

Marks

Question 20 (4 marks)

Outline how mitosis and cell differentiation assist in the maintenance of health.

4

Mitosis assists the maintenance of health by producing genetically identical cells for growth and repair of the body. A healthy organism will thus have mitosis occurring to replace dead or damaged cells.

Cell differentiation can assist the maintenance of health as cells become specialised to perform specific tasks. eg white blood cell, nerve cell. This allows maximum efficiency and functioning and specific cells look after specific problems and are thus good at it as they are specialised. Health is maintained as normal functioning is allowed to occur.