

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2023****Subject Code:3174203****Date:06-12-2023****Subject Name: AI in HealthCare & Fintech****Time: 10:30 AM TO 01:00 PM****Total Marks:70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) Define: GPU & TPU.	03
	(b) Explain various considerations for Unintended Consequences of Artificial Intelligence in health care in detail.	04
	(c) State and explain various applications of AI in health care detail.	07
Q.2	(a) State different roles in AI in future health.	03
	(b) How is language and conversation used as an individual function in AI in healthcare?	04
	(c) What are various applications of AI in non-health care systems. Explain any two in detail.	07
	OR	
	(c) Explain in detail various AI solutions for Patients and Families.	07
Q.3	(a) What is mean by correlation and prediction.	03
	(b) Explain Gartner Hype cycle in detail.	04
	(c) How could Improper AI hurt Patients and the Health System explain it with suitable examples.	07
	OR	
Q.3	(a) What is learning algorithm and model validation?	03
	(b) Explain in detail machine learning model training with suitable example.	04
	(c) Describe the framework and criteria for AI selection and implementation in Clinical Care in detail.	07
Q.4	(a) Explain how to select metrics for model performance.	03
	(b) Explain FinTech and its relationship with AI in the context of deposits and lending.	04
	(c) Explain in detail applications of AI in clinical care delivery.	07
	OR	
Q.4	(a) State AI approaches in capital markets. What are the key applications of AI in this domain?	03
	(b) Explain the role of AI in the lending industry. How does AI impact the lending process?	04
	(c) Describe the implications of AI in environmental, social, and governance (ESG) investing. How can AI improve ESG analysis?	07
Q.5	(a) What is Credit Assessment?	03
	(b) How can regulatory bodies and industry stakeholders promote responsible AI use in capital markets?	04

- (c) Discuss the significance of alternative data sources in capital markets. **07**
How can AI help analyze and leverage alternative data?

OR

- Q.5** (a) List the benefits to businesses that adopt AI in finance. **03**
(b) Explain how chatbots are leveraged in the banking industry to enhance customer service. **04**
(c) Explain the concept of "compliance as an outcome" in the financial industry. How can AI contribute to achieving compliance goals? **07**
