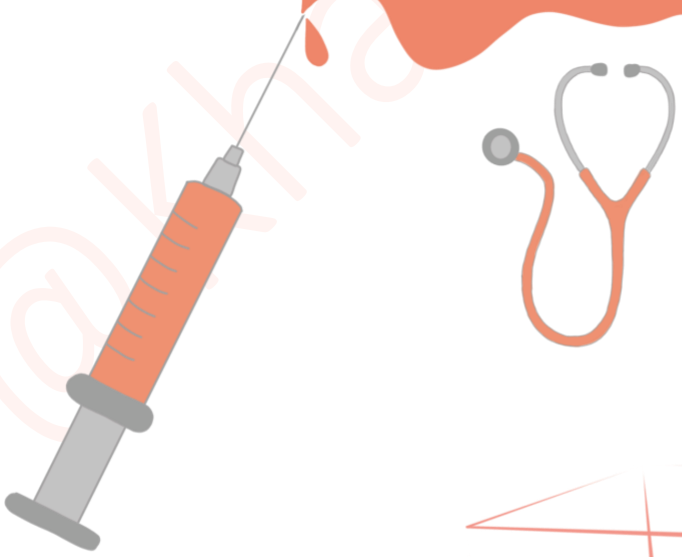
Kharmamedic UCAT notes



UCAT NOTES - KHARMAMEDIC

Disclaimer: This document consists of a collection of notes that I personally wrote and used to study for the UCAT test. It is by no means an official UCAT document nor a rulebook that must be adhered to. These notes include information, 'rules' and tips collected from a wide range of study resources and past test papers, designed to help you study for the UCAT test. Please use them to the extent you find them useful.

For an in-depth analysis of sample UCAT questions and solutions, visit my YouTube channel at www.youtube.com/KharmaMedic. Good luck (although I'm sure you won't need it) and happy studying! ☺

HOW TO PREPARE FOR THE UCAT TEST

1. UNDERSTAND THE THEORY THAT UNDERLIES EACH OF THE 5 SECTIONS: This is a test unlike what you have seen before (especially the abstract reasoning and situational judgement sections) so figuring out what the different questions are asking you to do and the strategies you can use to tackle them is an important first step.

2. DO AS MANY PRACTICE QUESTIONS AS POSSIBLE: At first it will be confusing but the more questions you complete, the more you will understand the UCAT. Practice is key to mastering this test and is guaranteed to improve your score.

3. IDENTIFY WEAKNESSES: After completing practice questions, go back to the questions you got wrong and identify weaknesses. These might be entire sections or specific types of questions in each section. Go back to the relevant theory for that section and relearn it before focusing on more practice questions to improve your scores for that section.

4. TIMED MOCK SECTIONS: Once you feel confident in a section, move on to timed mock sections. Although timing yourself might seem stressful, it is very important to become accustomed to the time pressures for each section and being able to complete the questions under those constraints. Complete a timed mock for each of the 5 sections of the UCAT test before attempting a full timed mock test.

5. FULL TIMED MOCK TESTS: Completing a full timed mock test is crucial before sitting the real UCAT test. The first one will probably not go too well, but don't worry, that's completely normal. Timing is a huge part of succeeding in the UCAT test and the more timed mocks you do, the more prepared you will be.

6. NAILING THE TIMING: After completing several full timed mocks, you will be able to see which sections you need to work faster in in order to complete all the questions on time. If there is a section that you continuously seem to run out of time in, work through some practice questions whilst focusing on completing them as fast as you can (without compromising your accuracy).

7. PRACTICE, PRACTICE, PRACTICE: At this stage, all that is left is to continue practicing for a few hours every day until your test day.

VERBAL REASONING

This section is about quickly (but accurately!) reading through a passage and extracting important and relevant information. This section is designed to test your reading comprehension and analysis skills and your ability to draw conclusions from the information presented in the passage.

Things I've learned

DOs

- It's up to you whether you prefer reading the question or the passage first (but I strongly recommend reading the question first). Identify key words in the question, then skim read the passage whilst searching for those key words.
- Always read around (the sentence above and below) the key words.
- Pay special attention to names, dates, places, people, numbers, shifts in thinking, changes, increases/decreases.
- Be aware of "shifts" in the author's opinion throughout the passage.
- Focus on questions that include the words "not", "least likely" and "cannot".
- If you come across an extremely long or complex passage, take a guess, flag the question and come back to it at the end.

