

SAQs:

1. Define "Chain-of-Thought" (CoT) prompting.
2. What is the role of an API (Application Programming Interface) in building an automation workflow?
3. Why is learning Generative AI important for today's students and professionals? Mention at least two benefits.
4. Define Prompt Engineering and state its main purpose.
5. What is the difference between a zero-shot prompt and a few-shot prompt?
6. Define a Large Language Model (LLM) and state two of its capabilities.
7. Explain the three keywords in the Large Language Model (LLM).
8. Why is an LLM sometimes compared to a Superintelligent Human?
9. What is n8n, and what is its main purpose in building automation workflows?
10. In the context of content automation, what is a "workflow"?
11. What are the three key components of Large Language Models (LLMs), and how do they demonstrate Superintelligent capabilities?
12. How do LLMs process and transform text inputs into meaningful outputs? Explain with examples.
13. What are the main types of Generative AI content? Give examples.
14. What is a "prompt" in the context of Large Language Models?
15. Explain the concept of "few-shot prompting" with a clear example.
16. Name any two Image Generation tools and their primary use cases.
17. What is the use of Search (Web Browsing) in Generative AI?
18. What is meant by Deep Research in Generative AI capabilities?
19. What is "workflow automation" and why is it useful?
20. In the AI News Summarizer workflow, what is the function of an RSS feed URL?

LAQs:

1. A) Explain with examples how Swiggy uses Generative AI to improve food ordering and personalization.  
B) Tabulate the advantages and disadvantages of Open-source vs Proprietary models with suitable examples.
2. Discuss the potential challenges and limitations of relying heavily on AI tools for productivity. How can these challenges be mitigated?
3. List down key steps and explain sub-steps required to build an automated workflow for posting content to a social media platform like LinkedIn using a tool like n8n.
4. Draw and label the architecture of the "AI News Summarizer" workflow with components architecture (2 RSS Read nodes as sources for AI news and other broader Tech News and a MERGE Node). Briefly explain the role of each component, from fetching the news articles to generate the final summary to be mailed to GMAIL.
5. Imagine you need to generate a detailed study plan for your final exams using an AI tool. Write a comprehensive prompt for this task, following RCAFT Framework for the desired output.
6. Explain how Hugging Face is shaping the open-source AI ecosystem with its models, datasets, and community. Write a note on the Hugging Face ecosystem and its importance in democratizing AI.
7. A) Describe the process of using few-shot prompting to teach an AI a new, specific Task, such as classifying customer feedback into "Positive," "Negative," and "Neutral" categories. Provide a clear example of the prompt structure.  
B) What are LLM Limitations and explain one mitigation tactic.
8. Describe the types of workflow testing and list down common issues you may encounter while creating an AI Workflow for Social Media Content Automation.
9. What are RSS Feeds and what kind of live information we may NOT get using them?
10. Imagine a 22-year-old college student is planning their first solo trip. They have a budget of ₹20,000, 10 days to travel in June, and are interested in both outdoor activities and local cultural experiences. The student is adventurous but also concerned about safety. Using this information, draft a complete RCAFT-style prompt that instructs AI to generate:  
Two suitable travel destinations,  
A detailed 10-day itinerary for each (including cultural, outdoor, and relaxation activities),  
Cost breakdowns, safety tips, and pros/cons for each destination.

11. A) Explain with examples how Amazon applies Generative AI in e-commerce.  
B) Compare the capabilities of GPT, Claude, and Gemini in terms of strengths and usage.
12. Compare and contrast "Prompt Engineering Fundamentals" with "Advanced Prompt Engineering." What key skills or techniques differentiate the advanced level from the fundamental one?
13. Draw and label the architecture required to build an automated workflow for posting content to social media platforms like LinkedIn and X (formerly Twitter) using a tool like n8n.
14. Explain Common Scheduling Options and steps of Time Based Scheduling.
15. (a) Explain any three limitations of Stable Diffusion when used on cloud platforms such as Kaggle.  
(b) Differentiate between Ngrok and AUTOMATIC1111
16. A) Explain with examples how Spotify leverages Generative AI to enhance music recommendations and playlist creation.  
B) Discuss the limitations of Generative AI in customer experience personalization across industries.
17. Why separate data from instructions in a prompt? Create a reusable prompt template and that can be reused with different data each time.
18. Give a step by step process of adding a Google Sheets trigger in n8n if you had to create an AI workflow for automation to fetch news articles from a sheet. Also mention 2 other Google APIs where we can follow a similar process.
19. Explain the primary benefits and potential drawbacks of using AI to generate code snippets for a software development project.
20. Discuss how AI image generation is being applied in various industries with suitable examples.