COMPUTER ENGINEERING

Level 4 Diploma

UNIT 5 – PERSONAL COMPUTER SOFTWARE SUPPORT

Question 1

(a)   Describe a troubleshooting process that could be applied when a computer system appears to boot but fails to launch the operating system. (10 marks)

(b)   Explain how third-party utilities such as Memtest can be used to diagnose computer hardware faults. (10 marks)

Question 2

(a)   Explain the purpose and role of the device driver in the setup and configuration of new computer hardware. (10 marks)

(b)   Discuss the implications of a device driver being unavailable for a particular operating system, with reference to possible remedies. (10 marks)

Question 3

(a)   Compare how files on a remote device can be located using graphical and command-line explorers. (10 marks)

(b)   Analyse the usefulness of the command-line menu. (10 marks)

Question 4

(a)   Describe the procedure for installing a new operating system, with reference to installation, configuration, updating and troubleshooting. (10 marks)

(b)   Discuss the differences in how Windows-based and Linux-based operating systems handle multiple concurrent users and how this affects the choice of operating system for a remote multi-user database server. (10 marks)

Question 5

Compare a Windows-based and a Linux-based operating system that would be suitable for running a dedicated web server. (20 marks)

Question 6

Explain the health and safety procedures which are associated with handling computer hardware, with references to appropriate tools and procedures. (20 marks)

Question 7

Discuss the environmental procedures and implications associated with disposing old computer motherboards and chipsets. (20 marks)