

Unit: NETK3/08A Electrical Scientific Principles and Technologies

Assessment type: Multiple choice

Number of questions: 40

Time allowed: 90 minutes

Graded exam. The FIRST ATTEMPT is normally expected to be around the boundaries: Pass 50% (20 Marks), Merit 65% (26 Marks), Distinction 80% (32 Marks). **Any resitting will only be subject to a Pass grade maximum.**

(The grade from this assessment is stand-alone, and does not contribute toward an overall qualification grade).

Calculator required

Closed book

The examination will cover the knowledge learning outcomes of the unit as follows:

Learning Outcome	Learning Outcome Title	Number of Questions
1	Understand mathematical principles which are appropriate to electrical installation, maintenance and design work	2
2	Understand standard units of measurement used in electrical installation, maintenance and design work	5
3	Understand basic mechanics and the relationship between force, work, energy and power	7
4	Understand the relationship between resistance, resistivity, voltage, current and power	15
5	Understand the fundamental principles which underpin the relationship between magnetism and electricity	7
6	Understand the types, applications and limitations of electronic components in electrotechnical systems and equipment	4
Totals		40

(To achieve the unit the learner must in total achieve tests 08A (on-screen) and 08B (written paper) and the Centre marked assessment covering Transformers)