


Name:			
Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, December 2023			
Course: Application Domains of AI Program: BCA Course Code: CSAI 3016		Semester: V Time: 03 hrs. Max. Marks: 100	
Instructions: Attempt all questions.			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	Explain the concept of bias in AI, and provide a brief example of how bias can impact AI systems in real-world scenarios.	4	CO1
Q2	Provide an example of a specific fraud detection technique and its impact on enhancing security and minimizing financial losses in banks and financial institutions.	4	CO2
Q3	How can media owners leverage AI to make informed business decisions?	4	CO3
Q4	Mention any two applications of AI in data security.	4	CO2
Q5	If you are starting a new business, how Will you use AI to promote your business?	4	CO1
SECTION B (4Qx10M= 40 Marks)			
Q 6	Discuss the role of analytics in enabling smart governance and effective management of education programs for pupils.	10	CO2
Q 7	Explain PEAS in AI. Write PEAS model for a) Automated car drive and b) Subject tutoring.	10	CO1
Q8	Examine the transformative role of analytics and artificial intelligence (AI) in the communication, media, and entertainment industry.	10	CO3
Q 9	Discuss the role and impact of IBM Watson in the healthcare industry. Provide examples of how Watson's AI capabilities are being utilized to improve patient care, diagnosis, treatment planning, and research.	10	CO3
SECTION-C (2Qx20M=40 Marks)			
Q 10	XYZ Bank, a leading financial institution, has recently implemented artificial intelligence (AI) solutions in various aspects of its operations. The bank has integrated AI-powered chatbots for customer service and utilized machine learning algorithms for credit risk assessment. These AI initiatives were aimed at enhancing customer experiences, improving efficiency, and managing risks effectively.	10+ 10= (20)	CO2

	<p>a) How has the implementation of AI in customer service affected XYZ Bank's operations, and what are the benefits and challenges associated with AI-powered chatbots?</p> <p>b) Discuss how AI-based credit risk assessment has impacted XYZ Bank's lending practices. What are the advantages and potential risks associated with using machine learning algorithms for credit risk analysis?</p>		
Q 11	<p>In higher education, AI is employed to streamline the grading and assessment process. Professors and instructors use AI-powered grading tools that can automatically evaluate and provide feedback on assignments, essays, and exams. These tools leverage natural language processing and machine learning to assess the quality of written work, provide constructive feedback, and ensure grading consistency.</p> <p>a) How does the implementation of AI-enhanced grading and assessment tools benefit both educators and students in higher education? Discuss the efficiency, consistency, and potential time-saving advantages of such AI applications.</p> <p>b) What are the concerns and limitations associated with AI-assisted grading systems in education? Are there situations where human grading is still preferable?</p>	20	CO1
	OR		
Q 11	<p>In the media and entertainment industry, streaming platforms like Netflix and Spotify employ AI-based content recommendation systems to enhance user experience. These systems utilize machine learning algorithms to analyze user behavior, including viewing or listening habits, genre preferences, and historical data. They then provide personalized content recommendations, such as movies, TV shows, or music playlists, to keep users engaged and satisfied.</p> <p>a. How does AI-powered content recommendation benefit both streaming platforms and users in the media and entertainment industry? Provide examples of how AI-driven recommendations have improved user engagement and content consumption.</p> <p>b. What are the privacy and ethical concerns related to the use of AI in content recommendation systems? How can media and entertainment companies address these concerns while still delivering personalized experiences to users?</p>		