DON'Ts

- Don't skim through the passage so fast that you miss important key words. Find the right balance between reading quickly and taking in the important parts of the passage.
- Make sure you don't skip over words like "not" – it will completely change the meaning of the question and the answer you search for.

Time-saving tips and tricks

- Scan the passage for dates, numbers and capitalized words.
- Triage questions relating to the author's opinion or any tricky/long questions.
- If you scan for >30s and you're still unsure of the correct answer, guess, flag the question and move on.
- Questions regarding the common factor between two things are likely to be time consuming so triage them.
- Simplify questions where possible into easier terms e.g. the question "Which of these assertions is best supported by information in the passage?" is essentially asking "Which assertion is true?".
- If you think 3 out of the 4 answers are false, then by default you know the fourth answer must be true. However, it will take you 2 seconds to read the fourth statement and you might realise that it is also false (based on the information you have read in the passage), then you must have made a mistake in one of the first three statements.
- If you're 90% sure about your answer, then select it and move on. Chances are you're right and you should be using the limited time on other questions that require more thinking and analysis.

Rules

- "TRUE" = Same as the passage | "FALSE" = Opposite to the passage | "CAN'T TELL" = the passage does not give you enough information to draw a conclusion.
- Answers to questions that include the word "not" don't match the passage.
- "Some" = At least one | "Many" = The majority, >50% | "All" = 100%
- If the question makes a statement but the passage says "Maybe" or "There is not a lot of evidence" then the answer is "C - Can't tell" because you cannot directly draw a conclusion.
- If a passage talks about e.g. "the period 1920-1925" and the question asks about "the 1920's" then the answer is "C - Can't tell" because the question is broader than the passage.
- Questions with the word 'except' are looking for the answer that is FALSE.

- If you can refute any part of a statement, then the answer is FALSE. The entire statement must be true in order for the answer to be TRUE.
- The author agrees with anything that matches the passage.
- The answer is CAN'T TELL if you can't determine if it's true or false based on the information given in the passage. If the passage gives you a reason contradictory to that stated in the question, the answer is FALSE.
- Pay special attention to the words "not", "except", "least" and "most".

DECISION MAKING

This section is about using logic and statistical reasoning to evaluate different statements given to you in the form of a passage, Venn diagram or logic puzzle. Make sure to practice your deductive reasoning skills as well as your ability to understand statistics and probabilities.

Things I've learned

DOs

- Have a well-practiced strategy for each question type (Venn diagrams, logic puzzles, logical deduction, probability, analysis & interpretation).
- For "select the strongest argument" questions, choose the statement that covers ALL parts of the passage. Pick answers based on statistics, evidence, facts, reports or studies rather than personal stories, assumptions or opinions.
- Know how to solve popular topics e.g. Venn diagrams, basic probability calculations ("AND" = multiplying fractions/probabilities, "OR" = adding fractions/probabilities).
- Probability questions that require interpreting graphs are common. Practice extracting important information from figures quickly.

DON'Ts

- Don't make any assumptions and don't jump to any conclusions. If you can't draw a conclusion based solely on the information presented to you in the passage, then you shouldn't make your own conclusion.
- Don't forget to pay careful attention to the specific words used when statements are made. These words will often describe the likelihood of something occurring e.g. "commonly", "often", "rarely" etc.
- Don't be scared to use the whiteboard in this section. Small symbols or diagrams can go a long way in simplifying the complicated wording of the passage.

Time-saving tips and tricks

- Follow clear logic. Write down some phrases that help you simplify the complicated situations given to you in each passage e.g. "If the table is black then it must have a white chair however, if the table is green but with a yellow book, it must have a green chair" can be simplified as "Bt -> Wc (Black table -> White chair) and Gt + Yb -> Gc (Green table AND Yellow book -> Green chair)". Using small diagrams may also be helpful.
- This section often leaves you with a bit more luxury time at the end. Take advantage of this to go back to the harder questions that you've guessed or flagged.

Rules

- "Some" = Any number >0 but not = 0 | "Less than 10" does not include 10 but may also include 0
- "Majority" = >50% | "Minority" = <50%
- A sentence of logic e.g. "A -> B -> C" usually only flows in one direction. Don't get it mixed up!
- Learn how to identify the difference between an assumption/idea and a statement/fact in the passage.

QUANTITATIVE REASONING

This section is about extracting relevant information from figures, graphs and text passages in order to perform calculations. This section is less about complicated math and more about problem solving. What you need to practice is doing calculations under time pressure.

