Question 1  
a) You’ve just been appointed as Chief Information Officer (CIO) of Megacorp plc, a global retailer headquartered in the UK with over 2,000 stores in 25 countries across the world and a high-volume online retail store. In recent years Megacorp has lost customers because of poor service levels. This was partly because it owns and runs all its own computers and applications in its own data centres and uses a private communications network to link the stores to the data centres. A year ago, it suffered from two major outages in its main data centres and recently it was the victim of a sophisticated hack which resulted in the loss of personal customer data.  
  
Your CEO, Bibi, wanders into your office to congratulate you on your new appointment. She admits that she is not very familiar with information technology, but knows it’s vital to restore the reputation of the company. She’s read a lot about cloud computing and asks you to explain to her in really simple terms what it is, why it’s different to traditional enterprise computing, and what advantages it might offer to Megacorp. [15 Marks]  
  
b) Bibi asks you to look into the reason behind the delay in Project Rainbow, a flagship development to replace all of the point-of-sales software in the retail stores. This is a new system that is being built by the Megacorp application development team. Bibi mentions that the project has adopted an agile methodology and that the business managers are expected to get involved in regular meetings with the development teams. Explain to Bibi what meetings they might be involved in, and why an agile methodology should help ensure that the project succeeds. [5 marks]  
  
c) As she’s leaving your office, Bibi asks if you know about this law called ‘Freedom of Information (FoI) Act 2000’. She wants to know its purpose and the organisations it applies to. She particularly wants to know if a Megacorp customer can use FoI to request data from the company if they believe that Megacorp’s employment policy is biased against older citizens? [5 marks]  
[Total 25 marks]  
  
  
Question 2  
a) To which organisations do the General Data Protection Regulations (GDPR) apply? Explain how the regulations provide additional protection to citizens in respect of automated decision-making systems. [5 Marks]  
b) Back at Megacorp, you get a call from your Information Security Officer who is concerned that one of the Megacorp executives, Mr. Cummings, is conducting business illegally using the company’s systems. She asks whether she should monitor Cummings’ email and Internet activity, but you are unsure if this is allowed. Where might you find guidance on best practice for conducting such activity in the workplace? Under what circumstances is workplace monitoring allowed? [10 Marks]  
c) Bibi, the Megacorp CEO calls to ask you about ‘Big Data’. She tells you that her friend Tove who runs Sun Travel (a large travel company) has been very successful in selling tailored package holidays to her customers. Explain to Bibi what Big Data is, using some examples to give her a practical understanding, and suggest how she might use it to give Megacorp some insights into customer behaviour. [10 Marks]  
[Total 25 Marks]