

BMSH4302 Introduction to Chronic Disease

Mock Paper 2: 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. Prevalence is best defined as:

- a) The number of new cases arising in a population over a defined time period
- b) The proportion of cases that result in death
- c) The total number of people living with a condition in a defined population at a given point in time
- d) The rate at which a condition is diagnosed each year

2. Aetiology is best described as:

- a) The study of the causes or origins of a disease
- b) The way a disease presents to the patient
- c) The way a disease changes tissues and cells
- d) The way a disease is treated

3. Which of the following is a modifiable risk factor for Type 2 diabetes?

- a) Physical inactivity
- b) Age
- c) Ethnicity
- d) Family history

4. The Dahlgren and Whitehead model is used to describe:

- a) The biological progression of disease
- b) The mechanism of insulin resistance
- c) The social determinants of health and the layers of influence on individual health
- d) The classification of cancers by site

5. Hypertension is best defined as:

- a) Persistently raised blood pressure that, over time, damages blood vessels and increases the risk of cardiovascular events
- b) A short-term rise in blood pressure during exercise
- c) A complete blockage of a coronary artery
- d) An irregular heart rhythm

- a) Women do not develop CVD until much older
- b) Women's symptoms are often atypical compared to the classic 'crushing chest pain' presentation, leading to delayed recognition
- c) Women's CVD is less serious
- d) Women always present with the same symptoms as men

7. In COPD, the airflow obstruction is:

- a) Reversible with a single dose of bronchodilator
- b) Largely irreversible and progressive
- c) Caused by an autoimmune attack on the airways
- d) Restricted to the upper airways only

8. Bronchiectasis is characterised by:

- a) Narrowing of the airways that is fully reversible with an inhaler
- b) Permanent abnormal widening of the airways with chronic mucus build-up and recurrent infection
- c) Stiffening of the lung tissue with reduced lung volumes
- d) An autoimmune attack on the alveoli

9. Hashimoto's thyroiditis is:

- a) An autoimmune condition that gradually destroys thyroid tissue, leading to hypothyroidism
- b) A bacterial infection of the thyroid gland
- c) An autoimmune condition that causes hyperthyroidism
- d) A type of thyroid cancer

10. Gestational diabetes is best described as:

- a) Pre-existing Type 1 diabetes diagnosed during pregnancy
- b) A form of high blood glucose that develops during pregnancy and usually resolves after birth, but increases later risk of Type 2 diabetes
- c) A permanent form of diabetes that always remains after pregnancy
- d) A condition affecting only the baby, not the mother

11. MASLD (metabolic dysfunction-associated steatotic liver disease) develops when:

- a) The liver becomes infected with a virus
- b) The bile ducts become blocked
- c) Excess fat accumulates in liver cells in the context of metabolic dysfunction such as insulin resistance
- d) The immune system attacks the liver

12. Osteoarthritis is best described as:

- a) A degenerative joint condition involving progressive loss of cartilage and changes to the underlying bone
- b) An autoimmune attack on the synovial membrane
- c) A bacterial infection of joint tissue
- d) A condition caused by uric acid crystal deposits

13. A fragility fracture is best defined as a fracture that occurs:

- a) Only in people over the age of 80
- b) From a fall from standing height or less, or from minimal trauma that would not normally break a healthy bone
- c) Only as a result of a sporting injury
- d) Only in the bones of the hand and wrist

14. Sarcopenic obesity refers to:

- a) Obesity in adolescents only
- b) Bone loss in obesity
- c) Muscle loss without any change in fat mass
- d) The combination of low muscle mass and strength with excess body fat, which carries higher risk than either alone

15. Alzheimer's disease is associated with which pathological changes in the brain?

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

16. An anxiety disorder is best characterised by:

- a) A short period of nervousness before a stressful event
- b) Persistent and excessive worry or fear that is out of proportion to the situation and interferes with daily functioning
- c) A loss of interest in previously enjoyed activities only
- d) An inflammatory condition of the brain

17. Stigma associated with mental health conditions can affect a person by:

- a) Making it more likely they will seek help quickly
- b) Increasing self-confidence about their condition
- c) Discouraging help-seeking, reducing adherence to treatment, and increasing social isolation
- d) Having no measurable impact on their experience of the condition

18. Adipose tissue is best described as:

- a) An inert energy store with no other function
- b) A type of muscle
- c) A connective tissue with no link to chronic disease
- d) A metabolically and hormonally active organ that releases signalling molecules influencing inflammation, appetite and metabolism

19. Health-related quality of life (HRQoL) is best described as:

- a) How long a person lives
- b) Income and material wealth
- c) The number of medications a person takes
- d) The impact of a person's health on their physical, psychological, and social functioning and wellbeing

20. Cancer arises when:

- a) Cells stop dividing entirely
- b) The immune system creates new tissues
- c) Bones produce too much marrow
- d) Cells acquire genetic and epigenetic damage that leads to uncontrolled proliferation, evasion of cell death, and the ability to invade other tissues

End of paper