Things I've learned

DOs

- Use accurate numbers for calculations and keep rounding to a minimum.
- Memorize all the equations that come up frequently. It's important to know these off by heart and be able to use them appropriately.
- If a question asks you to eyeball a value from a graph, it's worth making sure you are reading the question and graph correctly. This is one of the easier marks to get, so take a bit of extra time to make sure you're right.
- Know your fractions, ratios, conversions, probabilities, decimal places, percentages, mean, median, and mode well. They come up in almost every question!
- Read the question first and then look at the figures/graphs to extract relevant information.
- Make it a point to reach the end of the section. Easier questions are sometimes towards the end so do your best to get to those questions.

DON'Ts

- Don't over select the "Can't tell" option – it's easy to assume you don't have enough information to solve the question.
- Don't rush when estimating values from bar graphs or data plots as you don't want to introduce too much error through your rounding. This is important as the answers are often very close in value to each other.

Time-saving tips and tricks

- When reading the question, get used to assessing how long you think it is going to take you and its complexity in order to determine whether you should triage it.
- Flag and return to questions with 5-6 steps unless you know it's an easy mark (e.g. calculating an average).
- Triage questions that involve complicated/many calculations.
- Identify topics that you consistently make mistakes on or which you know are difficult for you and triage those questions the first time going through.
- Questions I spend a lot of time trying to solve are often the questions I get wrong. These are worth triaging.
- During the 1 minute reading time before this section, write down all the equations you remember on your white board, so you can easily refer to them when tackling the questions.
- Use the on-screen calculator from the beginning of your revision sessions. You need to become familiar with using it so that you don't waste any time inputting numbers during the actual test.
- If you can keep track of some numbers in your head during complex calculations instead of writing them down, it might increase your efficiency. Only do this if you are confident with your number-memory under time pressure. It's not worth saving those extra 1-2 seconds if it will cost you the mark!
- If you feel you've spent a lot of time on a question or you are getting stuck then take a guess, flag, and move on!!! There are plenty of other questions around the corner that you will know how to solve.

Rules

- Ratio of A to B = A : B = A / B.
- An isosceles triangle has 2 sides and 2 angles that are equal.
- There are 52 weeks in one year.

- There are 52 cards in one deck (54 including Jokers).
- The phrase "X per Y" means X / Y e.g. 10 pigs per square meter.
- The fraction 3 and 7 / 8 = [(3*8) + 7] / 8 = 31/8.
- If you do something and then "repeat twice" then you will have done it a total of 3 times.

IMPORTANT EQUATIONS

- **Original** = Final / 1+- % change
- **% change** = (Difference / Original) * 100 → The original in these equations is usually stated in the 2nd part of the Q.
- **Speed** = Distance / Time
- **Area of a circle** = $\Pi * r^2$
- **Circle perimeter** = $\Pi * D$
- **Median** = Middle value
- **Mode** = Most common value
- **Mean** = Sum of terms / number of terms

COMMON CONVERSIONS

- 1 mile = 1.6 km
- 1 ft = 12 in
- 1 kg = 2.2 pounds
- 1 cm = 0.4 in
- 1/9 = 0.11
- 1/8 = 0.125
- 1/7 = 0.15
- 1/6 = 0.17

ABSTRACT REASONING

This section is about identifying patterns or rules in a seemingly random collection of shapes and drawings. You will also need to identify changes in a sequence of patterns. This section is designed to test your ability to identify differences and infer relationships in an abstract manner.

Things I've learned

- When first looking at the abstract reasoning section, take your time. Keep staring at the shapes and test every possible pattern you can think of until you identify the pattern that works. This practice is required to train your brain to identify different shapes and patterns even when at first it seems that there aren't any.
- As tempting as it might be to look at the solutions, always try to figure out the pattern by yourself.
- Complete as many questions as you can and write down every single pattern or rule you come across. By the end of your revision, you will have accumulated a list of all the patterns you've seen.
- For set A vs set B questions: Start with a potential rule/pattern. If it's wrong, scrap it and come up with a new rule. Test it and if it's wrong, scrap it. Repeat this process quickly until you find one that works.
- Start by comparing either the simplest or most similar boxes in set A and set B.
- If the shapes between boxes within a set are completely different, a number pattern is likely.
- Look for shapes located in the same area (e.g. top right) of different boxes within a set.
- It is common for rotation to be part of the pattern/rule for type 2 and 3 questions.
- A shape/colour that is present in all boxes within a set may play an important role in the pattern.
- Every test will have some very complex patterns. These will probably take you a long time to figure out or you may not be able to at all so make your best educated guess as to which set the test shapes belong to and move on. Come back to these questions at the end if you have time.
- If the pattern/rule you come up with works for 3 or more boxes in a set, then it is generally good.
- Use a pen and paper to keep track of difficult patterns. Short hand code can help simplify complex patterns.
- For sequence questions, there is always repetition. Focus on one element at a time and look for the shapes or parts of shapes that seem to change drastically.

