

Re: Request to all MRCS examiners to submit new questions for the MRCS Part A Multiple Choice Question Bank

Dear fellow examiners,

Firstly, we would like to thank you for your time, dedication and enthusiasm in surgical assessment for the four surgical Royal Colleges. However, we would be grateful if you would now assist the Intercollegiate Committee for Basic Surgical Examinations (ICBSE) with some additional activity in relation to the MRCS Part A (multiple choice) examination. As a consequence of the remote delivery of the examination, there has been an increase in the reproduction of question material within the public domain. To maintain the validity and standard of the assessment we will need to rapidly change, and increase the size of, the MCQ question bank.

We would be grateful if you would consider submitting five or six MCQ questions on topics of your interest covering either basic sciences or clinical questions within your area of specialism that lie within the curriculum as defined in the new Intercollegiate Surgical Curriculum Programme.

<https://www.iscp.ac.uk/iscp/curriculum-2021>

As a short summary and to maintain consistency with the house-style of the question bank any question should have a short lead in stem with a clinical vignette defining a single clearly defined problem. There must be five possible answers in a single best answer format.

General points to consider include:

- Use simple, precise and unambiguous wording.
- Use plausible distractors that actually exist.
- Avoid clues wherever possible to the correct answer.
- Consider topics to emphasise higher-order thinking.
- Keep options of a similar length (avoiding one short or very long answer).
- Avoid negatives wherever possible.
- Avoid options such as "all of the above" or "none of the above"

We have included some exemplar questions (attached) for you to consider but we appreciate this is not an easy task. The current Paper Panel are actively engaged in this process by editing and modifying the current questions. However, we need your support in extending the question bank.

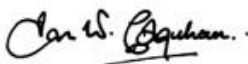
The timescale is unfortunately limited and we would ask if questions could be submitted **by the end of December 2021**. Once you have constructed your questions, we would be grateful if they could be emailed to the examination teams at your affiliated College from where they will be forwarded to the ICBSE office in London. In due course, we would aspire to giving feedback on how the questions that you have written performed in future diets of the examination.

Once again, we would wish to thank you for your ongoing work on behalf of ICBSE.

Yours sincerely,



John Hines
Chair of ICBSE



Ian Colquhoun
Chair MCQ sub group
Chair MRCS Paper Panel



Gregory Ayre
ICBSE Manager

EXEMPLAR MULTIPLE CHOICE QUESTIONS

Applied Basic Sciences - GOOD QUESTION

A 54-year-old woman had a left hemicolectomy for carcinoma 14 hours ago. Urine output charting confirms she is passing concentrated urine at a rate of 0.5 ml/kg/hr. Which endocrine response is most likely to have caused this?

- A. Decreased aldosterone release
- B. Decreased insulin release
- C. Decreased thyroxine release
- D. Increased adrenocorticotrophic hormone (ACTH) release
- E. Increased vasopressin release

Cross Reference: Desborough JP Br J Anaesth 2000; 85: 109-17

Correct Response: E

Summary: Good clinical stem.
Higher ordered thinking regarding physiology and renal function.
Understanding of the effects of increasing and decreasing hormone levels.
Cross reference given.

Applied Basic Sciences - POORER QUESTION

A 37-year-old woman who had a malignant breast lump removed recently is concerned about her 17-year-old daughter since reading in a magazine that this condition can be 'passed on' to daughters. Which of the following investigations would be most helpful for you to advise her on this matter?

- A BRCA-1/BRCA-2 genes
- B Oestrogen/progesterone receptor status
- C p53 gene
- D Papilloma virus
- E PTEN gene testing

Correct Response: A

SUMMARY: Linguistic style not precise – “most helpful”.
Mix of differing distractors – genes / receptor status / virus.
Only 1 answer.
No reference source.

Principles of Surgery in General – GOOD QUESTION:

A 72-year-old woman, who was treated for breast cancer 20 years ago, presents with tiredness, constipation, back and chest pain. Examination reveals localised tenderness over thoracic vertebrae and anterior ribs. Her pulse is 110 beats/minute and blood pressure 90/60 mmHg. An ECG shows a shortened QT interval. Her biochemistry results are:

	Finding	Normal
Sodium	137 mmol/L	135–145
Potassium	4.3 mmol/L	3.5–5.0
Corrected calcium	3.8 mmol/L	2.2–2.6
Phosphate	0.8 mmol/L	0.8–1.4

Chest X-ray shows lytic lesions in the left anterior third rib and fifth thoracic vertebra. Which of the following treatments should be administered first?

- A. 0.9% sodium chloride
- B. Calcitonin
- C. Cinalcalcet
- D. Pamidronate
- E. Prednisolone

Cross Reference: Walsh J., Gittoes N., Selby P. Emergency management of acute hypercalcaemia in adult patients. Endocr Connect 2016 vol. 5 no. 5 G9-G11

Correct Response: A

SUMMARY: Recognised relevant common clinical problem.
Knowledge of metastatic disease and hypercalcaemia.
Understanding of the emergency management.
Clinical experience will help guide thinking.

Principles of Surgery in General – POORER QUESTION:

A previously fit 49-year-old woman undergoes a laparoscopic right hemicolectomy. The next day, her haemoglobin is found to be 74 g/L. Transfusion of packed red cells is started. Thirty minutes later she develops an urticarial rash and becomes distressed. She is also noted to be hypotensive and tachycardic. What is the most likely cause for her signs and symptoms?

- A. Acute haemolytic reaction
- B. Delayed transfusion reaction
- C. Pulmonary embolism
- D. Transfusion related acute lung injury
- E. Transfusion related circulatory overload

Cross Reference: Fraser SM, Aldouri A, Toogood G. Chapter 5: Shock, blood transfusion and coagulation. In: Baker Q, Aldoori MI (ed). Clinical Surgery: A Practical Guide. 2009

Correct Response: A

SUMMARY: Transfusion triggers in a fit 49 yr old?
Poor distractors. C, D and E very unlikely.
Cue / clue in stem – 30 mins later.
Only 1 possible answer.