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NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA
(An Autonomous Institute Affiliated to AKTU, Lucknow)

B.Tech

SEM: II - THEORY EXAMINATION (2025- 2026)

Subject: Prompt Engineering and Automation Tools

Time: 2 Hours

Max. Marks: 50

General Instructions:

IMP: Verify that you have received the question paper with the correct course, code, branch etc.

1. This Question paper comprises of **three Sections -A, B, & C**. It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.
2. Maximum marks for each question are indicated on right -hand side of each question.
3. Illustrate your answers with neat sketches wherever necessary.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.
6. No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.

SECTION-A

15

1. Attempt all parts:-

- | | | |
|-------|---|---|
| (1.1) | Narrow AI is designed for:[CO1][K2] | 1 |
| | <ul style="list-style-type: none"> (a) Space exploration only (b) One specific task (c) Human emotions (d) Universal reasoning | |
| (1.2) | DALL·E 3 is primarily used for:[CO2][K1] | 1 |
| | <ul style="list-style-type: none"> (a) Networking (b) Coding (c) Image generation (d) Spreadsheet cleaning | |
| (1.3) | Edge computing provides:[CO3][K2] | 1 |
| | <ul style="list-style-type: none"> (a) High latency (b) Unlimited cloud storage (c) Manual debugging (d) Real-time processing | |
| (1.4) | Google Gemini in Docs assists in:[CO4][K2] | 1 |
| | <ul style="list-style-type: none"> (a) Writing and summarisation (b) Hardware testing (c) Antivirus scanning (d) Sensor calibration | |
| (1.5) | Summarisation prompts should specify:[CO4][K3] | 1 |

- (a) All of these
- (b) Output format
- (c) Constraints
- (d) Number of bullet points

2. Attempt all parts:-

- | | | |
|-------|--|---|
| (2.1) | Explain the concept of Prompt Types briefly. [CO1][K2] | 2 |
| (2.2) | Mention two advantages of Claude. [CO2][K1] | 2 |
| (2.3) | Describe the importance of Automation in modern systems. [CO3][K2] | 2 |
| (2.4) | Describe the importance of Monitoring Prompts in modern systems. [CO3][K2] | 2 |
| (2.5) | Mention two advantages of Copilot. [CO4][K1] | 2 |

SECTION-B

15

3. Answer any three of the following:-

- | | | |
|-------|---|---|
| (3.1) | Analyse the advantages and limitations of Hallucination with examples. [CO1][K4] | 5 |
| (3.2) | Analyse the advantages and limitations of No-Code Tools with examples. [CO2][K4] | 5 |
| (3.3) | Discuss the practical applications and future scope of Image Generation. [CO2][K5] | 5 |
| (3.4) | Create a complete workflow demonstrating the use of Cisco Packet Tracer. [CO3][K6] | 5 |
| (3.5) | Analyse the advantages and limitations of Spreadsheet Automation with examples. [CO4][K4] | 5 |

SECTION-C

20

4. Answer any five of the following:-

- | | | |
|-------|---|---|
| (4.1) | Discuss the significance of Generative AI in practical environments. [CO1][K4] | 4 |
| (4.2) | Explain the working principle of Prompt Engineering with suitable examples. [CO1][K2] | 4 |
| (4.3) | Discuss the significance of Image Generation in practical environments. [CO2][K4] | 4 |
| (4.4) | Analyze the role of AI and Automation in academic and professional workflows. [CO2][K4] | 4 |
| (4.5) | Discuss the significance of Tinkercad in practical environments. [CO3][K4] | 4 |
| (4.6) | Demonstrate an application of Simulation in a real-world scenario. [CO3][K3] | 4 |
| (4.7) | Explain the working principle of MS Word AI with suitable examples. [CO4][K2] | 4 |
| (4.8) | Analyse the role of Spreadsheet Automation in AI-based applications. [CO4][K4] | 4 |