



# Applaa UCAT Practice Mock 154

Mock Practice Exam Booklet

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# Instructions & Study Method

Welcome to your Applaa offline practice booklet. Please follow these guidelines to maximize your learning outcome:

- 1. Distraction-Free Practice:** Solve the multiple-choice questions in Section 1 under timed conditions. Do not look for shortcuts or answers until you are completely done.
- 2. Check & Submit Online:** We have intentionally excluded the answer key from this printout. To get your score, see worked solutions, and track your progress metrics, open: <https://applaa.com/practice/check?exam=ucat&paper;=154> on any browser. Bubble in your answers in our digital check sheet.
- 3. Learn with Appy Buddy (AI Socratic Tutor):** Applaa is a 100% ad-free educational space. Our online AI Tutor guides you step-by-step through questions you get wrong, showing you how to solve them rather than just giving you the answer.

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# Section 1: Practice Questions

## Question 1 — [Verbal Reasoning / true\_false\_cant\_tell]

Read the passage below and decide if the following statement is True, False, or Can't Tell based on the text.

Passage: In 2024, research conducted by researchers led by Dr. Marcus Vance at the Astrophysics Division investigated the properties of Germanene. Initial experimental setups achieved an energy conversion efficiency of 29 percent. By refining the chemical vapor deposition process and reducing crystalline defects, the team successfully boosted the efficiency of Germanene to 48 percent in follow-up trials. Despite these promising results, commercial viability is currently limited by the high cost of raw precursor materials and safety regulations governing nanotechnology manufacturing. Statement: The research team led by Dr. Marcus Vance managed to increase the energy conversion efficiency of Germanene.

- A: True
- B: False
- C: Can't Tell

## Question 2 — [Verbal Reasoning / true\_false\_cant\_tell]

Read the passage below and decide if the following statement is True, False, or Can't Tell based on the text.

Passage: In 2016, research conducted by researchers led by Dr. Sarah Jenkins at the Renewable Energy Research investigated the properties of Borophene. Initial experimental setups achieved an energy conversion efficiency of 17 percent. By refining the chemical vapor deposition process and reducing crystalline defects, the team successfully boosted the efficiency of Borophene to 38 percent in follow-up trials. Despite these promising results, commercial viability is currently limited by the high cost of raw precursor materials and safety regulations governing nanotechnology manufacturing. Statement: The research team led by Dr. Sarah Jenkins managed to increase the energy conversion efficiency of Borophene.

- A: True
- B: False
- C: Can't Tell

## Question 3 — [Verbal Reasoning / true\_false\_cant\_tell]

Read the passage below and decide if the following statement is True, False, or Can't Tell based on the text.

Passage: During the mid-nineteenth and early twentieth centuries, global trade networks reshaped national economies. In 1856, the annual production of lithium in Poland stood at approximately 46 million metric tons. Following key infrastructure improvements and trade agreements with Canada, production in Poland surged to 82 million metric tons by 1891. During this same period, Ecuador emerged as the primary global importer of lithium, consuming over sixty percent of the total global export supply, although its domestic production remained minimal. Statement: Canada produced more lithium than Poland did between 1856 and 1891.

- A: True
- B: False
- C: Can't Tell

**Question 4 — [Verbal Reasoning / true\_false\_cant\_tell]**

Read the passage below and decide if the following statement is True, False, or Can't Tell based on the text.

Passage: During the mid-nineteenth and early twentieth centuries, global trade networks reshaped national economies. In 1865, the annual production of bauxite in Ecuador stood at approximately 76 million metric tons. Following key infrastructure improvements and trade agreements with Spain, production in Ecuador surged to 99 million metric tons by 1885. During this same period, United Kingdom emerged as the primary global importer of bauxite, consuming over sixty percent of the total global export supply, although its domestic production remained minimal. Statement: The annual production of bauxite in Ecuador was higher in 1885 than it was in 1865.

- A: True
- B: False
- C: Can't Tell

**Question 5 — [Decision Making / venn\_deduction]**

Based on the Venn diagram, how many members belong to Dog Owners and Cat Owners but NOT Bird Owners?

- A: 7
- B: 2
- C: 15
- D: 5

**Question 6 — [Decision Making / error\_checking]**

How many of the four pictures in the left-hand column are exactly the same as the corresponding picture in the right-hand column?

- A: 0
- B: 1
- C: 2
- D: 3
- E: 4

**Question 7 — [Decision Making / error\_checking]**

How many of the four pictures in the left-hand column are exactly the same as the corresponding picture in the right-hand column?

- A: 0
- B: 1
- C: 2
- D: 3
- E: 4

**Question 8 — [Decision Making / venn\_deduction]**

Based on the Venn diagram, how many members belong to EXACTLY one club/group?

- A: 101
- B: 96
- C: 88
- D: 91

**Question 9 — [Quantitative Reasoning / chart\_interpretation]**

What is the simplified ratio of the revenue of Dept D to that of Dept B?

- A: 2:1
- B: 1:3
- C: 5:3
- D: 3:4
- E: 1:1

**Question 10 — [Quantitative Reasoning / chart\_interpretation]**

What is the combined revenue of Dept A and Dept C (in thousands)?

- A: \$200k
- B: \$230k
- C: \$210k
- D: \$240k
- E: \$190k

**Question 11 — [Quantitative Reasoning / table\_interpretation]**

What is the percentage increase in sales of Product Gamma from 2023 to 2025?

- A: 23.1%
- B: 32.2%
- C: 14.9%
- D: 28.5%
- E: 38.1%

**Question 12 — [Quantitative Reasoning / table\_interpretation]**

What is the percentage increase in sales of Product Gamma from 2023 to 2025?

