

MINI MOCK PAPER
UNIVERSITY CLINICAL
APTITUDE TEST (UCAT)

MINI MOCK PAPER

UCAT

Read this page carefully *before* starting your exam.

Real Test Time Allowed: 2 hours
Mini Mock Test Time Allowed: 15 minutes

Instructions to Candidates

Please read this page carefully

Below is a typical summary of the full test.

Our mini-mock is cut down to give you a first experience of each of the sections. It is most useful for acquainting yourself with the types of questions. Full practice tests are important as well in order to get used to the full timing.

Slight variation on structure in the UCAT can occur, in terms of numbers of questions and passages.

SECTION A: Verbal Reasoning

This section contains 11 passages; you must answer 4 questions relating to each passage.

SECTION B: Quantitative Reasoning

This section contains numerical problems based on graphs, charts and tables; you must answer all questions relating to each item.

SECTION C: Abstract Reasoning

This section contains 11 pairs of shapes (Set A and Set B) to which 5 test shapes are assigned; you must decide whether the test shapes fit into Set A, B, or neither.

SECTION D: Decision Analysis

This section contains 28 questions.

SECTION E: Situational Judgement.

This section contains 68 questions; each question aims to identify attributes that contribute towards being a successful doctor or dentist.

You have 15 minutes to complete your test. Please turn over.

SECTION A: VERBAL REASONING

Among adults aged 16 and over in GB, one in four were cigarette smokers in 2004 – with a slightly higher proportion of men (26 per cent) than women (23 per cent). People in routine and manual households were more likely to smoke than those in managerial and professional households (31 per cent compared with 18 per cent).

The proportion of adults who smoked was greatest among men and women aged 20 to 34 (36 and 29 per cent respectively). It then steadily declined with increasing age to 15 per cent of men and 14 per cent of women aged 60 and over. In contrast, the average number of cigarettes smoked per day in 2004 was highest for smokers aged 50 to 59 – 18 by men and 15 by women. Average daily cigarette consumption by adults in 2004 was 15 for men and 13 for women. Smoking prevalence fell substantially in the 1970s and the early 1980s – from 45 per cent in 1974 to 35 per cent in 1982. After 1982 the rate of decline slowed and then levelled out from 1992, at around 27 per cent.

In the 1970s men were far more likely than women to be smokers. In 1974, 51 per cent of men and 41 per cent of women smoked cigarettes. During the 1970s and 1980s the gap between men and women narrowed falling to 2 percentage points in 1990. Since then, the gender gap has remained fairly constant, fluctuating between 2 and 4 percentage points.

Smoking has declined in all age groups. The largest decrease was in the 50 to 59 age group, from 51 per cent in 1974 to 24 per cent in 2004. The smallest decrease was in the 16 to 19 and 20 to 24 age groups, falling from 40 to 24 per cent and 48 to 32 per cent respectively over the same period.

In a separate survey of school pupils in England in 2004 the proportion of regular smokers (smoking at least one cigarette a week) increased substantially with age. By age 15, 26 per cent of girls and 16 per cent of boys smoked regularly. Since 1986 the proportion of girls aged between 13 and 15 who were regular smokers has exceeded the corresponding proportion of boys. Among regular smokers aged 11 to 15, the average number of cigarettes smoked per day remained fairly stable between 1982 and 2002 but was higher for boys (over seven per day) than for girls (between six and seven).

Smoking is the main cause of lung cancer, responsible for nine out of ten cases, and it contributes to a range of other diseases and conditions, such as heart and respiratory diseases. It is estimated that

between 1998 and 2002 on average 106,000 people a year died from smoking-related causes in the UK – around one in six of all deaths.

1. 75% of adults in the UK were non-smokers in 2004.

- A True
- B False
- C Can't tell

2. It would be incorrect to say that men are heavier smokers than women in all demographics.

- A True
- B False
- C Can't tell

3. The overall number of smokers has declined in recent decades due to the amount of deaths caused by smoking-related diseases.

- A True
- B False
- C Can't tell

4. It is approximated that almost half a million people died of smoking related causes in the UK between 1998 and 2002.

- A True
- B False
- C Can't tell

SECTION B: QUANTITATIVE REASONING

The table below shows information about circus workers and the hours they do:

Job	Yearly Wage (£)	Hours (wk ⁻¹)
Clown	15,000	30
Lion keeper	18,000	36
Acrobat	20,000	30
Singer	12,000	24
Ring leader	25,000	40

Question 1

There are 2 acrobats, one lion keeper, one singer and an unknown number of clowns and ring leaders working at a circus. There is one more clown than ring leader. The sum of the number of clowns and ring leaders is 9. How many ring leaders are there?