SCANS

SCANS is a powerful method for systematically going through a list of potential patterns

SHAPE: Straight/curvy, concave/convex, open/closed, longest side, right/obtuse/acute angles, regular/irregular.

COLOUR: Part of the shape is shaded, particular kind of shape is shaded.

ARRANGEMENT within the box: Top, bottom, left, right, middle, clockwise/anti-clockwise, 90vs180° rotations, angles add up to certain degrees, shape rotations, arrows pointing to/away from shapes, shape positions relative to each other, arranged by shape colour/number/size.

NUMBER: Number of total shapes, particular shapes, sides, intersections, angles, regions, odd vs even.

SIZE: Big/medium/small, relative vs absolute size comparisons.

Time-saving tips and tricks

- Rules like "counting the number of shapes" or "odd vs even numbers of shapes" are very easy and quick to test so I often start with these first (this is my personal preference).
- If you believe you have found part of the bigger pattern, just go with it. You will still get 2-4 out of the 5 possible marks and it might not be worth the extra time spent trying to figure out the full pattern. Make educated guesses using the information you have.
- Don't spend more than 1 minute on a set. If a set is taking you longer, triage it and come back to it later.
- If you are struggling to find a pattern, take a step back from your screen and go back to the basics (number of shapes, straight vs curved shapes, sides, top vs bottom half of the box, etc.) Literally taking a step back and looking at the patterns from further away sometimes helps the patterns "pop" out at you.
- Multiple rules within the same set do exist but finding them all may be a waste of time. If you identify a rule which works for most boxes in the set, just go with it - you will still get some of the marks.
- If you get stuck, think about patterns you've seen in the past and test whether any of those apply.

Pattern Examples

- Number of sides in a shape, number of shapes in a box, number of sides a line intersects, number of straight vs curvy shapes, number of right angles.
- The numbers of shapes may not be the same in every box but may be multiples of the same number (2,4,6).
- The number of sides in a shape is equal to the number of shapes in a box (e.g. a square has 4 sides and there are 4 shapes in a box).
- Odd vs even number of shapes, horizontal vs vertical lines of symmetry, shapes in the top/bottom half or right/left half of the box (e.g. right half of the box has white shapes whilst left half of the box has black shapes).
- Shapes that cannot be drawn without lifting the pencil vs shapes that can be drawn in one straight line.
- For boxes with a single/large shape, look for symmetry, the number of sides and any angles.
- For boxes that have the same shapes, look at their position, order and the relationships between the shapes.
- For arrows, keep an eye out for the direction they are pointing, the number of arrows, arrows pointing to or away from white /black/certain types of objects and their location within a box.
- For clocks, pay attention to clock hands, angles between hands and the actual numbers the hands point to.
- For boxes with dominos, pay attention to top vs bottom half of the dominos, the orientation of the pieces and multiplying the values of the domino pieces.
- Always check the clockwise vs anticlockwise order of shapes.

Rules

- Rules using "or" or "at least" are almost always not acceptable rules but may help you find part of the rule.
- A square is also considered a rectangle.
- A shape found in some boxes but not all of them may be a distraction/red herring.
- Rule of 5: If a box has >5 shapes, a pattern may be hard to spot. Consider guessing, flagging, and moving on.
- A heart shaped object has 2 sides.
- Try to find positive rules rather than negative ones such as "no shapes have right angles".
- For complete the series questions: Once you've narrowed it down to 2 possible answers, find the difference between them and then go back to the sequence and cross reference it.

SITUATIONAL JUDGEMENT

This section will give the examiners an insight into how you are likely to behave as a medical student or junior doctor in the future. Among other characteristics, it is designed to test your integrity, honesty, team-working abilities, and personality traits (e.g. non-academic characteristics required as a doctor). Most questions will revolve around an ethical situation or moral dilemma where your answer will be based on the actions you think would be appropriate/inappropriate or how important you think different pieces of information are to consider.

