

BMSH4302 Introduction to Chronic Disease

What Each Section B Question is Testing

This document breaks down each of the five Section B questions: the structure of the question, what skills it is testing, how the marks are distributed across the (a) and (b) parts, and the most useful teaching point for each.

Use this alongside the mock questions and sample answers to help students see how the same question type can be applied to different conditions.

Q1: Condition, cause and what happens in the body

Question structure

(a) [8 marks]: Explain what the condition is and what causes it. (b) [7 marks]: Explain what happens in the body as a result.

What this question is testing

Whether the student can move from naming a condition to explaining its mechanism. Part (a) tests knowledge of aetiology with depth, going beyond a list of risk factors to explain how the condition develops. Part (b) tests knowledge of pathology and the link from biological process to clinical features. The marker is checking whether the student understands the condition mechanistically rather than just by name.

Mark breakdown

Part (a): 2 marks for identifying the condition with the body part affected. 6 marks for explaining the cause with detail. Part (b): 7 marks for describing what happens in the body and connecting this to symptoms.

Key teaching point

The strongest answers connect cause to pathology to symptom. A patient with Type 2 diabetes has insulin resistance because of excess visceral adiposity, which raises blood glucose, which damages small blood vessels, which produces retinopathy, neuropathy and nephropathy. Each link follows from the last.

Q2: Risk factors (modifiable and non-modifiable)

Question structure

(a) [8 marks]: Identify a modifiable risk factor and explain how it increases risk. (b) [7 marks]: Identify a non-modifiable risk factor and explain how it increases risk.

What this question is testing

Two skills. First, whether the student can correctly distinguish modifiable from non-modifiable risk factors. Second, whether they can explain how each one operates biologically. A correct identification with no mechanism is not enough. The marker is looking for evidence that the student understands the pathway from exposure to disease.

Mark breakdown

Part (a): 2 marks for naming the condition and the modifiable risk factor. 6 marks for explaining the mechanism. Part (b): 1 mark for the non-modifiable risk factor. 6 marks for explaining the mechanism.

Key teaching point

The most common error is mixing up the categories. Family history, age, sex, ethnicity and genetics are non-modifiable. Smoking, diet, activity, alcohol and weight are modifiable. The second most common error is stating the link without explaining it. 'Smoking causes COPD' earns the identification mark only. 'Tobacco smoke triggers chronic inflammation in the airways and destroys alveolar walls, leading to irreversible obstruction' earns the explanation marks.

Q3: Comorbidity and quality of life

Question structure

(a) [8 marks]: Explain how this condition can increase risk of a condition in a different body system. (b) [7 marks]: Explain how living with more than one condition can affect quality of life.

What this question is testing

Two related skills. First, whether the student understands that chronic conditions interact: that one condition can biologically drive another in a different body system. Second, whether they understand quality of life as multidimensional, covering physical, psychological and social effects. The marker is looking for the WHY of the comorbidity link, and concrete real-world examples of impact rather than vague generalisations.

Mark breakdown

Part (a): 2 marks for naming both conditions, with the second in a different body system. 6 marks for explaining the mechanism linking them. Part (b): 7 marks for discussing quality of life across more than one dimension with real-world specificity.

Key teaching point

Treat quality of life as broader than 'feeling sad'. It includes ability to work, finances, relationships, self-management burden, social participation and identity. Concrete examples earn marks: 'breathlessness on stairs limits ability to keep up with a young child or to continue working as a teaching assistant' is specific and credible. 'Affects daily life' is too vague.

Q4: Autoimmune diseases

Question structure

(a) [8 marks]: Choose ONE autoimmune condition. Explain what part of the body the immune system attacks and the effect. (b) [7 marks]: Choose a SECOND autoimmune condition from a different week. Explain target and effect.

What this question is testing

Whether the student understands autoimmune disease as a single mechanism (immune system attacks self) applied to different target tissues. The two examples test recognition that the underlying process is the same but the disease differs because the target is different. The marker also wants to see correct identification of which body part is attacked, with appropriate use of terminology.

Mark breakdown

Part (a): 2 marks for identifying the condition as autoimmune with the correct body part. 6 marks for explaining the effect. Part (b): 1 mark for the second condition with body part. 6 marks for explaining the effect, with bonus credit for noting the shared mechanism across different targets.

Key teaching point

Define autoimmune precisely: the immune system attacks the body's OWN tissues, having mistakenly identified them as foreign. That word matters. Common confusion: autoimmune (immune attacks self) versus allergy (over-reaction to external trigger) versus infection (response to foreign organism). Choose two conditions from different weeks: Type 1 diabetes and rheumatoid arthritis, or Hashimoto's thyroiditis and multiple sclerosis. Note the shared pattern at the end for the higher-band marks.

Q5: Management and professional relevance

Question structure

(a) [8 marks]: Explain how the condition can be managed through lifestyle, nutrition, or exercise approaches. (b) [7 marks]: Explain why understanding this condition matters for future professional practice.

What this question is testing

Whether the student can move from textbook knowledge to applied understanding. Part (a) tests technical accuracy about management approaches with specific detail. Part (b) tests the student's ability to translate that knowledge into the role they are training for. This is not a question where one programme has an advantage. The answer should sound credibly written by someone training for that specific role.

Mark breakdown

Part (a): 2 marks for choosing a condition with clear relevance to the programme of study. 6 marks for explaining management with specific detail. Part (b): 7 marks for explaining professional relevance with specificity. Vague answers like 'it is important to know about diseases' earn 0 for part (b).

Key teaching point

Specific approaches with mechanism earn marks. 'Resistance training stimulates osteoblasts which build bone' is specific. 'Exercise is good for bones' is not. For part (b), give concrete examples: who you will work with, what you will need to recognise, when you will refer. Recognise scope of practice: a sports therapist supports management, they do not prescribe medication.