

BMSH4302 Introduction to Chronic Disease

Mock Paper 3: Revision Aid

Instructions

Duration: 1 hour.

This paper has TWO sections.

Section A: 20 multiple choice questions. Answer ALL questions. Each question is worth 1 mark. (20 marks)

Section B: 5 short answer questions. Answer TWO questions only. Each question is worth 15 marks. (30 marks)

Total marks: 50.

This is a revision aid. The format mirrors the live exam paper. Use it as a timed practice run wherever possible.

Section A: Multiple Choice (20 marks)

Choose the single best answer for each question. Each correct answer is worth 1 mark.

1. Which of the following is the best example of a chronic disease?

- a) Influenza
- b) A bacterial throat infection
- c) A sprained ankle
- d) Type 2 diabetes

2. If 100 new cases of a condition are diagnosed in a population of 10,000 over one year, this figure represents:

- a) The prevalence of the condition
- b) The mortality rate of the condition
- c) The incidence of the condition
- d) The risk of dying from the condition

3. The signs and symptoms of a condition refer to:

- a) The cellular changes within tissues
- b) What the patient experiences and what can be observed or measured by a clinician
- c) The treatments offered
- d) The genetic basis of the disease

4. Health inequalities in Wales mean that:

- a) Health outcomes are identical across all areas of Wales
- b) Wales has lower rates of chronic disease than the rest of the UK
- c) People living in the most deprived areas of Wales have, on average, worse health outcomes and shorter healthy life expectancy than those in the least deprived areas
- d) Deprivation has no effect on chronic disease in Wales

5. Atherosclerosis is best described as:

- a) An infection of the heart valves
- b) The build-up of fatty plaques in the wall of an artery, which narrows the artery and reduces blood flow
- c) An irregular heart rhythm
- d) A weakening of the heart muscle

6. Anorexia nervosa is best characterised by:

- a) Restricted energy intake, intense fear of weight gain, and disturbed body image, leading to significantly low body weight
- b) A short-term loss of appetite during illness
- c) Episodes of binge eating only, without compensation or restriction
- d) Loss of muscle mass with no change in eating behaviour

7. Pulmonary hypertension is best defined as:

- a) Persistently raised blood pressure within the pulmonary arteries, which strains the right side of the heart over time
- b) Raised systemic blood pressure
- c) An infection of the lungs
- d) An autoimmune condition of the airways

8. Occupational lung diseases such as pneumoconiosis are caused by:

- a) Bacterial infection acquired in the workplace
- b) Inhalation of harmful dusts, fibres or fumes over prolonged periods, leading to lung damage
- c) Allergic reactions to food
- d) Inherited mutations alone

9. The classic '4 Ts' presentation of Type 1 diabetes refers to:

- a) Tingling, tightness, tremor, and tachycardia
- b) Tonsillitis, tinnitus, tachypnoea, and tearfulness
- c) Thirst, toilet (frequent urination), tired, and thinner
- d) Tremor, tightness, taste changes, and tinnitus

10. Insulin resistance is the central mechanism in:

- a) Type 1 diabetes
- b) Multiple sclerosis
- c) Osteoarthritis
- d) Type 2 diabetes

11. A person with longstanding Type 2 diabetes is at significantly increased risk of:

- a) Only joint pain
- b) Cardiovascular disease, kidney disease, eye disease, and nerve damage
- c) Only respiratory disease
- d) No additional health risks

12. Gout is caused by:

- a) Build-up of uric acid crystals in joints, triggering acute inflammation
- b) An autoimmune attack on joint cartilage
- c) Bacterial infection of bone
- d) Wear and tear of cartilage with age

13. The peak time for human bone mass to be reached is:

- a) By approximately the late 20s, after which bone mass gradually declines
- b) Around age 5 to 10
- c) After the age of 60
- d) Bone mass continues to increase throughout life

14. Chronic low back pain is best understood through which framework?

- a) A purely structural model focused on imaging findings
- b) A biopsychosocial model that considers biological, psychological and social factors together
- c) An infective model
- d) An autoimmune model

15. Alzheimer's disease is associated with:

- a) Loss of dopamine-producing neurons
- b) Demyelination of the central nervous system
- c) Build-up of amyloid plaques and neurofibrillary tau tangles in the brain, with progressive neuronal loss
- d) Loss of bone density in the skull

16. Multiple sclerosis is more commonly diagnosed in:

- a) Men aged over 70
- b) Children under 5
- c) There is no demographic pattern
- d) Women, often diagnosed between approximately 20 and 40 years of age

17. Eating disorders are best understood as:

- a) Lifestyle choices that can easily be reversed by willpower
- b) Serious mental health conditions involving disturbed eating behaviours and thoughts about food, weight or body shape, with significant physical and psychological consequences
- c) A condition that affects only adolescent girls
- d) A short-term phase that resolves without intervention

18. A patient lives with Type 2 diabetes, hypertension and depression. The presence of multiple long-term conditions is best described as:

- a) A single complex disease
- b) An acute episode
- c) A normal feature of ageing with no clinical relevance
- d) Multi-morbidity, which is associated with greater treatment burden, worse quality of life, and more complex care needs than any single condition alone

19. Lifestyle changes such as physical activity, dietary modification and smoking cessation are most accurately described as:

- a) Useful only after medication has failed
- b) Relevant only in cardiovascular disease
- c) Core elements of management for most chronic conditions, often used alongside other treatments and contributing to both prevention and management
- d) Not supported by evidence

20. Which of the following is a recognised modifiable risk factor for several cancers?

- a) Family history
- b) Age
- c) Sex assigned at birth
- d) Tobacco smoking

End of paper