COMPUTER SCIENCE TRIPOS Part II – 2016 – Paper 8

13 Topical Issues (RKH)

(*a*) Compare and contrast the Internet of Things (IoT) with the conventional internet. [4 marks]

(*b*) Describe how Bluetooth Low Energy (BLE) was designed to address the following IoT-related issues. Your answers should consider both BLE advertising and data channels.

  (*i*) Reduce the overall power consumption of peripherals. [6 marks]

  (*ii*) Handle radio channel contention from other IoT devices. [6 marks]

  (*iii*) Handle radio channel interference from other users of the same 2.4 GHz radio band such as WiFi. [4 marks]