THE FOUR PILLARS OF MEDICAL ETHICS

AUTONOMY: The patient is within their rights to decide what they want to do with their own body and treatment. They can make decisions on their own (if competent). You must respect the patient's wishes even if you don't agree.

BENEFICENCE: Have compassion, take positive actions to help others and follow through on the desire to do good. Make decisions that best serve the interests of patients and their families.

NON-MALEFICENCE: Do no harm. A doctor has the duty to prevent patient harm caused by neglect.

JUSTICE: Equal treatment for all people regardless of their culture, background, colour, religion etc.

ANSWER OPTIONS

A: Optimal + directly addresses the key issue.

B: Not optimal but there are no negative consequences to public opinion or patient safety.

C: Not good, but there are minimal negative consequences to public opinion or patient safety.

D: Bad, direct negative consequences to public opinion or patient safety.

Rules

- This section requires no previous medical knowledge.
- Partial marks are awarded if you are close to the correct answer and full marks for the correct answer.
- First, you need to do is decide if your answer falls into A/B or C/D. If you get that right, then you will get at least partial marks.
- The correct answer is based on what the majority of a panel of doctors have deemed to be correct.
- Assess options independently – information from one statement does not affect the previous or next one.
- For the answer to be appropriate/important, it must address the key issue directly.

Things I've learned

- The same themes (medical ethics and moral dilemmas) frequently come up in this section so make sure you read up on and dedicate extra time to them.
- Always collect as much evidence and information as you can before reacting to a situation or incident.

- Pay attention to the roles of different characters in the question (e.g. Who is a junior doctor/ consultant/patient/medical student?)
- Read the scenario carefully – not doing this was always my downfall.
- Factors related to medical professionalism, ethics and patient safety are important. You should always be mindful of consequences of bad professional behaviour.
- In terms of seniority, consultant > doctor > medical student but all must act with integrity and professionalism
- The seniority of someone's position isn't important at all in cases where a mistake has been made.
- You shouldn't apologize on someone else's behalf.
- Whether someone witnessed an incorrect or illegal action isn't important. The fact that it actually occurred (irrespective of who saw it) is what is important.
- Overhearing someone making bad comments is important. Gossip that is overheard shouldn't be taken into account when deciding how to respond as it's not a reliable source of information.
- It is important to immediately rectify the situation.
- Problems within a group should be attempted to be solved locally. If this doesn't work, you can escalate.
- Pulling out of pre-arranged meetings without proper communication is inappropriate but not awful unless it is a doctor-patient meeting or requires mandatory attendance in which case it is very inappropriate.
- Regardless of who is wrong in the scenario, it is always appropriate to comfort someone that is upset and make sure they are okay.
- The "very inappropriate" answer should be chosen when the actions have severe consequences.
- An illegal act usually requires an extreme answer (D).
- A lie is extremely inappropriate and is always answer D.
- Any negative consequences to public confidence in the medical profession are usually answer D.
- Anything that ignores or does not immediately address a patient in discomfort is answer D.
- If something is urgent/important and you wait a long time to address it, the answer is C or D.
- Going above someone's head to solve an issue instead of addressing it with them first is C. Generally, reporting a colleague to a supervisor before talking to the colleague first is answer C.
- If there is nothing wrong with the response but it doesn't directly address the key issue, then it is B (appropriate but not ideal).
- If the question includes a random fact that is important but not directly relevant to the issue at hand the answer is B.
- Where there is a mix of good and bad elements in a response, if the patient's needs are dealt with, the answer is at least B.
- If a response solves a problem but after some delay, then the answer is B.
- Pulling someone aside to discuss or solve something that happened is answer B.
- Following an incident, telling your manager the next day and recording it in your notes is answer A.
- A and D are more common answers than B and C. If you have to guess, choose A or D (personal opinion based on my experience in 2017).

University

- If someone is letting down the group, the issue should be addressed with the whole group.
- Cheating should always be reported. Lying or cheating are never appropriate. Always be honest and open.
- Completing the work alone in a group project is very inappropriate.
- People working in groups must solve problems together.
- When deciding if someone should be expelled from medical school, whether they show remorse or have learned from what has occurred should be taken into account.
- Having a good relationship with your tutorial group is important.
- No one should solve problems on behalf of someone else.

