

Writing Better Examinations

(by an old friend from the East – the great filosofer)

The technique of writing examinations is one which every student has to become proficient with in order to be successful in a university career, and in business after graduation. From many years of setting and marking examinations here are a few clues which may be of help to students. These are mostly common-sense suggestions which, if followed should make a considerable difference in the final examination mark.

Before the examination:

1. Forget about cramming during the reading break, or the night before the examination. Your brain cannot assimilate a lot of new material in a short period of time.
2. Be prepared. Know the material in the course before you enter the examination. Good marks are easier to obtain if you have confidence that you know the material on which you are being examined. This means that you must study the textbook and class notes and ask questions in class, or tutorial throughout the term, if something is unclear.
3. Try to explain the fundamentals of the subject to a classmate. If you do not understand the principles, you can't explain them to someone else.
4. Review the day's lectures at the end of each lecture day.
5. Review the week's lectures at the end of each week.
6. Review the lecture and lab material at the end of each month.
7. Prepare for open or closed book examinations. It has been found that with proper preparation, there is little difference in writing either type of examination. Where handbooks or codes are required because of the need for complex formulae or material properties, the basic theory is often available and does not need to be memorized, or be derivable from first principles. It is necessary, though to know how to apply the theory correctly.
8. For open book examination determine if the instructor will allow additional written material to be placed on the covers or blank pages of the textbook.
9. In open book examinations use only the textbook that you are familiar with. If you rifle the Library for every book you can find on the subject, you will waste most of your valuable examination time reading, and not writing.
10. Remember to bring your calculator to the examination, and be sure that the batteries are charged. Poorly charged batteries used to be a major problem for students. That is seldom a difficulty these days. It is important that you be in the correct frame of mind when writing examinations. Don't let extraneous material or thoughts interfere with your concentration. Do everything to calm down and get ready for the writing. If you know the material, you should be confident that you can handle any problem given to you.
11. When writing an examination in a large room where there may be several exams being written simultaneously, be sure that you are writing the correct examination, or the correct section of the exam.
12. During the time before the examination, write your name on the exam books and fill in all the blank lines on the cover sheet. Write as neatly as possible.
13. Read the entire exam before starting to write. Decide on the easiest problem to solve first and leave the difficult ones to the end. Problems don't have to be solved in the order in which they appear on the examination. Occasionally the examiner will place the very difficult problems first on the exam paper, and the number of students who fall into the trap of starting the examination with the hard or lengthy problem is remarkable. Nothing destroys a student's confidence more than having trouble, and wasting time, on the very first problem of the examination.
14. Work neatly! Use a straightedge and an eraser and a soft pencil. Take pity on the marker of the examination (sfs) for if

you consider that he will probably mark for three or four hours continuously, he will not spend much time trying to fathom what you had in mind if everything is disorganized.

15. Proportion your time according to the marks given for each question in the examination. Ten descriptive answers worth 10 marks will not justify spending 35 minutes of examination time. If no marks are given for each question, ask the invigilator, or assume that the questions are of equal value.
16. Note any assumptions you make and justify them. Students who get lost in a problem will often note, *Assume the value of this function is so-and-so*, when it is so-and-so that is required. Such broad assumptions get no marks at all.
17. In open book examinations it is futile to try to summarize theory which is contained in the book you are using and expect to gain some marks. Anyone can copy from a book.
18. When working on numerical questions which carry over from one page to another, be very careful in transcribing numbers. This is a source of a large number of errors in structural analysis problems.
19. Review in your mind how you will solve the problem at hand. The logic of the solution should be apparent to the marker. Keep the solution linear so that everything follows in a logical straight line. Avoid jumping from left to right pages, or to pages ahead or back. While it may be clear in your mind how the solution is progressing, the marker may not take the time to follow your thinking and that will lead to poor marks.
20. Be cautious in the use of a programmable calculator. Often a student will give an answer with no intervening calculations. This may indicate to the marker that the answer has been guessed, or a programmable calculator has been used. If the answer is correct, you will get the marks, but if it is wrong, then zero will be the reward. It would be useful to show the marker the logic of how you went about getting the answers, although detailed calculations are not shown.
21. Marking can be absolute or class-relative. This depends on the marker, the subject and the examination. In courses, which are

fundamental to any subject, the marking will generally be absolute and the number of passes or failures is irrelevant. What is important is the knowledge possessed by the student. In the case of relative marking, the best mark in the class will be scaled upwards or downwards and everyone else will be fitted in proportionally. Here, the results depend on *the luck of the draw* - the number of people writing the examination and their abilities.

22. Multiple choice tests can be scored to discourage guessing. Watch out for trick questions which are confusing or unclear. Always ask the invigilator if you are uncertain about the meaning of any question.
23. Follow instructions given in the examination to the letter. Don't give more than what is requested, nor less. This examiner is looking for some particular knowledge of the subject material and he should get only what he asks for.
24. If a particular method of solution is requested, don't give the examiner anything else. He has his reasons for asking for that method.
25. Don't ever *be psyched out* by an examination. If you are ready, and know the material for the course and present it neatly and logically, you will be successful. The form of the exam is irrelevant if you are prepared. Look upon the exam as a challenge.
26. If you think that the final mark you received in the examination is not what you deserved, talk to the instructor. Most professors are reasonable and will go over your paper. In the event that you still feel that you would like a more formal evaluation of your final mark, apply to the Registrar's office for a formal review of the mark. There will be a small fee for this service which will be refunded if the mark is raised. From past experience, marks seldom change following a review, and on occasion, they can go down!

After the examination: Relax