Answer any FOUR of the six questions.

Each question is worth 25 marks – Total 100 marks.

Q1

a) Immanuel Kant, John Stuart Mill and John Locke.What area of study do the above three people have in common? **[2 marks]**

b i) Each of above three people is associated with one of the following theories,Natural rights, Deontology, Utilitarianism.Which person is associated with which theory? **[3 marks]**

b ii) Choose one of the three theories above and explain its main points **[6 marks]**

c) You are working for a private company as the lead developer on a new computercontrolled device for carrying out intricate and delicate eye surgery that isplanned to be much more accurate than previous devices. The computer controlsdirection, intensity and timing of a beam allows surgeons to save patientseyesight. However, delays have put the project behind schedule, it is not fullytested and the deadline for delivery to hospitals is approaching.

Your manager wants you to authorize the delivery of the devices to hospitals ontime so that the machines can be immediately used on patients, even though heis aware that the planned testing is not complete. He threatens to fire you if youdo not.

Identify the stakeholders then discuss the legal, social and professional / ethicalimplications of both following and not following your manager's instructions andcome to a conclusion.**[14 marks]**

Q2

a) Explain the purpose of professional bodies. **[4 marks]**

b) Give FOUR examples of how they can contribute to professional practice inorganisations. **[16 marks]**

c) Explain what is meant by the term professionalism in the context of the IT industry**[5 marks]**

Q3

ClothesNTreands is a large UK clothes outlet for leading brands in many cities. The company is considering creating a 'try-it-online' web site for customers to visualize through the web site how clothes look on themselves. ClothesNTreands is not the first company to provide an online provision of this type.

a) Explain how ClothesNTreands can protect its intellectual property for the new service using:

i) trademarks, **[4 marks]**

ii) copyright and design rights, and **[8 marks]**

iii) domain names. **[4 marks]**

b) Another UK company, TrendyClothes, has complained that ClothesNTreands has copied its ideas for the e-commerce facility and is therefore infringing its intellectual property rights. On what grounds might TrendyClothes take legal action? **[9 marks]**

Q4

a) What is spam? What types of information do users normally receive as spam? **[6marks]**

b) Explain the law relating to the sending of 'spam' to individuals either within the European Union or in the USA **[6 marks]**

c) The security department of a bank has discovered that one of the bank's programmers has made unauthorized modifications to a programme he has been maintaining; these modifications divert a very small percentage of the value of each transaction into an account belonging to the programmer's mother. How do the provisions of the Computer Misuse Act 1990 relate to this scenario? **[13 marks]**

Q5

a) In the context of identity theft and credit card fraud, what do the following terms mean to you? Phishing, Smishing, Vishing and Pharming **[4 marks]**

b) Describe 3 main security measures that are in place to combat identity theft and credit card fraud. **[6 marks]**

c) What is Hacktivism, and who are Anonymous? Under what circumstances would you justify Hacktivism? Also identify situations where you would not justify Hacktivism. Use examples where necessary. Write four paragraphs, an introduction, a paragraph justifying Hacktivism, a paragraph where you would not justify Hacktivism and a conclusion. **[15 marks]**

Q6

a) What are two major reasons for the offshoring of jobs, in a computing technology context? **[4 Marks]**

b) Write three examples of offshoring in a computer technology context. **[6 marks]**

c) You are a manager of a U.K. software company about to begin a large software project. You will need to hire dozens of programmers. You can hire programmers in India at a lower salary than programmers in the U.K. Describe both the ethical arguments and economic arguments

for and against hiring the programmers in India, rather than the U.K. and then write your conclusions. **[15 marks]**