

KOTHARI INTERNATIONAL SCHOOL, NOIDA
COMPARTMENT EXAMINATION, SESSION: 2024-25
GRADE: 9 SUBJECT: ARTIFICIAL INTELLIGENCE (417)
SET C

DAY & DATE: MONDAY- MARCH 17, 2025

MAXIMUM MARKS: 50

NAME: _____

TIME ALLOTTED: 2 HOURS

ROLL NO: _____

GENERAL INSTRUCTIONS:

- i). This question paper consists of 21 questions in two sections: Section A and Section B*
- ii). Section A has objective type questions, whereas Section B contains Subjective type questions.*
- iii). Out of the given (5 + 16 =) 21 questions, a candidate has to answer (5 + 10 =) 15 questions in the allotted (maximum) time of 3 hours.*
- iv). All questions of a particular section must be attempted in the correct order.*

SECTION – A

1. Answer any 4 out of the 6 questions.

- i.** Choose the correct example for oral communication **(1)**

 - (a) Reports
 - (b) Newspapers
 - (c) Face to face conversation
 - (d) Notes
- ii.** Which of the following is not a quality of self-confident people? **(1)**

 - (a) Self-belief
 - (b) Hardwork
 - (c) Commitment
 - (d) Procrastination
- iii.** What does spam refer to in emails? **(1)**

 - (a) Important emails
 - (b) Sent emails
 - (c) Deleted emails
 - (d) Junk emails
- iv.** Which of the following is an example of a startup business? **(1)**

- (a) A multinational corporation
- (b) A newly established online store
- (c) A govt organization
- (d) NGO

- v. What is self-management? (1)
- (a) Controlling others and behavior
 - (b) Managing your own emotions, time, and responsibilities
 - (c) Ignoring your responsibilities
 - (d) Delegating tasks to others
- vi. Which of the following is a renewable energy source? (1)
- (a) Coal
 - (b) Natural gas
 - (c) Solar energy
 - (d) Diesel

2. Answer any 5 out of the 6 questions.

- i. Artificial intelligence was first conceptualized by _____ (1)
- ii. Which of the following elements is not a part of sustainable development? (1)
- (a) Society
 - (b) Environment
 - (c) Ecology
 - (d) EcoSystem
- iii. Chatgpt is an example of _____ domain of AI. (1)
- iv. The term _____ refers to a system of principles and rules of conduct that govern an individual's acceptable behaviour and actions. (1)
- v. _____ is India's first largest AI based banking chatbot. (1)
- vi. Name the virtual assistant made by Microsoft? (1)

3. Answer any 5 out of the 6 questions.

- i. Which of the following terms refers to a process of exploring data to interpret some useful information? (1)

- (a) Data Acquisition
- (b) Problem Scoping
- (c) Data Exploration
- (d) Data Validation

ii. A predetermined approach is also known as **(1)**

- (a) Change driven approach
- (b) Flexible approach
- (c) Plan driven approach
- (d) Adaptive approach

iii. Which of the following options is not a feature of data visualisation technique? **(1)**

- (a) Easy
- (b) User friendly
- (c) Complex
- (d) Simple

iv. Which of the following options is true about rule-based systems? **(1)**

- (a) Static
- (b) Dynamic
- (c) Raw text
- (d) Summarized text

v. Is the given statement true or false? **(1)**

AI systems cannot beat the intelligence of human beings due to limited learning capabilities.

vi. Identify the correct representations in a system map **(1)**

- (a) Circles -> elements; arrowed lines -> relationship
- (b) Squares -> elements ; dotted lines -> relationship
- (c) Circles -> elements ; dotted lines -> relationship
- (d) Squares -> elements ; arrowed lines -> relationship

4. Answer any 5 out of the 6 questions.

i. Which of the following is not an example of data visualization? **(1)**

- (a) A summarized weather report
- (b) A network topology map
- (c) A webpage
- (d) A system map

- ii. Which of the following talks about context/ situation of the problem? (1)
(a) who
(b) where
(c) what
(d) why
- iii. _____ pays a crucial role in the decision making of AI systems. (1)
- iv. _____ is the practice of protecting digital information from unauthorized access corruption or theft (1)
(a)Data security
(b)Data literacy
(c)Data acquisition
(d)Data privacy
- v. What are the basic building blocks of qualitative data? (1)
(a) Individuals
(b) Units
(c) Categories
(d) Measurements
- vi. A Bar Graph is an example of? (1)
a. Textual
b. Tabular
c. Graphical
d. None of the above

5. Answer any 5 out of the given 6 questions.

- i. _____ is the practice of protecting digital information from unauthorized access, corruption, or theft throughout its entire lifecycle. (1)
(a) data security
(b) data literacy
(c) data privacy
(d) data acquisition
- ii. _____ relates to the manipulation of data to produce meaningful insights. (1)
(a) Data Processing
(b) Data Interpretation
(c) Data Analysis
(d) Data Presentation

- iii. Find the missing pattern from the following (1)
1, 4, 9, 16, _____
- iv. What is the probability of getting head when you toss a coin once? (1)
- (a) 0.75
(b) 1
(c) 0
(d) 0.5
- v. With one throw of a six sided dice , what is the probability of getting an odd number? (1)
- (a) 1/5
(b) 2/5
(c) 5/6
(d) 1/2
- vi Which of the following is NOT a strong password practice? (1)
- (a) Using a combination of uppercase, lowercase, numbers, and special characters
(b) Using your birthdate as your password
(c) Using a long password
(d) Regularly changing your password

Section – B
Answer any 3 out of the 5 questions.

6. Name two advantages of visual communication? (2)
7. Define self-management? (2)
8. Name four input devices? (2)
9. Mention two qualities of successful entrepreneur? (2)
10. Mention three steps to build self-confidence? (2)

Answer any 4 out of the given 6 questions.

- 11 What are the main ethical concerns related to the adoption of AI systems? (2)
- 12 Write any two applications of machine learning? (2)
- 13 What is data literacy? (2)

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| 14 | What is probability? | (2) |
| 15 | Mention few examples of how generative AI is used in various fields? | (2) |
| 16 | Differentiate between data processing and data interpretation? | (2) |

Answer any 3 out of the 5 given questions.

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| 17 | Explain about 4w's canvas with the example " how to eradicate poverty in India"? | (4) |
| 18 | Mention four do's and don'ts's for cyber security? | (4) |
| 19 | Differentiate between Artificial Intelligence, Machine Learning and Deep Learning? | (4) |
| 20 | How is maths used in AI? | (4) |
| 21 | What are the limitations of using generative AI? | (4) |