

SECTION A [30 MARKS]
ANSWER ALL QUESTIONS

Question 1

[20]

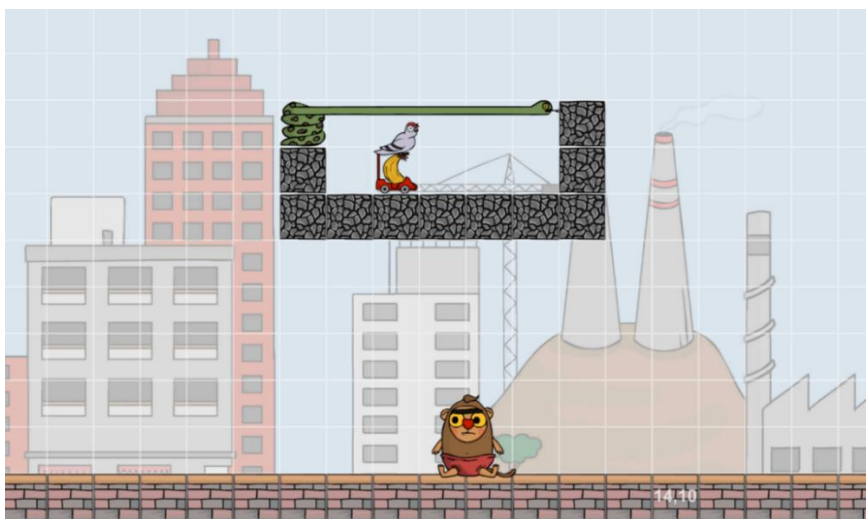
- a) For each question, there are **FOUR** responses: **A, B, C** and **D**. Choose the corresponding letter of your response and **CIRCLE** it neatly. **NO** score will be awarded if you circle more than **ONE** letter.
- i. You want to create a clickable link on Slide 2 that takes you directly to Slide 6 during your presentation. Which hyperlink option allows this action?
- A Email Address
 - B Create New Document
 - C Place in this Document
 - D Existing File or Webpage
- ii. Identify the function used to accept responses from the user.
- A `Input()`
 - B `Print()`
 - C `print()`
 - D `input()`
- iii. At which stage of the video-making process is video editing software commonly used?
- A Post-Production
 - B Pre-Production
 - C Production
 - D Distribution
- iv. How does an AI system identify an apple, an orange, and a banana based on their physical appearance?
- A By reading the fruit price.
 - B By using a barcode on each fruit.
 - C By randomly guessing which fruit it is.
 - D By analysing their colour, shape, and size.
- v. Your teacher noticed that you write good articles and has encouraged you to start blogging. What is the best way to do this?
- A Record a video reading your article.
 - B Make a digital poster with pictures and words.
 - C Write articles and upload them on a blogging site.
 - D Write articles in Microsoft Word or PowerPoint and save it.

- vi. Your friend has posted an opinion that you do not agree with. what would be the best way to comment on that post?
- A Share your opinion with kind words.
 - B Tell others to argue with your friend.
 - C Post something unrelated to distract others.
 - D Write negative comments to show your views.

- vii. What will be the output if the user enters 'Tashi' for the following code?

Line	Code
1	<code>name=input("Enter your name:")</code>
2	<code>print("Hello, "+name+"!")</code>

- A Hello Tashi!
 - B Hello, Tashi!
 - C Hello+ Tashi!
 - D Hello+ name!
- viii. Which of the following options best shows that you understand how to protect your digital footprint while using websites?
- A Use strong passwords and avoid clicking on unknown links.
 - B Only browse websites that look colourful and funny.
 - C Share your passwords only with friends you trust.
 - D Turn off your device frequently to stay safe.
- ix. You want to create a short story using generative AI. Which statement correctly explains how the AI helps you?
- A It copies a story from a book or website.
 - B It searches the Internet to find a story for you.
 - C It chooses an existing story from the online sources.
 - D It creates a new story using what it has learned from many stories.
- x. Study the given figure and choose the correct line of code to release the pigeon.



