**ATHLONE INSTITUTE OF TECHNOLOGY**

**SCHOOL OF ENGINEERING**

**SEMESTER 2 EXAMINATIONS 2014**

**May Session**

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**BSc. IN Software Design (Web Development)**

**BSc. IN Software Design (Game Development)**

**YEAR 4**

**LAW, ETHICS, COMPUTERS AND SOCIETY**

**External Examiner(s): Mr Damien Marshall**

**Dr Chris Exton**

**Internal Examiner(s): Mr. Seamus Ryan**

**Instructions to candidates:**

Answer ANY three questions.

All questions carry equal marks (20 marks).

***Time Allowed: TWO (2) hours.***

***No. of pages including cover sheet: 3***

Q.1 Dave Murtagh is an ambitious 41 year old project manager with Becker Software Systems (BSS). A married man with three teenaged children, he has risen through the ranks of the organisation since he joined as a technician seven years ago.

Recently, a former employee of BSS contacted the Chief Executive, Jane Becker, alleging that Dave had falsified documentation associated with the Newark project which he, Dave, had led last year. Newark was an important new software product which BSS developed under tight time pressure. Delivering the product on time meant a competitive advantage and extra profits for BSS.

The allegation was that Dave had falsified test data and forged signatures of other staff to suggest that Newark had successfully passed some time-consuming test stages which were not, in fact, completed. His actions could have exposed BSS to lawsuits which would have destroyed the firm. Luckily, the product performed to specification despite the lack of the testing.

Jane conducted a careful investigation and concluded that the allegations were true and when challenged, Dave admitted forging signatures.

Jane has come to you for advice, firstly on how to deal with Dave, but also, on what organisational and policy changes she should introduce to BSS in order to prevent such behaviour in the future.

(a) Advise Jane on her options for dealing with Dave and the consequences of each. Recommend one option and justify your choice. 10 marks

(b) Using the guidelines from the Stead, Worrell and Stead article, advise Jane as to how she might change BSS in order to promote ethical behaviour. 10 marks

**[20/60 Marks]**

Q.2 (a) “A contract is an agreement which the law will enforce.”

Explain the elements that go to make up a legally binding contract. 10 marks

(b) Tony and Eddie are businessmen living in Dublin. On 27th March 2013, they both purchase copies of “Bonanza” a word processing training package from Computerplanet.com, an online retailer of software products based in Cork. Tony buys it for use in his business and Eddie buys it to help his daughter to improve her word processing skills. In both cases, the DVD arrives by post within three working days and in both cases, the package stops working within 30 days. Advise Tony and Eddie as to their legal rights in the context of contract law and the sale of goods act.

10 marks

**[20/60 Marks]**

Q3 "Go back 50 years and copyright was an industrial regulation that most people had no contact with. It was pretty difficult to find yourself in a position where you had committed a felony. Now the US is [trying to extradite Richard O'Dwyer](http://www.guardian.co.uk/uk/2012/mar/13/theresa-may-extradition-richard-odwyer), a 23-year-old UK-based computer science student, on copyright infringement charges. When, 50 years ago, could a kid sitting in his basement in the UK commit a crime in the US? It's disturbing."

*Jimmy Wales 2012 (Wikipedia Co-founder)*

(a) Is Jimmy Wales justified in being disturbed to see copyright infringement punished?

Discuss 10 marks

(b) Is the internet in particular, and technology in general, to blame for this situation?

Discuss 10 marks

**[20/60 Marks]**

Q4 “The half-life of an engineer, software or hardware, is only a few years.”

*Craig Barrett, (ex-President and co-founder, Intel)*

(a) What are the career implications of the above statement for a graduate software engineer. 10 marks

(b) Discuss the ways in which the concepts of lifelong learning and CPD can contribute to the career of a software engineer. 10 marks

**[20/60 Marks]**