

Introduction to the GAMSAT

The Graduate Medical School Admissions Test (GAMSAT) is an entrance exam required for entry into some graduate entry medical degrees. In Scotland the GAMSAT is used for admission to ScotGEM, a 4 year degree course run by the University of St Andrews and University of Dundee for students who want to become a doctor and have completed any honours degree at university.

The exam is analogous to the UCAT or BMAT in principle but the actual content is quite different. This document outlines the three different sections you will come up against and also gives some online resources that can get you started in your preparation.

The exam costs £265 to book and can only be sat during two windows, in spring and late autumn, but for 2021 the exam can only be taken in Edinburgh during the autumn window. The exam lasts a full day as each section lasts at least an hour (with the third section giving over two hours of time!) but there is a 30 minute break between section 2 and 3.

This document has been produced to help give applicants an idea of what this exam will contain and is based on information available online. We highly recommend also reading the official handbook which can be found here (https://gamsat.acer.org/files/GAMSAT_Info_Booklet_2021.pdf).

Section	Question type	Number of Questions	Time allowed
1 - Reasoning in Humanities and Social Sciences	Multiple choice	47	70 minutes
2 - Written Communication	Essay	2	65 minutes
3 - Reasoning in Biological and Physical Sciences	Multiple choice	75	150 minutes
Table adapted from GAMSAT Information Booklet 2021			285 minutes

(https://gamsat.acer.org/files/GAMSAT_Info_Booklet_2021.pdf)

Section 1 - Reasoning in Humanities and Social Sciences

This section contains 47 **multiple choice questions** of varying length and difficulty which you have to complete in 70 minutes. You should aim to try and do a 'first pass' of the questions and answer the easiest ones first before coming back and spending more time on harder questions.

Questions in this section will require you to read a short passage and then choose from a series of prepared conclusions to say which of them is the 'best solution' to the passage or which of them 'cannot be inferred from the passage'.

The questions will test your **critical reasoning** and ability to **formulate conclusions** based on information you are presented with. You can be presented with a **range of different forms of information**, including poetry and comics, so make sure you are familiar with digesting a variety of literature forms. **Figure 1** on the next page is taken from AceGAMSAT.com and shows an example of a passage for section 1.

During your preparation we recommend reading **lots of different short passages** of text to improve your comprehension of a variety of styles, as opposed to spending a lot of time on fewer long texts. Pay particular attention to **recent medical news** from the last few years as the exam questions may touch on this kind of information.

Unlike for previous exams you might have sat, **it's not about revising or 'what you know'** but instead is about how well you have developed your techniques. To do well in this section **you need to develop skills** like skim reading and identifying motivations, character emotions, and thinking about overarching themes while reading.

Passage 1

Well, I got a mysterious call from an agency asking if I was interested in a job with better prospects and more money. I felt quite flattered. Anyway, I met the person and we discussed the proposition over a drink. Basically, she made me an offer I couldn't refuse- it was such a good job. And there was a marvellous golden hello. My old company tried to keep me, but that one was just a stepping stone for me. I was off.

Question 1

Which statement is TRUE about the speaker in passage 1?

- A** She was dissatisfied with the financial benefits she received from the old company.
- B** She saw the new job as a means of advancement.
- C** She was wary of the headhunting approach.
- D** She passed up negotiations with the old company.

Figure 1.

Section 2 - Written Communication

This section of the exam consists of **two essays** that you have to write within 65 minutes. To help guide your writing the 'questions' are given in the form of quotes that are intended to inspire your thinking. You choose one of the questions for each essay and then can start writing.

Generally Essay A is '**discursive**' and is based around some socio-cultural matter (e.g. technology in the modern age or poverty) while Essay B is usually more **personal** (e.g. your views on love or ageing). **Figure 2** shows some examples of essay topics, taken from AceGAMSAT.com.

There is **no set word limit** but a good target is around 500 words per essay. In general, quality is more important than quantity so **take a short time at the start to plan out what you want to write** and why. You could start with a 5-minute brainstorm or writing down a formal essay outline. During your preparation it is essential to write at least some of your practice essays with a time limit to get used to coming up with ideas under pressure.

Essays should be structured with an introduction, main body (spanning ~3 paragraphs), and a conclusion. Remember to include evidence (either from personal experience or background reading you've done) as this can help really

Figure 3 on the next page is taken from the official 2021 GAMSAT guide and gives you an idea of how your essays will be marked. During your preparation it can be very useful to show your essays to friends or teachers who can give feedback on how your writing reads and whether they could follow the different threads through the piece.

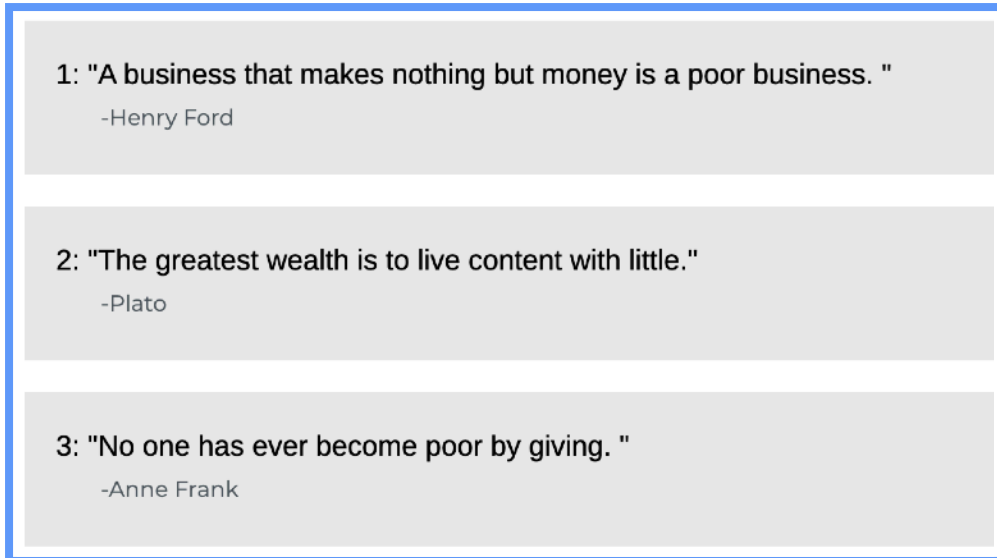


Figure 2.