- A length.snake = 2
- B snake.length = 2
- C length.snake = 3
- D snake.length = 3

b) Complete the following statements with the most appropriate word(s).

[5]

i.	A transition is a special effect used when moving from one _____ to another in a presentation.	
ii.	The digital service in Bhutan that allows users to access G2C services without using their CID is _____.	
iii.	Sharing respectful, thoughtful, and resourceful content on the internet contributes to _____ online identity.	
iv.	In a class, the first parameter in any method is always declared as _____.	
v.	To ensure that AI systems are used fairly and respectfully in real-life, we must follow a set of rules known as _____.	

c) Write TRUE or FALSE for the following statements in the space provided in the 'Answer' column.

[5]

	Statements	Answer
i.	Writing a script before recording helps to plan the scenes, actions, and dialogues in the video.	
ii.	In Bhutan, G2C services are available only in government offices and cannot be accessed online.	
iii.	Deleting your browsing history removes the record of websites you have visited.	
iv.	Once a tuple is created, its items cannot be changed, added or removed.	
v.	Google Slides cannot open or edit the files created in Microsoft PowerPoint.	

SECTION B [50 MARKS]
ANSWER ALL THE QUESTIONS

Question 2

- a) Your teacher has asked you to use Google Slides instead of PowerPoint for a group presentation. Give any **TWO** reasons that support your teacher's suggestion. **[2]**

- b) Which platform would you use to share video online to reach a large audience? Why? **[2]**

- c) Using a `for` loop, rewrite the given code so that it performs the same task? **[2]**

Line	Code
1	<code>clouds[3][0]=None</code>
2	<code>clouds[3][1]=None</code>
3	<code>clouds[3][2]=None</code>
4	<code>clouds[3][3]=None</code>

d) How does the way you ask a question affect the answers you get from a language model like ChatGPT?

[2]

e) Both the codes given below take input from the user. How is the value stored in `height` different in Code A compared to Code B?

[2]

Code A	<code>height=input("Enter the giraffe's height:")</code>
Code B	<code>height=int(input("Enter the giraffe's height:"))</code>

Question 3

a) How does good lighting help you make better and interesting video clip? [2]

b) Explain any **TWO** ways to raise awareness about G2C services in your community? [2]

c) You are given two options to convey a message about online safety through a poster. [2]

Option A: "Share everything online, it does not matter what you share."

Option B: "Think before you share, protect your digital self."

Which option would be the best? Give **TWO** reasons to support your answer

- d) Create two variables named `number1` and `number2` to store values 7 and 8. Write a Python program to add these two numbers and print the result. [2]

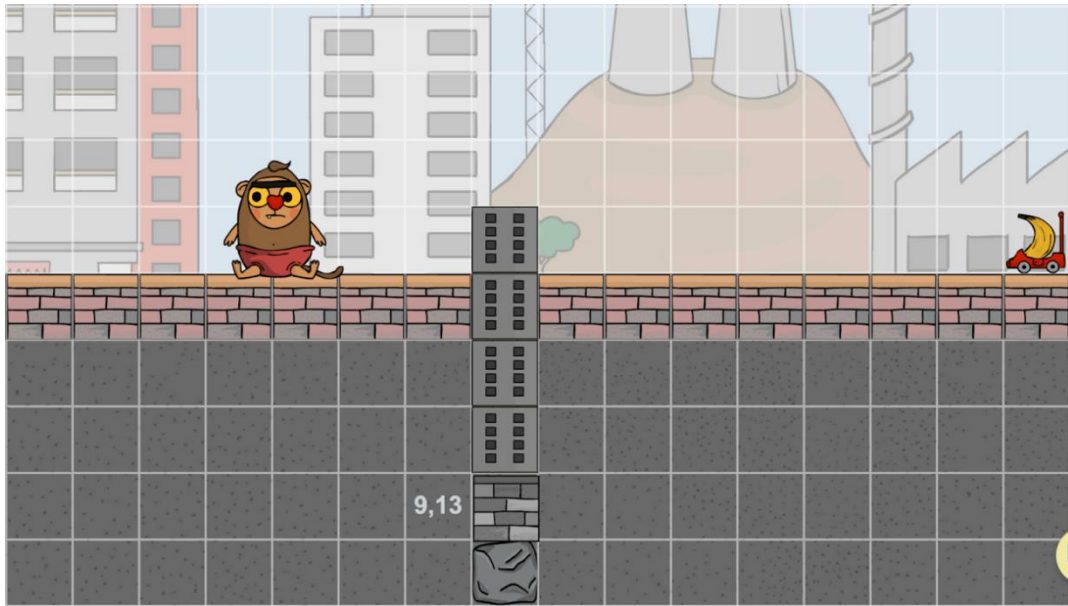
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- e) What is reinforcement learning in AI? Give **ONE** example. [2]

