# Cork Institute of Technology

Bachelor of Engineering in Building Services Engineering

(National Diploma in Engineering in Building Services Engineering)

(NFQ - Level 7)

#### Summer 2005

# Electrotechnology - Paper 1

(Time: 3 Hours)

Instructions Examiners: Mr. S. Boljevic Dr. N. J. Hewitt. Answer FTVE Question Mir. T. Dannes All Question carry equal marks. Q1. (a) Using a sketch outline the theory in relation to charge separation in the storm cloud. (6 marks) (B5): Explain what is meant by the term rolling sphere and why is it important when designing lightning protection system? (Simorks). Outline and explain the most important factors taken into consideration for the ((c) lightning protection? (6 marks) Q2. Relative to the protective relay: Name four general function of a relay. (4 marks) (a) (363) Name at least five incoming signal to a relay. (4 marks) Name four basic requirements that must be taken into account when designing (c) the protection system, and briefly explain each of them. (8 marks) Name at least four principals that must be taken into account when designing (d) the protective relays. (4 marks)

# **Question Paper Of Electrotechnology Of 13 November 2014**

**M Woodhall** 

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