Medical Students

- Medical students are responsible for developing their own professional development.
- Medical students aren't qualified to make recommendations.
- Medical students shouldn't tell a consultant what to do.
- Medical students taking blood for the first time should be under medical supervision and guidance.
- Medical students shadowing consultations/examinations must always introduce themselves to patients.
- Medical students don't have the experience to discuss treatment options with patients, even if just recommending a treatment.
- Medical students shouldn't make assumptions about medical results and don't have the expertise to break bad news to patients.
- Medical students aren't allowed to administer drugs to patients.
- Medical students must observe the same values as doctors.
- Medical students don't have the experience or expertise to answer questions about patient death.
- Medical students need to be assessed on their medical techniques and interactions with patients.

Doctors

- Ensuring health and safety is always the top priority. Patient comfort and public confidence in the medical profession are #2.
- Doctors must always behave professionally, even when not in the workplace.
- Doctors must never do anything that undermines public opinion of the medical profession.
- Doctors should never abuse their power or position as a doctor.
- Doctors must address problems immediately or at least in a timely manner.
- Doctors must seek local help and local solutions first.
- Doctors must never go behind a colleague's back.
- Doctors shouldn't try to escalate issues or be too confrontational.
- Doctors must always take down patient notes.
- Doctors must deal with problems as soon as possible.
- Doctors must attend their compulsory teaching sessions.
- Doctors should always answer a bleep.
- Doctors must adhere to hospital rules.
- Doctors shouldn't take medical advice from the internet.
- Doctors mustn't suggest a course of action that isn't possible or advisable.
- Doctors shouldn't rely on someone else to report something. If you see something you should report it.
- Doctors shouldn't have to leave the room to check a patient's chart.
- Doctors should record all instructions and prescriptions in patient notes.
- Doctors shouldn't be carrying around patient notes relating to patients that aren't their own.
- Doctors should only pass on patient information via secure email services or direct contact.
- Doctors should never change a patients' notes secretly.
- Doctors shouldn't remove items from the drugs cart without another member of staff present.
- Doctors shouldn't explain the complaint procedure to patients if there isn't yet a reason to do so.
- A junior doctor can't "send another junior doctor home".
- Depending on the situation, a formal complaint against another colleague may be inappropriate.
- Seeking advice from a senior doctor is always appropriate.
- Asking someone more senior to intervene is dependent on patient health and safety.
- Doctors shouldn't perform someone else's job for them.

- Interrupting a consultation (even if the doctor is being negative towards the patient) and undermining the doctor-patient relationship is less than ideal.
- If something bad happens for a second time which you've already tried to resolve, then a formal complaint may be appropriate.
- It's always inappropriate for doctors to make negative comments about each other (especially in a public space).
- Health professionals that feel unwell/sick, should call in sick and let other members of staff know. The logic here is that they would be unable to perform their job properly in the workplace and may compromise patient safety.
- Regardless of whether two people agree or are in good terms, they should act professionally and get along within a professional setting.
- If a doctor is dealing with personal issues it may affect their work on the ward. A doctor should always be in their full capability when dealing with patients. If this isn't the case, taking a sick day may be the best course of action.
- It's a doctor's responsibility to manage their work-life balance.
- The fact that no patients are around to hear a healthcare practitioner make inappropriate comments, doesn't change the fact that those comments are unprofessional and shouldn't have been made in the first place.
- During an emergency (earthquake, fire, active shooter, etc.), healthcare staff must ensure the safety of patients and staff.
- Asking one doctor to cover two wards is inappropriate.
- There is always a risk of misinformation when information is passed on through a third party.
- It's always very important to consider whether someone has died or is very ill.
- Discussing workplace issues in front of patients is highly inappropriate.
- Undermining a colleague in front of a patient is very unprofessional and very inappropriate.
- Doctors normally shouldn't stay overtime for multiple hours unless it's urgent/really necessary.
- If a doctor is very hungry, they should eat first before performing surgery.
- Doctors are expected to have a personal life/hobbies/activity outside of work.
- Making arrangements for religious or personal obligations is very understandable as long as you make appropriate arrangements, inform the relevant person you won't be present and check there is no emergency.
- It's inappropriate to ask someone what their family emergency was that caused them to be late.
- Taking someone aside and telling them they were "well out of order" in a negative tone, even if they were, is highly unacceptable.
- Telling a nurse to check on a random patient is inappropriate as it is not their job.
- Jumping to conclusions or announcing a diagnosis in a public area is highly inappropriate.
- A pharmacist is the best person to talk to regarding drug-drug interactions or when to stop taking medication.
- It's okay to avoid someone you know in the clinic if they don't see you in order to maintain confidentiality. You can let them know later on and reassure them you don't know anything about their visit.
- Running a "quit smoking" campaign and then being seen smoking will undermine the public's confidence and therefore is important to consider.
- If patient notes are found lying around unattended, they should be returned to the correct location as soon as possible.
- Regardless of whether you are wearing your hospital ID, scrubs or workplace clothing, you should always act professionally.
- Interrupting a nurse who is talking to a patient is answer D unless it is urgent or concerns the patient's health.