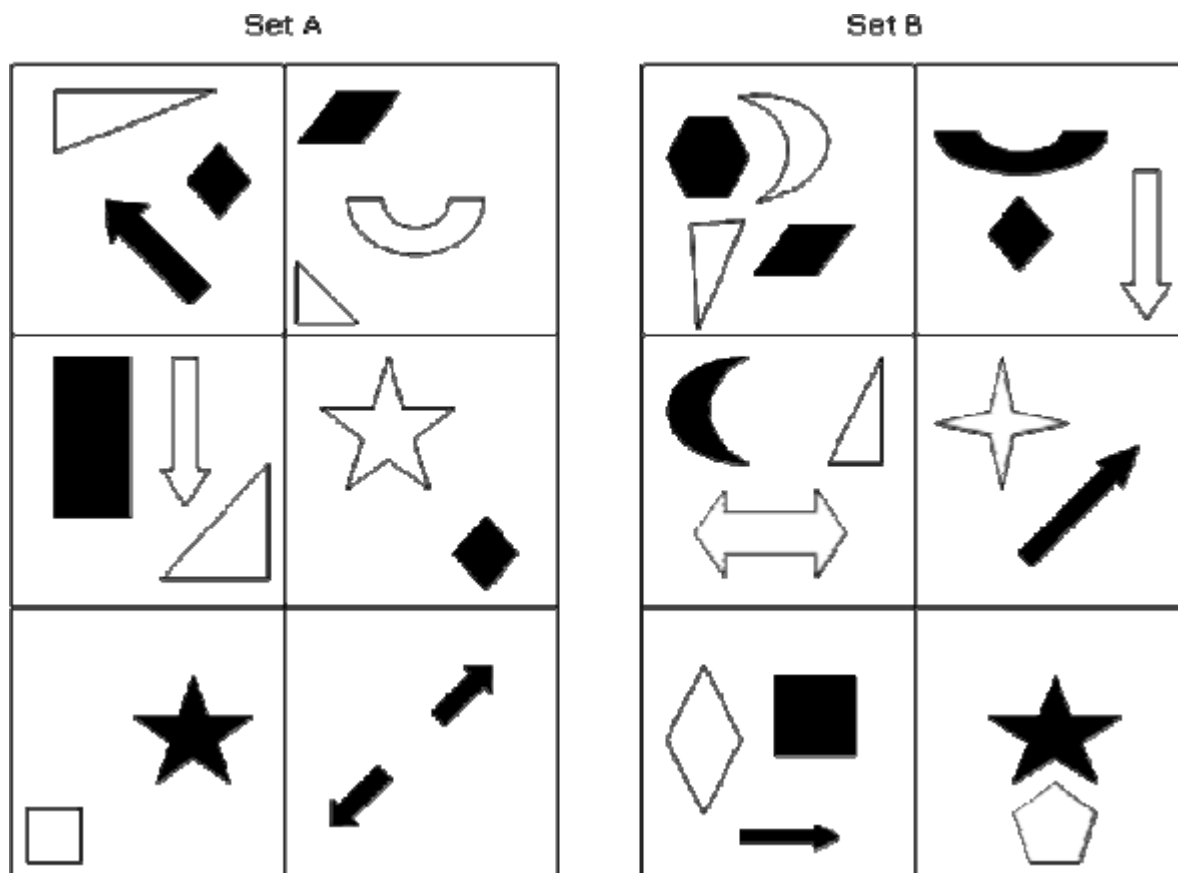
- A 2
- B 3
- C 5
- D 6
- E None of the above.

Question 2

Who earns the most per hour at the circus?

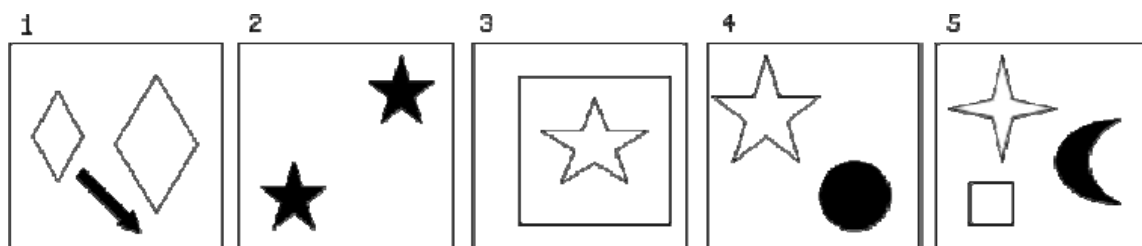
- A Clown
- B Lion keeper
- C Acrobat
- D Singer
- E Ring Leader

SECTION C: ABSTRACT REASONING



Which set do the shapes below belong to?

- A Set A
- B Set B
- C Neither



SECTION D: DECISION ANALYSIS

An ancient rune is found at what is believed to be an alien ship's crash site. A team of researchers are able to decipher parts of it. The team find a message on the crashed ship. Unfortunately, the message is coded.

Message	Locations	Additional
01=frighten	!=earth	A=alien
02=operation	£=home	B=meteor
03=capture	\$=planet X	C=light
04=defeat	%=ship	D=chip
06=memory		E=return
07=hostile		F=lost
08=friend		G=negative
09=return		
10=connect		

What are the two best interpretations of the coded message (G, 01, E), (03, %), (10, 06, D)?

