



**UNICUS  
OLYMPIADS**

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# Sample Paper



**Class 2**

## Unicus Artificial Intelligence Olympiad (UAIO)

Time: 60 minutes

Pattern and Marking Scheme			
Section	Total Questions	Marks per Question	Total Marks
Classic Section	20	1	20
Scholar Section	10	2	20
Grand Total	30		40

## Classic Section (Each Question is 1 Mark)

1. John just got a new desktop computer. He wants to type his name on the screen. Which part of the computer should he use?



- 
2. Kai notices that many things in his house have tiny computers inside them. Look at the picture. Which of these things does NOT have a computer inside it?



- 
3. A washing machine at home lets you press buttons to choose how to wash clothes. Which statement about this washing machine is correct?



- a. It has a tiny computer inside that follows the button commands
- b. It works only by magic with no computer parts at all
- c. It needs a person to pour water by hand each time
- d. It is the same as a simple bucket with no special parts

## Unicus Artificial Intelligence Olympiad (UAIO)

4. Liam is programming a toy robot to walk from his desk to the door. The robot can only follow step-by-step instructions. Which set of steps is in the right order?



- a. Stand up then walk then stop at the door  
b. Walk then stop at the door then stand up  
c. Stop at the door then stand up then walk  
d. Stand up then stop at the door then walk
- 

5. Step-by-step instructions are written to make a peanut butter sandwich for a robot. What is a set of step-by-step instructions called?

- a. A story  
b. A song  
c. A drawing  
d. An algorithm
- 

6. An algorithm is written for a robot to brush its teeth:

Step 1 -- Pick up the toothbrush.  
Step 2 -- \_\_\_\_\_.  
Step 3 -- Brush teeth.  
Step 4 -- Rinse mouth.

What is the missing step?

- a. Put toothpaste on the brush  
b. Put the toothbrush away  
c. Eat breakfast  
d. Go to sleep
- 

7. Look at the picture. Yuki gave her robot four steps to water a plant, but one step is in the wrong place. Which step should move?



- a. Step 1 should move after Step 3  
b. Step 3 should move before Step 2  
c. Step 3 should move before Step 1  
d. Step 4 should move before Step 2
-

## Unicus Artificial Intelligence Olympiad (UAIO)

8. Someone wants to ask a smart speaker to play a song. Put these steps in the right order:

- (P) The speaker finds the song,
- (Q) The person says the song name,
- (R) The speaker plays the song,
- (S) The person wakes the speaker by saying 'Hey speaker'.



- a. S then Q then P then R
- b. Q then S then R then P
- c. P then R then S then Q
- d. R then P then Q then S

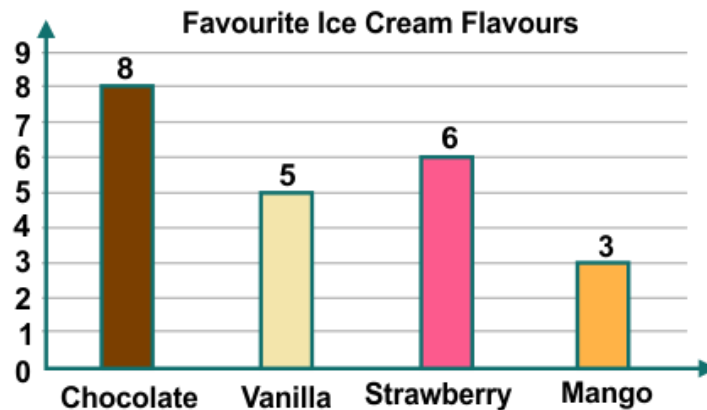
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9. A school conducts a survey to find out how many hours students spend watching television each day, and the responses are recorded. What is this recorded information called?

- a. A schedule
- b. An algorithm
- c. An instruction
- d. Data

---

10. Look at the bar chart. Jack made it to show the favourite ice cream flavours of his class. Which flavour do the most children like?



- a. Chocolate
- b. Vanilla
- c. Strawberry
- d. Mango

---

11. Mei wants to find out which colour of shoes is most popular in her class. What should she do first?

- a. Count the colours of shoes everyone is wearing
- b. Draw a picture of shoes
- c. Sing a song about shoes
- d. Read a storybook about shoes

## Unicus Artificial Intelligence Olympiad (UAIO)

12. Fill in the blank:

A phone unlocks when it sees a face. It can \_\_\_\_\_ the face and match it with the saved picture.

