

Name: _____

Roll No: _____

Class: _____ Section: _____ Date: _____

Unit-1

CLASS 9

COMMUNICATION SKILLS-I



(i) Fill in the correct answers in the clouds. Two have already been done for you.

(ii) Explain each term in the clouds in brief.

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2. "Facial expressions are a very powerful way of conveying different forms of feelings and emotions." Justify this statement

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3. Match the following:

Column A

1. Apostrophe
2. Question mark
3. Capitalisation
4. Exclamation Mark
5. Proper Nouns
6. Full Stop
7. Phrases
8. Comma
9. Punctuation Marks

Column B

- a. Strong emotions
- b. Sentence clarity
- c. Word group
- d. Possession, omission
- e. Inquiry
- f. Uppercase letters
- g. End sentence
- h. Pause, list
- i. Names, places

SELF-MANAGEMENT SKILLS-I

1. Riya is usually confident and does well in her school projects. But after scoring low in one science test, she keeps telling herself, "I'm not smart enough." She avoids participating in competitions, feels nervous even when prepared, and starts comparing herself with others. What factors might be lowering Riya's self-confidence? Suggest any two ways she can rebuild it.

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2. State whether these statements are true or false.

- a. Self-confidence means trusting in your own abilities, qualities, and judgment.
- b. Self-awareness is the ability to manage your emotions and behavior.
- c. Problem solving involves identifying a problem and finding possible solutions to it.
- d. Cultural impact is shaped by traditions, religions, and surroundings.

3. Fill in the missing steps and arrange them in the correct order of handwashing. The first and last steps are given.

Step 1: Wet your hands with clean, running water (warm or cold).

Step 2:

Step 3:

Step 4: Right palm over left dorsum with interlaced fingers and vice versa.

Step 5:

Step 6:

Step 7:

Step 8:

Step 9: Rinse hands with water and dry with a single use towel.

Step 10: Use the towel to turn off the tap.

ICT SKILLS-I

1. Read the email written by a student named Riya Sharma. Identify and correct the formatting mistakes to structure the email properly.

To: Priya

From: riyasharma@gmail.com

Subject: Project

Hi,

the project file attached.

Riya

Cc: teacher

Bcc:

2. Explain the important components of a task bar.

3. Short Answer Questions:

a. What is Booting?

b. Define HDMI Port.

ENTREPRENEURIAL SKILLS-I

1. Short Answer Questions:

- a. What do you understand by Open to Trial and Error?

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- b. Is it important to gather feedback in the long run after starting a business?

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- c. Can a service be stored in a shop or warehouse? Justify your answer.

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2. Aanya started a small handmade crafts business but is struggling to grow it. She avoids taking risks, isn't open to new ideas, and lacks confidence. As her friend, how would you help Aanya become a successful entrepreneur?

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3. Correct the following statements:

- a. Risk-taking is not required in entrepreneurship; only good financial planning ensures success.

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- b. A businessman is always an entrepreneur as both follow the same approach and take equal risks.

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- c. Entrepreneurs always follow traditional business methods.

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- d. Building a team is not important in entrepreneurship.

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GREEN SKILLS-I

1. Priya was reading a newspaper headline which said, "With scientists all across the globe repeatedly warning about how our environment is being seriously damaged by our actions, it has become necessary for us to learn the importance of implementing Green Skills." She laughs it off, joking about it. Her friend, however, responds seriously, explaining why green skills are important.

Why do you think Priya's friend took the importance of green skills seriously? What role do green skills play in addressing environmental issues?

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2. Fill in the blanks:

- a. The loss of due to deforestation accelerates the increase in atmospheric CO₂ levels.
- b. The government of India launched the Green Skills Development Programme (GSDP) in India in the year
- c., often used in coolants, contribute to ozone depletion by releasing harmful substances into the atmosphere.

3. Identify the following images as the causes and effects of Global warming. Justify your answer.

a.



b.



c.



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AI REFLECTION, PROJECT CYCLE AND ETHICS

- A. Observe the image of a humanoid robot. How does it represent AI, and how does it differ from real AI applications?**



- B. A company wants to use AI to improve customer service using chatbots. However, customers are complaining that the chatbot does not understand emotions or complex queries. Identify the AI challenges in this scenario and suggest how the chatbot can be improved.**

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- C. Read the chatbot conversation below and answer the following questions:**

Chatbot: Hi! I can help you explore career options in AI and technology. What are you most interested in?