From AceGAMSAT Quote Generator (<https://www.acegamsat.com/gamsat-quote-generator/>)

Figure 3.

CRITERIA FOR THE ASSESSMENT OF WRITTEN COMMUNICATION
Raters consider the following issues:
Thought and Content (the quality of what is said) <ul style="list-style-type: none">• what is made of and developed from the task• the kinds of thoughts and feelings offered in response to the task
Organisation and Expression (the quality of the structure developed and the language used) <ul style="list-style-type: none">• the shape and form of the piece• the effectiveness and fluency of the language
Each piece of writing will be assessed by three independent raters.

From GAMSAT Information Booklet 2021

(https://gamsat.acer.org/files/GAMSAT_Info_Booklet_2021.pdf)

Section 3 - Reasoning in Biological and Physical Sciences

This section contains 75 multiple choice questions that cover material from biology, chemistry, and (to a lesser) extent physics. You are given 150 minutes to complete all these questions. Information can be presented as text but can also include graphs, tables, and diagrams.

This section can seem really daunting, especially if you're approaching it from a non-science background, but it is actually likely the easiest to study for because it has examinable topics that are clearly stated. The biology and chemistry material corresponds to a level equivalent to first year of university (similar to SQA advanced higher) while the physics questions are closer to SQA higher so you can use books/materials aimed at these levels to prepare.

Figure 4 shows an example of a physics question that may appear in the exam, taken from AceGAMSAT.com.

In addition to testing your knowledge of principles you will need to use your reasoning and problem solving skills to apply the right techniques to the right information.

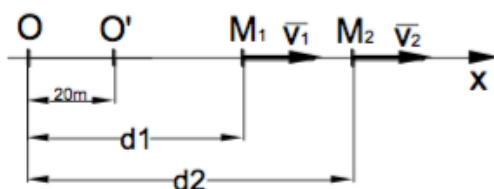
Classically this section is 'double weighted' by the admissions teams, meaning your performance in this section matters a lot more than the other two, however **for ScotGEM this section is not double weighted.**

Unit 21

Questions 37 - 39

Two cars travel with constant velocity on the Ox axis of a Cartesian system. The first car M_1 starts from the point O which is the origin of the system with the velocity $v_1 = 4\text{ m/s}$. The second car M_2 starts from the point O' (20 m further) after the time $t_0 = 10\text{ s}$ with the velocity $v_2 = 6\text{ m/s}$. Assuming that the general motion law of the two cars is: $x = x_0 + v(t - t_0)$ answer the questions about the system. Note: the relations between average velocity and travelled distance is:

The travelled distance is: $\Delta d = v \cdot \Delta t$ where $\Delta d = d_f - d_0$



37. What are the motion equations of the two cars?

- A. $x_1 = 4 \cdot t$, $x_2 = 20 - 6 \cdot (t - 10)$
- B. $x_1 = 6 \cdot t$, $x_2 = 20 - 4 \cdot (t - 10)$
- C. $x_1 = 4 \cdot t$, $x_2 = 20 + 6 \cdot (t - 10)$
- D. $x_1 = 6 \cdot t$, $x_2 = 20 + 4 \cdot (t - 10)$

38. At what time does the car M_2 meet the car M_1 ?

- A. $T = 10\text{ s}$
- B. $T = 15\text{ s}$
- C. $T = 20\text{ s}$
- D. $T = 25\text{ s}$

39. At what distance from the point O does the car M_2 meet the car M_1 ?

- A. $d_1 = 60\text{ m}$
- B. $d_1 = 80\text{ m}$
- C. $d_1 = 100\text{ m}$
- D. $d_1 = 120\text{ m}$

Figure 4.

Useful resources

Below is a list of online resources that you might find useful. As stated in the introduction, we recommend reading the official guide from GAMSAT which can be found here (https://gamsat.acer.org/files/GAMSAT_Info_Booklet_2021.pdf).

It's important to understand that official paid for GAMSAT resources (found here; <https://gamsat.acer.org/prepare/preparation-materials>) are the only preparation materials that you can be certain match the content of the final exam.

- **Free GAMSAT Study Guide;** specific question topics included and extensive list of questions for section 3
(<https://gradready.com.au/gamsat-study-syllabus>)
- **Publication2;** useful guide, although some information is outdated
(https://www.plymouth.ac.uk/uploads/production/document/path/4/4170/GAMSAT_booklet.pdf)
- **Practice test from Gradmed Australia;** free practice test, note that despite the URL this website is not an official GAMSAT resource
(<https://www.gamsat.co.uk/test-centre>)
- **Sample questions/practice test from GAMSAT Preparation Courses;** free practice test and over 50 sample questions
(<https://www.gamsatpreparationcourses.co.uk/free-GAMSAT-practice-test>)