scheme and Solutions		M	BT	CO
1	In effectively implementing artificial intelligence (AI) within an organization, leadership is pivotal in guiding the strategic direction and ensuring successful adoption. As a leadership team member, how would you outline five strategic approaches to implement AI within the organization effectively? (Each strategy should be written in two to three lines) Ans: Example Strategies ANY FIVE (2M X 5)	10	2	4

	<ul style="list-style-type: none"> a. Creating an AI-vision and product strategies b. Education and training of employees c. Creating pilot projects d. Feedback systems from stakeholders e. Continuous Evaluation of the impact created 			
2	<p>a. Google Photos faced backlash when its AI mistakenly labeled African American individuals as "gorillas" in photo-tagging features.</p> <p>b. A new streaming platform called StreamNow is set to debut. It specializes in a wide range of movies and TV shows from various genres. It aims to deliver captivating and tailored recommendations to users right after signup, even without any previous interaction data.</p> <p>What are your thoughts on whether the abovementioned services should have been taken to prevent product failures (List three key points for each)?</p> <p>Ans:</p> <ul style="list-style-type: none"> a. Bias in training data/Improper understanding of the context/Incomplete testing (5M) b. Lack of accurate recommendations for personalization/ Loading with choices/Limited content/etc. (5M) 	10	3	4
3	<p>Examine the use of artificial intelligence (AI) in the scenarios below and classify them as embedded AI, ethical AI, creative AI, or autonomous AI.</p> <ul style="list-style-type: none"> a. Financial fraud detection b. Autonomous vehicles responding to emergencies c. Scriptwriting in film production d. Agricultural drones <p>Ans: (2.5M x 4)</p> <ul style="list-style-type: none"> a. Embedded AI: Involves monitoring the transactions to identify the patterns of fraudulent activities. b. Autonomous AI + Ethical AI: Real-time decision-making for the changed context c. Creative AI: Generating the creative content d. Embedded AI + Autonomous AI: Integrated with the agricultural process and also can be unmanned vehicles 	10	3	3
4	<p>a. The product strategy is a high-level plan that describes what the company hopes to accomplish with its products and the steps to achieve that. Write a five-step product strategy lifecycle framework.</p> <p>Ans: 4M</p> <pre> graph LR 1[1.Product Visioning] --> 2[2.Product Discovery] 2 --> 3[3.Product Requirements Analysis] 3 --> 4[4.Product Prioritization] 4 --> Roadmap[Roadmap] Roadmap --> 5[5.Roadmap Efficacy Evaluation] 5 --> 1 </pre> <p>b. Tesla, Inc., an innovative company in the automotive and energy sectors, aims to accelerate the world's transition to sustainable energy through electric vehicles, renewable energy products, and energy storage solutions. How is Tesla Inc. leveraging artificial intelligence to enhance its product strategy and improve its customer experience?</p>	4+6	3	3

Ans: ANY THREE FEATURES DISCUSSION (2M x 3)

1. Autopilot Feature: This feature uses advanced AI algorithms and Neural Networks to interpret data from various sensors and cameras, enabling self-driving capabilities.
2. Personalization: AI is used to provide more personalized experiences to users, by analyzing their driving habits and preferences
3. Virtual assistants: To interact with the users more naturally, and enable the voice command execution

a. Write the SETDA framework to discover AI outcomes.

Ans: 4M

Outcome	SENSE (Perception)	EXPLAIN (Description)	THINK (Insights)	DECIDE (Decisions)	ACTION (Automation)
Generate Revenue & New Business Models	ID Verification	Summarize Contributing Factors of Failed Sales	Predict Churn Predict Revenue	Optimize Investment Portfolio	Buy and Sell Stocks bots
Operational Efficiency	Monitor overproduction	Summarize Wasted material	Predict Estimated Time of Arrival Of goods Predict Remaining Useful Life	Optimize Production Schedule	Assembly robots Automated Forklifts
Risk Reduction	Monitor Security Catching Fraud	Analyze Root Cause of accident	Predict Machine Breakdown Predict Default Loan	Optimize Maintenance Schedule	Fire extinguisher robots

- b. Several successful AI applications have embraced elements of the *building in public* methodology, involving their audiences and potential customers throughout the development process. By considering one such application, write three key features supporting the above statement.

Ans: Students can choose any product of their choice to answer, for example, ChatGPT, Github, Discord, Microsoft Designer, etc. **(ANY THREE FEATURES X 2M)**