

WRITING QUESTIONS FOR UNDERGRADUATE EXAMS

A resource pack for MSCAA

Thanks for agreeing to contribute questions for the MSCAA bank. This pack will give you all the information you need to write good quality questions that are suitable for undergraduates.

Single best answer items

A typical SBA has a clinical scenario, a question and a five option answer list e.g.

A 54 year old man has recently had a myocardial infarction. His medications include aspirin, bisoprolol, perindopril, atorvastatin and furosemide. He now has severe aching in his limbs.

Which intervention is most likely to improve his symptoms?

- A. Change furosemide to bumetanide
- B. Increase dose of aspirin
- C. Reduce dose of atorvastatin
- D. Start diclofenac
- E. Stop atorvastatin

Answer E

How to construct an SBA:

SBAs are not about testing knowledge of obscure facts, but about testing how to apply knowledge to a clinical situation.

- All SBAs should begin with a clinical vignette, giving patient history, signs, observations, investigations etc in a logical order.
- Vignettes should be 30-100 words in length.
- There should then be a lead in, which asks a specific question e.g. which is the most likely diagnosis? Avoid using 'which of the following' and use 'which' instead of 'what'.
- The options presented should all be:
 - Alphabetical or numerical– we do not use any other order
 - Plausible – try to avoid obviously redundant answers
 - Homogenous – e.g. all diagnoses, all treatments
 - Grammatically correct – don't mix tenses etc
 - Roughly the same length – so the right answer doesn't stand out

- Make sure there is only one right answer and that the right answer is in the list

What SBAs do we want?

- It is best to think about a patient you have seen rather than something vague and abstract. Remember the curriculum – we should be testing students in what they are expected to know and have seen in their placements.
- Think about all the areas of practice – investigations, management, risk factors, side effects of treatments, ethical or legal issues, advice to patients, how basic science applies to clinical assessment.
- Encourage the student to problem solve – they may have to work out the diagnosis from the information given in order to decide the best management etc.

What we don't want:

- We **don't** want questions about esoteric facts.
- We **don't** want questions that are multiple true false items with only one right answer, or statements of fact without any clinical setting
- We **don't** want questions with negative lead ins such as “*least likely*”, “*treatment you would not give*” etc

e.g Which form of contraception is not progesterone only?

- A. Cerazette
- B. Depo Provera
- C. Femidom
- D. Implanon
- E. Mirena IUS

This question has no clinical information, so is a statement of fact only, and asks a negative question.

House style

1. Aim for lead in of 30-100 words. The language should be clear and concise. Use the **present** tense.
2. The scenario poses the clinical problem which is to be solved by **one and only one** of the suggested answers in the option list. If there is any ambiguity, try to add details to the scenario to rule out any possible options other than the intended answer.
3. Where appropriate, make the scenarios patient focused and include all or some of the following components in this order:
 - age

- gender
 - symptoms
 - duration
 - the setting, especially with regard to use of generic test material across specialties
 - relevant past history, family or social history
 - physical findings (NB positive/abnormal findings first)
 - results and investigations presented in a logical, standardised order
4. The scenario should ensure that the candidate is not being assessed on factual recall but on the application of knowledge.
 5. Avoid making the scenario overcomplicated and exclude irrelevant information
 6. Avoid the phrase 'on examination' unless what follows would be otherwise ambiguous.
 7. Avoid the terms 'presents with' or 'complains of' instead use 'has' e.g A 33 year old woman has abdominal pain.
 8. Avoid the term 'history of' instead use 'with' e.g. A 46 year old man with known alcohol dependence
 9. Write numbers up to nine in full and numbers above nine as digits
 10. Ensure there is a list of **5 possible answers** to the lead in, identified serially A-E. The list should be in **alphabetical** order unless a different logical order is specified.
 11. Do not mix different skill areas in the same list (e.g. diagnoses and treatments).
 12. All options should be plausible answers for the scenario, but four of them should be incorrect or inferior.
 13. Options should be of a **similar length** and balanced content, and grammatically and logically compatible with the lead in.
 14. Avoid grammatical cues: all answers should connect to the question.
 15. Uses the terms 'woman' and 'man' rather than 'male, lady' etc.
 16. Does not use hyphens.

If you have any more queries about this resource pack please contact Veronica Davids at the MSCAA: Veronica.Davids@medschools.ac.uk