- a. forget
  - b. break
  - c. paint
  - d. recognize
- 

13. Study the image. A camera at the school gate shows students walking in. What is the camera trying to do?



- a. Take a photo for the school album
  - b. Count how many trees are nearby
  - c. Make funny drawings of students
  - d. Recognize the faces of the students
- 

14. Face unlock is used on a phone every day. Which of these statements about face unlock is correct?

- a. It looks at your face and matches it with a saved picture
  - b. It listens to your voice to open the phone
  - c. It reads your mind to know who you are
  - d. It opens for anyone who stands in front of it
- 

15. Amara looks at the sky before school. She asks herself: Is it cloudy?

If YES -> take an umbrella.  
If NO -> wear sunglasses.  
The sky is bright and sunny.

What should Amara do?

- a. Take an umbrella
  - b. Wear a raincoat
  - c. Stay home from school
  - d. Wear sunglasses
- 

16. What shape is used for asking a question in a flowchart?

- a. A circle
  - b. A square
  - c. A diamond
  - d. A star
-

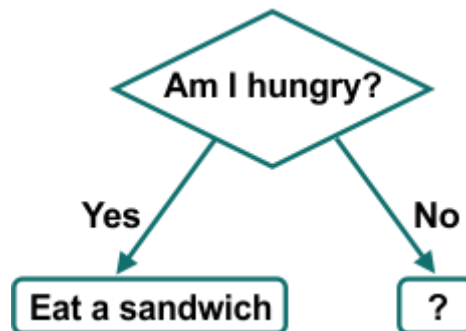
## Unicus Artificial Intelligence Olympiad (UAIO)

17. A flowchart is being made for deciding what to drink. Put these steps in the correct flowchart order:

- (P) Drink hot chocolate,
- (Q) Am I feeling cold?
- (R) Start,
- (S) Drink cold water.

- a. R then Q then P or S
- b. Q then R then S then P
- c. P then S then R then Q
- d. S then P then Q then R

18. Kofi drew a flowchart for choosing a snack. What should the NO path lead to?



- a. Eat two sandwiches
- b. Do not eat anything right now
- c. Cook a big meal
- d. Eat a sandwich anyway

19. Zara is using a smart photo app that automatically improves her pictures. She clicks a photo, and the app adjusts brightness and sharpness before showing the final image.

Match each action to who performs it:

- (1) Captures the photo
- (2) Improves the photo automatically

- a. 1-App and 2-Zara
- b. 1-Zara and 2-App
- c. 1-App and 2-App
- d. 1-Zara and 2-Zara

20. Rambo's father uses a map app on his phone that tells him the fastest road to reach the office. Which helper is working inside the map app?

- a. A paint helper
- b. A music helper
- c. A navigation AI helper
- d. A cooking helper

## Scholar Section (Each Question is 2 Marks)

21. Which of the following is an example of an AI helper in daily life?

- a. A notebook
- b. A smart speaker
- c. A pencil
- d. A wooden chair

## Unicus Artificial Intelligence Olympiad (UAIO)

22. Liam found three things on the kitchen table: a smartphone, a toaster with buttons, and a plain wooden spoon. He wants to sort them into two groups -- things with a computer inside and things without. Which grouping is correct?
- Smartphone and toaster together -- wooden spoon alone
  - All three together in one group
  - Smartphone alone -- toaster and spoon together
  - Wooden spoon and smartphone together -- toaster alone
- 

23. Maria wrote an algorithm for a robot to make orange juice:

- Cut the orange in half
- Take out an orange
- Squeeze the juice into a glass
- Drink the juice.

One step is in the wrong place. Which step should move?



- Step 1 should move after Step 3
  - Step 2 should move before Step 1
  - Step 4 should move before Step 3
  - Step 3 should move before Step 1
- 

24. Chris follows these steps every evening:

- If he feels hungry, he eats a snack.
- If he has a quiz the next day, he revises notes.
- If he feels hungry and has a quiz the next day, he sleeps 15 minutes later.