The Doctor-patient relationship

- If a patient makes a racist comment during a history or exam, addressing their concerns without engaging the comment is answer A.
- A doctor shouldn't be involved in an examination if a personal relationship exists with the patient.
- It's inappropriate for a doctor to mention personal likes/preferences to patients.
- Asking patients if they've taken their medication is an unreliable method of assessing medication compliance.
- Patients have the right to prefer to be treated by a male or female doctor. If a patient has stated they are uncomfortable with either a male or female doctor, then they shouldn't see a male or female doctor, respectively. Even for a 'minor' examination.
- When patients have been treated inappropriately or experienced discomfort, a doctor must always apologize.
- Always include the patient in any decision-making → patients with mental capacity should always be involved in their treatment options.
- Doctors must always support the patient's wishes regarding treatment.
- Doctors must always receive informed consent from a patient before any procedure.
- A patient always has the right to a second opinion by another member of healthcare staff.
- Doctor-patient relationships must remain professional at all times.
- Doctors and their patients can't be friends on Facebook or have email correspondence.
- Doctors shouldn't develop personal relationships with patients – a 5 minute conversation in public is okay as long as it isn't part of an ongoing friendship/relationship.
- Doctors may accept gifts from patients as long as they don't impact the doctor-patient relationship (e.g. a gift of small value).
- If a patient gives you money you should immediately inform your supervisor/ward manager.
- Initiating discussion about a patient's personal or religious beliefs is inappropriate.
- When there is a threat to patient safety, patient confidentiality comes second.
- Checking back to a patient's notes/double checking a patient's notes is always appropriate (if you are in charge of their care of course).
- Not knowing a patient's history is of minor importance in deciding whether to assist them or not.
- It's wrong to assume something about a patient without first checking if you are correct.
- It's dangerous to make assumptions about a patient when you don't have all the information.
- If a patient doesn't consent to or understand the relevant procedures, then the doctor shouldn't treat them.
- Never use a patient's family as translators.
- If a doctor knows a patient or has met them before it is very important to consider this.
- If you see a patient who seems lost or stranded, you should try to help them get to where they need to be but if you are unable to, directing a porter to them is appropriate.
- If a patient is known to make up stories and lie about pain, it doesn't mean that they aren't currently experiencing pain.
- Patients are always entitled to make their own decisions about health and lifestyle even if the doctors know it'll be detrimental to their health.
- All mistakes made by doctors should be explained to the affected patients and should be reported to seniors.
- Lack of basic hygiene in a patient is an indicator of other problems and should be investigated.

GMC "Tomorrow's Doctor's" Key Points

Patient care is the #1 priority

A doctor must:

- Keep their knowledge and skills up to date and work within the limits of their own competence.
- Act immediately to protect patient safety, dignity and comfort.
- Protect and promote the health of their patients and the public.
- Respect a patient's right to confidentiality.
- Give patients the information they need in a way they can understand.
- Respect a patient's right to decide on treatment.
- Act with honesty and integrity.
- Never discriminate against patients or colleagues.
- Never abuse the patient's or public's trust in them and in the medical profession.
- Be personally accountable and must always be able to justify their decisions and actions.

GMC "Good Medical Practice" Key Points

A doctor must:

- Always respect a patient's privacy and dignity.
- Refer a patient to another practitioner if this satisfies their needs.
- Take all steps to alleviate pain and distress even if no care is available.
- Avoid providing medical care to themselves or anyone with whom they have a close relationship with.
- Make notes soon after an experience; they must be accurate, neat and confidential.
- Seek advice from a senior colleague, defence body or the GMC if they are concerned that a colleague isn't fit for practice. If the problem persists, they must report it.
- Never express their own personal beliefs (political, religious or otherwise) in ways that exploit or stress the patient.
- Respond promptly to complaints and apologize when appropriate.
- Always declare conflicts of interest and be prepared to exclude themselves from decision making.
- Be remember that patient information is still confidential after patient death.

