Question 5 6 marks

Turing Machines

- First abstract model for computability
- If something was computable it could be computer by a Turing Machine
- They were used to prove that not everything was computable i.e. limits of computation

Transistors

 Replaced bulky and less reliable vacuum tubes, enabling the development of smaller, faster, and more energy-efficient electronic devices. This laid the foundation for modern semiconductor technology.

Integrated Circuits

• Integrated circuits are orders of magnitude smaller, faster, and less expensive than those constructed of discrete components, allowing a large transistor count.

ARPANET

 Considered the forerunner or the internet – many of the protocols used by modern computer networks were developed for ARPANET

Microprocessors

The microprocessor enabled the integration of computing power on a small chip. This
development led to the rapid advancement of personal computers and other electronic
devices.

Personal Computers

 Personal computers have revolutionised the way individuals work, learn, and connect with others. Their affordability made them much more accessible for people to use in their daily lives to access information, communication and productivity tools easily accessible to everyone.

Very good explanation - clear understanding demonstrated 6 marks
Good explanation - clear information, lacking demonstration of full understanding 4 marks
Fair explanation - limited understanding 2 mark