- A: 11.6%
- B: 22.0%
- C: 8.4%
- D: 16.6%
- E: 4.1%

**Question 13 — [Abstract Reasoning / set\_ab]**

Does the Test Shape belong to Set A, Set B, or Neither?

- A: Set A
- B: Set B
- C: Neither

**Question 14 — [Abstract Reasoning / odd\_one\_out]**

Which of the following boxes does not belong with the others?

- A: Box A
- B: Box B
- C: Box C
- D: Box D
- E: Box E

**Question 15 — [Abstract Reasoning / odd\_one\_out]**

Which of the following boxes does not belong with the others?

- A: Box A
- B: Box B
- C: Box C
- D: Box D
- E: Box E

**Question 16 — [Abstract Reasoning / sequence]**

Which of the options completes the sequence shown in the diagram?

**A:** `<svg width="70" height="70" viewBox="0 0 70 70" xmlns="http://www.w3.org/2000/svg" style="background-color:#f8f9fa;border:1px solid #ced4da;"> <rect x="0" y="0" width="70" height="70" rx="4" ry="0" fill="#f8f9fa" stroke="#343a40" stroke-width="2" fill-opacity="1.0" /> <polygon points="19.5,26.84 29.320439999999998,9.83 9.67956,9.83" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="51.5,8.16 61.32044,25.17 41.67956,25.17" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="19.5,61.84 29.320439999999998,44.83 9.67956,44.83" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="53.5,42.16 63.32044,59.17 43.67956,59.17" fill="#888888" stroke="#000000" stroke-width="2" /> </svg>`

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**D:** `<svg width="70" height="70" viewBox="0 0 70 70" xmlns="http://www.w3.org/2000/svg" style="background-color:#f8f9fa;border:1px solid #ced4da;"> <rect x="0" y="0" width="70" height="70" rx="4" ry="0" fill="#f8f9fa" stroke="#343a40" stroke-width="2" fill-opacity="1.0" /> <polygon points="17.5,64.84 27.320439999999998,47.83 7.67956,47.83" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="53.5,8.16 63.32044,25.17 43.67956,25.17" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="49.5,62.84 59.32044,45.83 39.67956,45.83" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="19.5,6.16 29.320439999999998,23.17 9.67956,23.17" fill="#888888" stroke="#000000" stroke-width="2" /> </svg>`

**E:** `<svg width="70" height="70" viewBox="0 0 70 70" xmlns="http://www.w3.org/2000/svg" style="background-color:#f8f9fa;border:1px solid #ced4da;"> <rect x="0" y="0" width="70" height="70" rx="4" ry="0" fill="#f8f9fa" stroke="#343a40" stroke-width="2" fill-opacity="1.0" /> <polygon points="52.5,30.84 62.32044,13.83 42.67956,13.83" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="14.5,4.16 24.320439999999998,21.17 4.67956,21.17" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="16.5,43.16 26.320439999999998,60.17 6.67956,60.17" fill="#888888" stroke="#000000" stroke-width="2" /> <polygon points="50.5,38.16 60.32044,55.17 40.67956,55.17" fill="#888888" stroke="#000000" stroke-width="2" /> </svg>`

**Question 17 — [Situational Judgement / appropriateness]**

Scenario: During a dermatology ward round during a late-night shift at Memorial Hospital, a consultant asks a medical student, Sophia, a clinical question. The student, who has been shadowing for 2 weeks, does not know the answer. How appropriate is the following action? Action: The student invents a plausible-sounding answer hoping the consultant will not notice.

- A: A very appropriate thing to do
- B: Appropriate, but not ideal
- C: Inappropriate, but not awful
- D: A very inappropriate thing to do

**Question 18 — [Situational Judgement / appropriateness]**

Scenario: During a emergency ward round on Wednesday evening at City General Infirmary, a consultant asks a medical student, Charlotte, a clinical question. The student, who has been shadowing for 11 weeks, does not know the answer. How appropriate is the following action? Action: The student invents a plausible-sounding answer hoping the consultant will not notice.

- A: A very appropriate thing to do
- B: Appropriate, but not ideal
- C: Inappropriate, but not awful
- D: A very inappropriate thing to do

**Question 19 — [Situational Judgement / appropriateness]**

Scenario: A busy junior doctor, Lucy, at General Infirmary is asked by a nurse to prescribe simvastatin for a 76-year-old patient in the endocrinology ward she has not yet met or reviewed. She has been on shift for 6 hours. How appropriate is the following action? Action: The doctor writes the prescription over the phone without reviewing the patient's chart or history.

- A: A very appropriate thing to do
- B: Appropriate, but not ideal
- C: Inappropriate, but not awful
- D: A very inappropriate thing to do

**Question 20 — [Situational Judgement / appropriateness]**

Scenario: A final-year medical student, Lily, is working at East Valley Hospital on Thursday morning. She notices that a fellow medical student, Matthew, has arrived on shift smelling strongly of alcohol. Matthew is scheduled to assist in a clinical procedure later that morning on a ward with 40 patients under the supervision of a registrar. How appropriate is the following action? Action: Lily immediately reports Matthew to the supervising consultant in charge.

- A: A very appropriate thing to do
- B: Appropriate, but not ideal
- C: Inappropriate, but not awful
- D: A very inappropriate thing to do

# Submit Answers & Check worked Solutions

## ■ Section Complete!

You have completed this practice exam paper. To check your answers and view step-by-step worked explanations:

■ Go to: <https://applaa.com/practice/check?exam=ucac&paper;=154>

Simply bubble in your choices (e.g. A, B, C, D) and get instantly scored! You can then review the explanations or chat with Appy Buddy (AI Socratic tutor) to understand complex concepts.