18047

BRAINWARE UNIVERSITY

Term End Examination 2025-2026
Programme – MCA-2024
Course Name – MOOC-Generative AI for Everyday Life
Course Code - MCA30302C
(Semester III)

Full Marks : 70 **Time : 3:0 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question) 1 x 15=15

1. *Choose the correct alternative from the following :*

(i) Determine which model generates text-based content similar to human writing

a) GPT b) DALL-E
c) Jukebox d) StyleGAN

(ii) Explain what a discriminator does in a GAN model

a) Generates content b) Optimizes learning
c) Evaluates authenticity d) Creates images

(iii) Identify the technology revolutionizing personalized learning in education

a) Neural networks b) Generative AI
c) Blockchain d) IoT

(iv) Analyze which principle of Generative AI enables predicting the next data sequence

a) Optimization b) Probabilistic Modeling
c) Data Encoding d) Deep Learning

(v) Illustrate how DALL-E bridges the gap between language and visual art

a) Language and music b) Language and visual art
c) Music and videos d) Text and code

(vi) Evaluate the main innovation introduced by GPT-4 in ChatGPT

a) Increased parameters to 10 billion b) Introduction of multi-modal capabilities
c) Integration with social media platforms d) Simplified user interface

(vii) Recall the year OpenAI introduced GPT-1

a) 2015 b) 2018
c) 2020 d) 2021

(viii) Assess a potential challenge associated with using AI technologies like Gemini

a) Over-reliance on physical resources b) Ineffective learning algorithms
c) Data privacy and bias d) Lack of user interest

(ix) Identify the primary goal of prompt engineering

a) To generate random AI responses | b) To structure AI inputs for better output quality
c) To avoid user customization | d) To reduce AI response length

(x) Identify which of the following is NOT a key element of an effective prompt
a) Clarity | b) Complexity
c) Context | d) Specificity

(xi) Illustrate an example of a refined prompt
a) Explain artificial intelligence in 200 words with examples from healthcare and education. | b) Explain artificial intelligence.
c) Write a summary of AI without any details. | d) Tell me about AI.

(xii) Identify a common challenge in prompt engineering
a) AI refusing to answer questions | b) AI always generating the perfect response in one attempt
c) AI responding too quickly | d) Overloading prompts with excessive details

(xiii) Assess which ethical concern is associated with AI for proposal writing
a) AI does not help with proposal development | b) AI generates proposals too quickly
c) AI may compromise data security and confidentiality | d) AI cannot write in a professional tone

(xiv) Assess an ethical concern when using AI for presentation content
a) AI-generated slides may contain biases or inaccuracies | b) AI always produces completely accurate results
c) AI replaces the need for ethical considerations | d) AI can function without any human intervention

(xv) Determine how AI-generated visual content can be refined for better accuracy
a) By iterating and refining the prompts | b) By accepting AI-generated content without review
c) By avoiding specific design elements | d) By limiting AI usage to only text-based presentations

Group-B

(Short Answer Type Questions) 3 x 10=30

2. Define Generative AI and describe its main functionalities. (3)
3. Discuss one ethical concern when using AI in content creation. (3)
4. Differentiate between AI-powered chatbots and traditional customer support systems. (3)
5. Describe the attention mechanism in transformers. (3)
6. Explain how AI assists in generating meeting minutes efficiently. (3)
7. Write a prompt for drafting a personalized email campaign for an online store. (3)
8. Calculate basic performance metrics for AI-generated content (e.g., relevance or accuracy scores). (3)
9. Analyze the workflow of AI in optimizing YouTube video titles and thumbnails. (3)
10. Evaluate potential biases in AI-generated summaries and propose mitigation strategies. (3)
11. Write a prompt to generate a formal letter of complaint based on a given scenario. (3)

OR

Write a prompt to generate educational content explaining photosynthesis to high school students. (3)

Group-C

(Long Answer Type Questions) 5 x 5=25

12. State the main functions of AI in daily applications (5)

13. Evaluate the major challenges faced in implementing Generative AI systems and propose potential solutions. (5)
14. Critically assess challenges in real-world applications of prompt engineering and formulate mitigation strategies. (5)
15. Formulate a comprehensive project plan that integrates generative AI tools, optimized prompts, and ethical guidelines for a real-world application. (5)
16. Create a system using AI to continuously monitor and refine keywords and hashtags for dynamic audience targeting. (5)

OR

Design a comprehensive content campaign using AI-generated titles, descriptions, keywords, and hashtags to maximize reach and engagement. (5)

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