Question 4

- a) You want to send a video from your phone to a computer for editing. Name **ONE** method you could use to transfer the video. [1]

b) Study the figure and lines of code given below to answer the following questions.



Line	Code
1	<code>class Drill:</code>
2	<code>def __init__(self):</code>
3	<code>self.x = 9</code>
4	<code>self.y = 13</code>
5	<code>def drill_right(self):</code>
6	<code>self.x = self.x + 2</code>
7	<code>drill_1 = Drill()</code>
8	<code>drill_1.drill_right()</code>

i. Is it necessary to use the class name `Drill` to create an object? Why?

[2]

ii. Write the value of `x` after calling the `drill_right()` method.

[1]

c) Identify the errors and rewrite the correct lines of code.

i.

[1]

Line	Code
1	<code>odd_numbers = {1, 3, 5, 7, 9}</code>
2	<code>print(odd)</code>

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ii.

[1]

Line	Code
1	<code>student_info=["name": "Karma", "grade": "VIII"]</code>
2	<code>print(student_info)</code>

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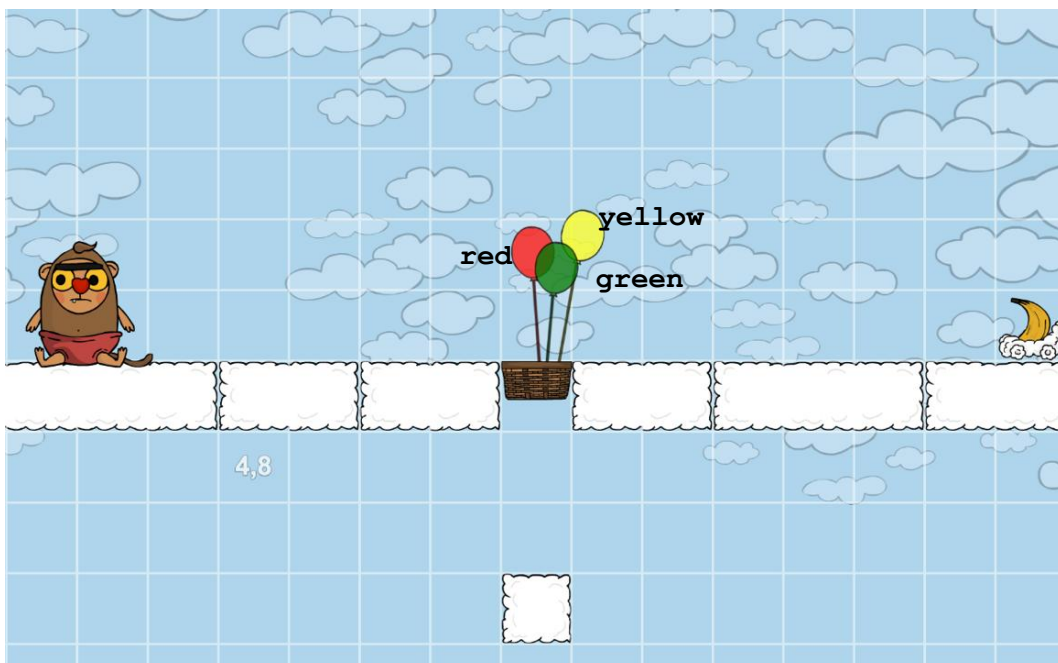
Question 5

a) How is AI's method of creating images different from that of human artist's?