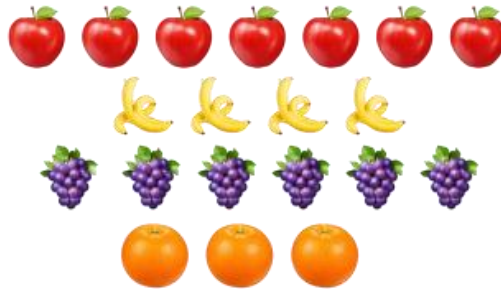
Today, Chris feels hungry and has a quiz the next day.

What will Chris do?

- Eat a snack and revise notes only
  - Eat a snack, revise notes, and sleep 15 minutes later
  - Only revise notes and sleep 15 minutes later
  - Only eat a snack and sleep 15 minutes later
-

## Unicus Artificial Intelligence Olympiad (UAIO)

25. Ingrid collected data on her classmates' favourite fruits. Look at the picture chart and how many more children chose Apple than Orange?



- a. 3 more children  
b. 2 more children  
c. 4 more children  
d. 5 more children
- 

26. John looks at a pattern of coloured beads:

He wants to figure out what comes next. Which bead completes the pattern?



- a.  b.   
c.  d. 
- 

27. A smart door lock uses fingerprint recognition to allow entry. It opened when the owner placed their finger but did NOT open when another person tried. Why did the lock remain closed for the other person?

- a. The sensor was temporarily inactive  
b. The lock opens only after multiple attempts  
c. The system required a password instead  
d. The fingerprint did not match the stored data
- 

28. Sven wants to teach a robot to sort apples and bananas into different baskets. What should the robot learn to recognize first?



## Unicus Artificial Intelligence Olympiad (UAIO)

- a. The weight of the baskets
- c. The name of the farmer

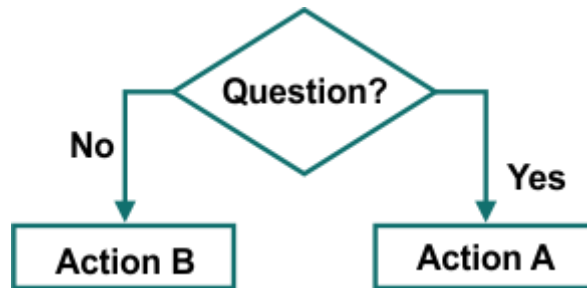
- b. The shape and colour of each fruit
- d. The price of each fruit

29. A smart study assistant helps a student decide what to do.

It first asks: "Have you completed your homework?"

- If the answer is Yes, it tells the student: "You can play games."
- If the answer is No, it tells the student: "Complete your homework first."

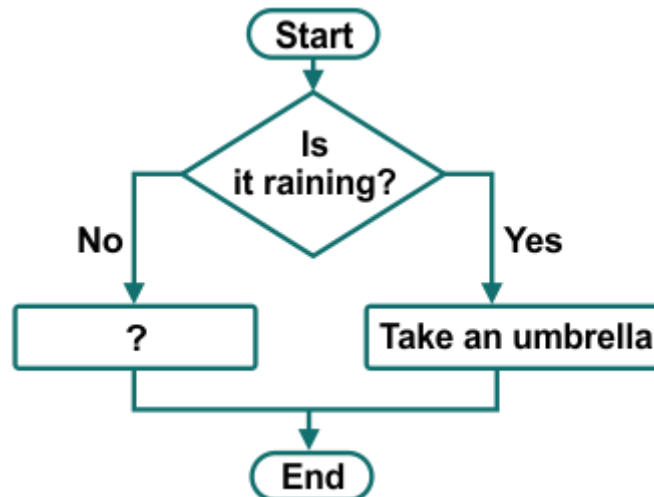
Which option correctly matches the flowchart shown?



- a. Action A → Complete homework, Action B → Play games
- b. Action A → Play games, Action B → Complete homework
- c. Action A → Do nothing, Action B → Play games
- d. Action A → Complete homework, Action B → Do nothing

30. Marco made a flowchart:

But he forgot the NO path. What should the NO path say?



- a. Take an umbrella anyway
- c. Go to school without an umbrella
- b. Go back to sleep and skip school
- d. Stay at the Start forever

## Answer Key

1.	d	2.	c	3.	a	4.	a	5.	d	6.	a	7.	b
8.	a	9.	d	10.	a	11.	a	12.	d	13.	d	14.	a
15.	d	16.	c	17.	a	18.	b	19.	b	20.	c	21.	b
22.	a	23.	b	24.	b	25.	c	26.	c	27.	d	28.	b
29.	b	30.	c										