

BMSH4302 Introduction to Chronic Disease

Mock Paper 3: Marking Guide

Exam structure

Section A: 20 MCQs at 1 mark each = 20 marks. Answer ALL.

Section B: 5 short answer questions at 15 marks each. Answer TWO. = 30 marks.

Total: 50 marks. Final percentage = total mark x 2.

Duration: 60 minutes.

Section A: MCQ Answer Key

Each question is worth 1 mark. Total: 20 marks.

Q1. Answer: d

Type 2 diabetes is long-lasting, requires ongoing management, and is not curable in the conventional sense. Influenza, throat infections and a sprained ankle are acute and self-limiting.

Q2. Answer: c

New cases over a defined time period in a defined population is incidence. Prevalence would be the total number of people living with the condition at a given point. Mortality counts deaths.

Q3. Answer: b

Symptoms are subjective (what the patient reports). Signs are objective (what can be observed or measured). Together they form the clinical presentation. Pathology, treatment and genetics are separate concepts.

Q4. Answer: c

There is a clear deprivation gradient in Wales: chronic disease prevalence, healthy life expectancy and mortality all show worse outcomes in more deprived areas. Wales has higher rates of several chronic conditions than the UK average.

Q5. Answer: b

Atherosclerosis is the gradual build-up of plaques (made up of fats, cholesterol and other substances) in the artery wall. The narrowing reduces blood flow and is the underlying process in coronary heart disease, stroke and peripheral arterial disease.

Q6. Answer: a

Anorexia nervosa involves persistent restriction of intake, fear of weight gain and body image disturbance, with significantly low body weight. Brief loss of appetite during illness is not an eating disorder. The pattern of binge eating without compensation describes binge eating disorder.

Q7. Answer: a

Pulmonary hypertension is raised pressure in the pulmonary circulation. The right ventricle has to work harder against this pressure and may eventually fail. It is distinct from systemic hypertension.

Q8. Answer: b

Occupational lung diseases follow chronic inhalation of harmful particles. In Wales, coal workers' pneumoconiosis is part of an important historical and ongoing occupational health context.

Q9. Answer: c

The 4 Ts (Thirst, Toilet, Tired, Thinner) are used in UK awareness campaigns to support earlier recognition of Type 1 diabetes, particularly in children and young people.

Q10. Answer: d

Type 2 diabetes is characterised by insulin resistance, often with relative insulin deficiency over time. Type 1 is autoimmune destruction of beta cells. MS and OA do not involve insulin resistance as their central mechanism.

Q11. Answer: b

Chronic hyperglycaemia damages both small and large blood vessels and peripheral nerves. The major long-term complications are cardiovascular disease, nephropathy, retinopathy and neuropathy.

Q12. Answer: a

Gout is a crystal arthropathy: monosodium urate crystals deposit in joints, triggering acute inflammation. RA is autoimmune; OA is degenerative; osteomyelitis is infective.

Q13. Answer: a

Peak bone mass is achieved by approximately the late 20s. Subsequent loss is gradual until the menopause in women, when loss accelerates due to falling oestrogen. Lifestyle factors during youth and early adulthood significantly influence peak bone mass.

Q14. Answer: b

Chronic low back pain is most usefully understood biopsychosocially. Imaging findings often correlate poorly with pain. Psychological factors (e.g. fear avoidance) and social factors (e.g. work, deprivation) are important contributors to chronicity.

Q15. Answer: c

The pathological hallmarks of Alzheimer's disease are amyloid plaques and tau tangles, with progressive neurodegeneration. Dopamine loss describes Parkinson's; demyelination describes MS.

Q16. Answer: d

MS is more common in women (approximately 2 to 3 times more common than in men) and is most often diagnosed in young adulthood. This pattern has important implications for education, employment and family planning.

Q17. Answer: b

Eating disorders are serious mental health conditions with significant physical and psychological consequences. They are not lifestyle choices, do not affect only one demographic group, and require professional intervention. They cause substantial morbidity and have one of the highest mortality rates of any mental health condition.

Q18. Answer: d

Multi-morbidity is the coexistence of two or more long-term conditions. It is increasingly common, particularly with deprivation and ageing, and substantially complicates care.

Q19. Answer: c

Lifestyle interventions are foundational across the majority of chronic conditions covered in this module, both for prevention and for ongoing management. They are not a last resort and are not condition-specific.

Q20. Answer: d

Tobacco smoking is a modifiable risk factor for several cancers, including lung, oral, oesophageal, bladder and others. Family history, age and sex assigned at birth are non-modifiable.

End of marking guide