[2]

b) Refer the lines of code and figure given below to answer the following questions.

Line	Code
1	<code>basket.balloon_colors.add("blue")</code>
2	<code># The balloon_colors is a set.</code>
3	<code>basket.balloon_colors.add("yellow")</code>
4	<code>basket.balloon_colors.add("yellow")</code>
5	<code>basket.balloon_colors.add("red")</code>
6	<code>basket.balloon_colors.add("green")</code>
7	<code>basket.balloon_colors.pop()</code>



- i. Why does only one yellow balloon appear in the basket although the colour “yellow” is added twice? **[1]**

- ii. How is `pop()` method different from `add()` method? **[1]**

- iii. How is code line 2 different from rest of the code, and how does it affect the program? **[2]**

Question 6

a) The following code contains an error in line 3.

[2]

Line	Code
1	password = "xyz"
2	gate_index = 2
3	print(password "is password of gate"+ gate_index)

Rewrite the code correctly using typecasting and evaluate how type casting fixes the error.

b) Refer the lines of code given below and answer the following questions.

Line	Code
1	new_colors = ('red', 'blue', 'green', 'purple', 'yellow')
2	print(new_colors)

i. What will be the output of the code.

[1]

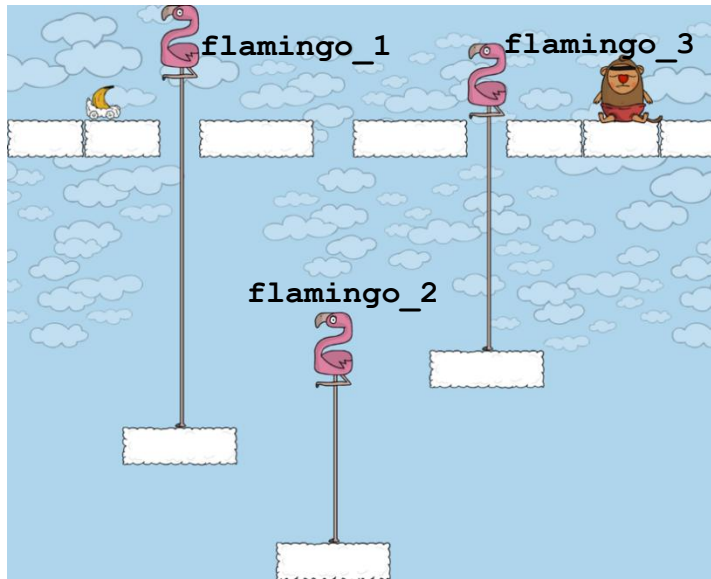
ii. What happens if quotation marks are not used in line 1, and why is it necessary? [2]

c) Why should we be careful when we see images that might be deepfakes? [1]

Question 7

a) Karma wants to share stories online but is unsure whether to use a blog or a vlog. Which would you recommend to Karma? Why? [2]

b) Study the figure given below and answer the following questions.



i. Write the code to arrange flamingos so that banana reaches the baby monkey. [2]

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ii. Write the code to create a list of flamingos and print flamingo_2. [2]

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Question 8

Read the algorithm below, which checks whether a student has passed or failed based on his or her marks.

Step	Algorithm
1	START
2	Enter the mark
3	Check if mark is greater or equal to 40
4	Display 'Pass'
5	Otherwise, display 'fail'
6	STOP/END

a) Draw a flowchart based on the above algorithm.

[3]

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b) Write a Python code for the above algorithm.

[3]

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