Student: I love solving math problems and coding!

Chatbot: That's great! Have you considered careers in Data Science, AI Development, or Software Engineering?

Student: What does an AI Developer do?

Chatbot: AI Developers create smart applications that learn from data and improve decision-making. Would you like to know the skills required?

Student: Yes, please!

Chatbot: You'll need skills in Python, Machine Learning, and Problem-Solving. Do you want to see learning resources?

Student: Yes!

1. How does the chatbot personalize career guidance based on the student's response?

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2. Identify the AI concepts used in the chatbot's responses.

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3. What improvements would you suggest to make the chatbot more interactive and helpful?

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DATA LITERACY**A. Give reasons for the following statements:**

1. We need to standardise date formats in a dataset.

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2. Handling duplicate data important for maintaining data integrity.

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3. Data Preprocessing an important step before analysis.

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B. A bank wants to prevent fraud using data literacy skills. What steps should they take?

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C. Predict how advancements in data interpretation will change decision-making in businesses.

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MATH FOR AI (STATISTICS & PROBABILITY)

A. How does AI analyse recurring patterns in images?

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B. Identify the category of probability events for the following examples:

1. Getting a prime number on rolling a six-sided die.

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2. Finding a book of Shakespeare in a library.

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3. Meeting an alien on Earth.

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4. Drawing a king from a deck of playing cards.

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C. Assertion based questions.

1. **Assertion (A):** Weather forecasts always provide 100% accurate predictions.

Reason (R): Probability is used to estimate the likelihood of weather events such as rain, wind, and snowfall based on historical and real-time data.

1. Both A and R are true, and R is the correct explanation of A.
2. Both A and R are true, but R is not the correct explanation of A.
3. A is true, but R is false.
4. A is false, but R is true.

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2. **Assertion (A):** Probability is not useful in traffic estimation.

Reason (R): People use probability to predict traffic conditions based on factors like time of day, weather, and location.

1. Both A and R are true, and R is the correct explanation of A.
2. Both A and R are true, but R is not the correct explanation of A.
3. A is true, but R is false.
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INTRODUCTION TO GENERATIVE AI**A. Classify the following as examples of supervised or unsupervised learning:**

1. Identifying spam emails based on past labeled data.

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2. Generating a realistic human face from random noise.

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3. Clustering customers based on purchasing behaviour.

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4. Predicting house prices based on historical data.

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B. You come across a viral social media post featuring an AI-generated video. How can you fact-check its credibility?

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C. Compare AI-generated images with real photographs. What key differences can you identify?

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Unit-5

CLASS 9

INTRODUCTION TO PYTHON

A. Answer the following questions in one or two words:

1. What is a collection of heterogeneous data arranged in a sequence known as?
2. Which function is used to add a single element with the given value at the end of the list?
3. Which loop is used to repeat a set of instructions as long as the condition is true?
4. Which statement is used to handle multiple conditions in a program?
5. Which kind of error is difficult to find since the program will run correctly but the desired output is not achieved?

B. Match the following:

- | | |
|----------------------------------|--|
| 1. Arithmetic operators | a. Compare the value on both sides of the operator. |
| 2. Relational operator | b. Used to combine one or more conditional statements. |
| 3. Logical operators | c. Used to perform mathematical operations. |
| 4. Assignment operator | d. Take the value of the operand on the right side, perform an operation and assign the result to the operand on the left. |
| 5. Augmented assignment operator | e. Used to assign a value to a variable or a constant. |

C. Long answer type questions.

1. What is the difference between relational and logical operators? Explain in detail with the help of an example.
2. What is the difference between for loop and while loop? Explain with the help of an example.
3. Write a Python code for the following:
 - a. Input Salary and Years of Service. If the number of years is more than 5 then give an extra bonus of 15%. Display the net salary after adding the bonus.
 - b. Swap the values of two variables using third variable.
 - c. Create a list with heterogeneous values and print the values which are only integer.