



# Applaa UCAT Practice Mock 112

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;=112> 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: Public health campaigns in South Africa during the late twentieth century made significant progress in combating infectious diseases. In 1975, the incidence rate of Dengue Fever was recorded at 220 cases per 100,000 people. Following a nationwide distribution of protective nets and sanitation improvements, the rate fell to 127 cases per 100,000 people over the next decade. While this decline was celebrated as a major victory, health officials warned that rising temperatures could allow vector populations to rebound in rural regions.

Statement: Rising temperatures caused the incidence rate of Dengue Fever to increase during the campaign.

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 Prof. Dorothy Hodgkin at the Genetic Engineering Center investigated the properties of Borophene. Initial experimental setups achieved an energy conversion efficiency of 20 percent. By refining the chemical vapor deposition process and reducing crystalline defects, the team successfully boosted the efficiency of Borophene to 34 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: Borophene became commercially viable immediately following the trials led by Prof. Dorothy Hodgkin.

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: In 2022, research conducted by researchers led by Prof. Richard Feynman at the Renewable Energy Research investigated the properties of Helium-3. Initial experimental setups achieved an energy conversion efficiency of 28 percent. By refining the chemical vapor deposition process and reducing crystalline defects, the team successfully boosted the efficiency of Helium-3 to 52 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 at the Renewable Energy Research was funded by a government scientific grant.

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: In 2015, research conducted by researchers led by Dr. Sarah Jenkins at the Astrophysics Division investigated the properties of Carbon-Nanotubes. Initial experimental setups achieved an energy conversion efficiency of 15 percent. By refining the chemical vapor deposition process and reducing crystalline defects, the team successfully boosted the efficiency of Carbon-Nanotubes to 39 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 at the Astrophysics Division was funded by a government scientific grant.

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

**Question 5 — [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 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 AT LEAST two clubs/groups?

- A: 18
- B: 23
- C: 31
- D: 28

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

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

- A: 7:10
- B: 3:4
- C: 3:2
- D: 2:1
- E: 2:5

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

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

- A: \$230k
- B: \$250k
- C: \$220k
- D: \$260k
- E: \$210k

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

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

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

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

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

- A: \$160k
- B: \$150k
- C: \$130k
- D: \$110k
- E: \$140k

**Question 13 — [Abstract Reasoning / sequence]**

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

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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" /> <circle cx="18.5" cy="17.5" r="10.08" fill="#888888" stroke="#000000" stroke-width="2" fill-opacity="1.0" /> <circle cx="50.5" cy="19.5" r="10.08" fill="#888888" stroke="#000000" stroke-width="2" fill-opacity="1.0" /> <circle cx="55.5" cy="49.5" r="10.08" fill="#888888" stroke="#000000" stroke-width="2" fill-opacity="1.0" /> <circle cx="16.5" cy="53.5" r="10.08" fill="#888888" stroke="#000000" stroke-width="2" fill-opacity="1.0" /> </svg>

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**Question 14 — [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 15 — [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 16 — [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 17 — [Situational Judgement / importance]**

Scenario: A medical student, Megan, at St. John's Clinic is deciding whether to raise a complaint about a consultant in general surgery who is consistently 22 minutes late to teaching sessions. How important is the following factor to consider? Factor: How popular the consultant is among the rest of the student cohort.

- A: Very Important
- B: Important
- C: Of Minor Importance
- D: Not Important at All

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

Scenario: A junior doctor, Alice, in emergency at General Infirmary is considering whether to stay past her shift on a Thursday afternoon to finish routine paperwork. She has already worked 8 hours. How important is the following factor to consider? Factor: The doctor's current level of fatigue and its potential impact on accuracy.

- A: Very Important
- B: Important
- C: Of Minor Importance
- D: Not Important at All

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

Scenario: A doctor, Ruby, in the general surgery clinic at Hope Hospital is treating a 16-year-old patient who presents with physical injuries on a Thursday afternoon. The teenager, who is accompanied by a relative, begs the doctor not to tell anyone. How important is the following factor to consider? Factor: The child protection and safeguarding duties of the medical team.

- A: Very Important
- B: Important
- C: Of Minor Importance
- D: Not Important at All

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

Scenario: During a oncology ward round on Wednesday evening at St. Jude's Hospital, a consultant asks a medical student, Charlotte, a clinical question. The student, who has been shadowing for 7 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

# 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=ucat&paper;=112>

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.