

Maharshi Karve Stree Shikshan Samstha's

Smt. Hiraben Nanavati Institute of Management & Research for Women

INTERNAL EXAMINATION – Sem IV – ( Jan- July 2026)

SUBJECT – Generative AI for Business Applications

CODE – 408 BA

Date : 12-05-2026

Pattern : 2024

Duration : 150 min

Max Marks : 50

Instructions for students :

- Marks are indicated for each question.
  - Handwriting should be eligible for evaluation.
  - Marks will be given for quality, not quantity.
- 

**SECTION A — Short Answer Questions (Attempt any 5 out of 7) [5 × 2 = 10 Marks]**

**Q1.** Define Generative AI. How does it differ from Predictive AI? [2 Marks]

**Q2.** What is a Large Language Model (LLM)? Name any two widely-used LLMs in the industry. [2 Marks]

**Q3.** Briefly explain the role of Transformers in Generative AI. [2 Marks]

**Q4.** What is the purpose of the MCP (Model Context Protocol) in agentic AI workflows? [2 Marks]

**Q5.** State any two ethical concerns associated with the use of Generative AI in business. [2 Marks]

**Q6.** What is Retrieval-Augmented Generation (RAG)? Mention one business scenario where it is useful. [2 Marks]

**Q7.** Name any two open-source Generative AI platforms and briefly describe what each is used for. [2 Marks]

---

**SECTION B — Medium Answer Questions (Attempt any 5 out of 7) [5 × 4 = 20 Marks]**

**Q8.** Explain the concept of Generative Adversarial Networks (GANs). How can they be applied in a retail business context? [4 Marks]

**Q9.** Describe how AI-driven personalization and dynamic pricing work in e-commerce. Illustrate with an example. [4 Marks]

**Q10.** What is synthetic data generation? How does it help in business analytics and decision-making? [4 Marks]

**Q11.** Discuss the significance of AI chatbots and conversational AI in pre-sales and customer support. What is the role of NLP in this context? **[4 Marks]**

**Q12.** Explain how Generative AI can assist in product design and market research. Provide relevant examples from any one industry. **[4 Marks]**

**Q13.** What are the key regulatory frameworks (GDPR, HIPAA, CCPA) relevant to Generative AI in business? Why is compliance important? **[4 Marks]**

**Q14.** How can AI enhance business intelligence through automated dashboards, report writing, and scenario planning? Explain with a use case. **[4 Marks]**

---

**SECTION C — Long Answer Questions (Attempt any 2 out of 4) [2 × 10 = 20 Marks]**

**Q15.** Trace the evolution of Artificial Intelligence from rule-based systems to modern Generative AI. In your answer, discuss the role of key technologies such as LLMs, GANs, and Transformers. Explain how tools like ChatGPT, DALL·E, Claude, and Midjourney represent the current state of the art, and describe three real-world business use cases across different industries (e.g., retail, banking, healthcare, or education). **[10 Marks]**

**Q16.** Generative AI is reshaping the landscape of sales and marketing. With reference to AI-driven content generation, personalization, customer journey mapping, and conversational agents, discuss how businesses in the e-commerce and financial services sectors are leveraging Generative AI. Include the role of multimodal multi-turn models and planning/execution AI agents in this transformation, and evaluate both the opportunities and challenges faced by organizations. **[10 Marks]**

**Q17.** Critically analyze the ethical, legal, and strategic dimensions of deploying Generative AI in an organization. Your answer should cover AI bias, fake content risks, copyright concerns, relevant regulations (GDPR, HIPAA, CCPA), responsible AI practices, and the concept of explainability (SHAP, LIME). Also discuss the steps an organization must take to build an AI-ready culture and align AI initiatives with broader business goals. **[10 Marks]**

**Q18.** Design an AI-enabled solution for a business of your choice (e.g., healthcare, hospitality, HR, or finance) that integrates Generative AI capabilities for at least three of the following: data preparation, automated customer support, sentiment detection, forecasting, report generation, or employee upskilling. Justify your design decisions, outline the expected impact on productivity and decision-making, and identify potential risks along with mitigation strategies. **[10 Marks]**

---

\*\*\*