- A. Don't be frightened, we will return you as soon as we have downloaded the information from the memory chip in your brain!
- B. The memory chips you sold us when you came on our ship last time have not been profitable; we would like to return them.
- C. We are going to wire you to the computer and implant new memory into you.
- D. There is nothing to be frightened of, come aboard ship and we can have good old-fashioned fish & chips, something to remember you by.
- E. You won't have nightmares when we let you go, because we will erase your memory of the capture.

SECTION E: JUDGEMENT TEST

You are a final year medical student on your surgical placement. You are about to go into clinic with your supervising consultant. When he walks into the room, you smell a strong stench of alcohol. He is scheduled to see 14 patients in the clinic. He is not operating on anyone today. How appropriate are the following actions:

1. Do nothing as he won't be operating today.
 - a. A very appropriate thing to do
 - b. Appropriate, but not ideal
 - c. Inappropriate, but not awful
 - d. A very inappropriate thing to do

2. Ask him to reschedule his clinic as patient safety is compromised.
 - a. A very appropriate thing to do
 - b. Appropriate, but not ideal
 - c. Inappropriate, but not awful
 - d. A very inappropriate thing to do

3. File a formal complaint and report him to the clinical director. Do not tell the consultant as he will try to stop you.
 - a. A very appropriate thing to do
 - b. Appropriate, but not ideal
 - c. Inappropriate, but not awful
 - d. A very inappropriate thing to do

ANSWERS

SECTION A: VERBAL REASONING

1. True

The passage explains that one in four adults was a smoker in 2004. This would indicate that three in four were non-smokers. Three in four would be equivalent to 75%, which demonstrates that the statement is true.

2. True

It is made clear that men are heavier smokers in several demographics, however, there are more female than male smokers at the age of 15 (26% compared to 16%). Therefore it would be incorrect to say that men are heavier smokers than women in all demographics.

3. Can't tell

Although the statement may seem obvious, there is actually nothing in the passage that would be able to confirm or deny it.

4. False

We are told that 'on average 106,000 people a year died from smoking-related causes' in the period between 1998 and 2002. Since there are five years within this period, the total number of deaths would be approximately five times 106,000. This figure comes to 530,000, which is over half a million, not almost half a million.

SECTION B:

QUANTITATIVE REASONING

Question 1

(e) None of the above.

Use simultaneous equations: Let A be clown and B be ring leader, so:
 $A + B = 9$ and $A = B + 1$.

Solving gives $B = 4$ and $A = 5$. 4 isn't an option so the answer is E.

Question 2

(c) Acrobat

As the clowns, lion keeper and singer earn the same per hour (£500), it is between the acrobat and the ring leader. Simply by dividing the wage by the number of hours you can see the acrobat just earns more per hour than the ring leader.

Acrobat: $\text{£}20,000/30 = 2/3$ ratio (6.666)

Ring Leader: $\text{£}25,000/40 = 25/4$ ratio (6.125)

SECTION C: ABSTRACT REASONING

The pattern is that each box in Set A has 14 edges whilst set B has 15 edges. Thus:

- Box 1 has 15 edges so is belongs in Set B.
- Box 2 has 20 edges so is belongs in Neither Set.
- Box 3 has 14 edges so is belongs in Set A.
- Box 4 has 11 edges so is belongs in Neither Set.
- Box 5 has 14 edges so is belongs in Set A.

SECTION D: DECISION ANALYSIS

The best way to approach these types of questions is to write down what each code means: (Negative, frighten, return), (capture, ship), (connect, memory, chip)

The best answer is the one that conveys the maximal amount of correct information:

B is talking about a profit made from selling the chips- none of which is coded.

C makes no mention of the first two sets of brackets.

D is clearly incorrect as it talking about food rather than memories.

This process of elimination leaves us with A and E.

SECTION E: SITUATIONAL JUDGEMENT TEST

It is hard to put yourself in these scenarios as they are unlikely to be familiar to you. Your first concern is whether patient safety is compromised. You cannot know this until you have established whether he is actually affected by alcohol (i.e. drunk).

Thus, the first step is to ask him why he smells of alcohol rather than accusing him of it and escalating the issue. It is possible that he has had alcohol thrown on him by a drunken patient in A/E (more common than you may think) etc.

1. You must clearly do something as decisions he makes could still put patients at risk, even if he isn't operating. Thus, you must exercise your duty of care. Since your inaction could lead to patient safety being compromised, this is a very inappropriate thing to do.
2. This maybe a bit premature given that you haven't found out the facts yet. However, a response like this is likely to lead into a discussion that would allow you to gauge whether he was actually drunk. If he wasn't, you will have unnecessarily damaged your relationship with him. Thus, it is an inappropriate but not awful thing to do.
3. This is clearly a step too far! Reporting anyone is a serious business and you should at least have some basic facts to back your argument up with. Thus, it is obviously a very inappropriate thing to do.