THE GOLDEN RULES

TRIAGE, TRIAGE, TRIAGE. ALWAYS MOVE ON. It's not worth the lost time.

SITUATIONAL JUDGEMENT: Seeking advice from a superior is always at the very least appropriate.

VERBAL REASONING: Read the question first! Then, skim the passage for key words from the question and read the text around these key words.

QUANTITATIVE REASONING: Memorize commonly-used equations and learn to use them efficiently. Also become comfortable with the on-screen calculator and number pad. Learn how to use the memory function on the calculator – this will save you so much time. Seriously… do it!

DECISION MAKING: Practice, practice, practice. Read the question, create rules that flow from logic and follow them.

ABSTRACT REASONING: Complete every question you have access to and write down all the rules/patterns you come across. You'll make a list of all the rules/patterns which you can read over and refer to mentally when you're searching for the potential rule/pattern during the test.

TIME ALLOCATIONS PER SECTION

This is a breakdown of the approximate time allocations for each question in each section. This isn't a strict rule that you must stick to, but rather a guideline so that you can pace yourself throughout the UCAT test.

Time yourselves based on these restrictions in order to get used to the speed at which you need to try and solve questions. If you solve a question faster than the time allocated to it then you have extra time to use somewhere else! If a question takes you a bit too long, then you need to speed up elsewhere or triage upcoming questions. Use these values as a general guideline to keep yourself "on track".

UCAT section	Total time per section	Time per question
Verbal Reasoning	21 minutes	28 seconds
Quantitative Reasoning	24 minutes	40 seconds
Abstract Reasoning	13 minutes	14 seconds
Decision-Making	31 minutes	66 seconds
Situational Judgement	26 minutes	23 seconds

HOW COMPETETIVE IS YOUR SCORE?

This is a difficult question to answer as it changes from year to year (the UCAT changes their scoring methods) and will depend on which universities you apply to. Each university will have their own way of using the UCAT test in their admission process in order to give interviews to candidates (other components of your application will also play a role). This information can sometimes be found on the universities' websites but not always.

A good way of figuring out how competitive your score is, is by:

a) Using the deciles published by the UCAT each year
b) Taking a look at the average scores of candidates who got accepted to medical schools in previous years.

Decile Rank	2018 Score	2017 Score	2016 Score
1st	2160	2230	1640
2nd	2280	2340	1730
3rd	2360	2420	1790
4th	2420	2480	1850
5th	2490	2540	1890
6th	2550	2600	1940
7th	2610	2670	1990
8th	2690	2750	2060
9th	2810	2860	2150

a) You can see that from year to year that (depending on how candidates perform), what is considered the 80th or 90th percentile, changes. These deciles let you know how you performed compared to other candidates that have taken the test with you in the same year.

b) If you look through the medicine forums on websites such as the www.thestudentroom.com, you will find threads where students share their scores as they receive interviews to different universities. This is an extremely valuable resource and can help you know if your score is high enough to meet a specific university's cutoff.

As an example of how varied the use of the UCAT test between universities is, below are some UK universities and their use of the UCAT in the application process. This is why it's so important to research universities before you apply and make sure that your credentials (grades, UCAT scores, work experience etc.) match what they are looking for.

UK UNIVERSITY	USE OF THE UCAT TEST IN THE ADMISSIONS PROCESS
University of Bristol	No minimum cutoff score for the UCAT.
King's College London	Average UCAT scores across all sections are used instead of looking at individual scores. SJT is looked at separately when shortlisting candidates.
Queen Mary University of London	For graduate students, the UCAT has a 50:50 weighting with other academic criteria. Interviews aren't offered to students scoring below the 3rd decile.
St. George's University of London	UCAT results are used to select students for interview.
University of Southampton	UCAT scores will help determine who will be invited to the selection day.
University of Nottingham	AR, QR, VR, and DM sections will be scored as follows: 801 - 900 = 9 points 701 - 800 = 8 points 601 – 700 = 7 points 501 – 600 = 6 points 401 – 500 = 5 points 301 – 400 = 4 points SJT section will be scored as follows: Band 1 = 4 points Band 2 = 2 points Band 3 = 1 point Band 4 = 0 points (these applicants are not considered for interview)