

# Higher National Graded Unit Specification

## General Information for Centres

This Graded Unit has been validated as part of the HNC Information Technology. Centres are required to develop the assessment instrument in accordance with this validated specification. Centres wishing to use another type of Graded Unit or assessment instrument are required to submit proposals detailing the justification for change for validation.

**Graded Unit Title:** Information Technology: Graded Unit 1

**Graded Unit Code:** DV6D 34

**Type of Graded Unit:** Examination

**Assessment Instrument:** Closed-book

**Credit points and level:** 1 HN Credit(s) at SCQF level 7: (8 SCQF credit points at SCQF level 7\*).

*\*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

**Purpose:** This Graded Unit is designed to provide evidence that the candidate has achieved the following principal aims of the HNC in Information Technology:

- ◆ Demonstrate the candidate's knowledge and skills in using and developing information technology packages
- ◆ Demonstrate the candidate's knowledge and skills in using and developing relational database management systems
- ◆ Demonstrate the candidate's knowledge of PC first line support

**Recommended Prior Knowledge and Skills:** It is recommended that the candidate should have completed or be in the process of completing the following Units relating to these specific aims prior to undertaking this Graded Unit:

D76N 34 Software Development: Applications Development  
DV6E 34 Database Design Fundamentals  
DV6L 34 PC: First Line Support

**Core Skills:** There are no Core Skills embedded in this Graded Unit specification.

**Assessment:** This examination based Graded Unit is closed-book. It will consist of a written examination of three hours duration. Candidates may not have access to any books, handouts, notes or other learning material. The assessment must be invigilated. There must be no communication between candidates and communication with the invigilator must be restricted to matters relating to the administration of the assessment.

## General Information for Centres (cont)

If e-testing is used for part (or all) of this examination, centres must ensure the security of the questions and the identity of the candidates with the examination presented with a secure desktop locking out **all** other applications or access to resources.

## Administrative Information

**Graded Unit Code:** DV6D 34

**Graded Unit Title:** Information Technology: Graded Unit 1

**Original date of publication:** June 2006

**Version:** 02 (September 2006)

### History of Changes:

Version	Description of change	Date
02	Modification of the examination coverage.	21/9/06

**Source:** SQA

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## Higher National Graded Unit specification: Instructions for designing the assessment task and assessing candidates

**Graded Unit Title:** Information Technology: Graded Unit 1

### Conditions of Assessment

The assessment is based on a closed-book examination lasting three hours. The graded awarded will reflect the candidate's achievement on the first examination event.

If a candidate does not achieve a pass or if a candidate wishes to retake the Graded Unit examination, this must be based on a significantly different examination from that given originally. A candidate's grade will be based on his/her achievement on the new event using a significantly different examination.

The examination should be unseen and the assessment should be conducted in controlled and invigilated conditions.

At all times, the security, integrity and confidentiality of examinations must be ensured.

### Instructions for designing the assessment task:

The examination should be designed to assess the candidate's critical knowledge and understanding of the topics relating to the specific aims which this Graded Unit is designed to cover. The questions and corresponding marks should be designed in accordance with the ranges indicated in the table that follows. However, the overall total mark for the examination is 100.

#### Section 1

Topic	Level of knowledge/ understanding	Weighting/ Mark Allocation
<b>DV6E 34</b> Database Design Fundamentals	Ability to understand the main concepts and principles of these mandatory Units.  Ability to understand and apply the main concepts and principles of these mandatory Units.	<b>Multiple choice/Multiple Response:</b>  30 questions, 15 questions per unit, 1 mark per question.  <b>30 marks</b>
<b>DV6L 34</b> PC: First Line Support		

## Higher National Graded Unit specification: Instructions for designing the assessment task and assessing candidates

**Graded Unit Title:** Information Technology: Graded Unit 1

### Section 2

Topic	Level of knowledge/ understanding	Weighting/ Mark Allocation
		<b>Constructed Response:</b>
		Two questions per Unit, plus a question which integrates knowledge from more than two Units. 10 marks per Question.
<b>D76N 34</b> Software Development Applications Development	Constructed response questions relating to comprehension, analysis, synthesis or evaluation	The questions will assess the candidate's ability to present and evaluate arguments, integrate information and ideas, which are related to the subject discipline.
<b>DV6E 34</b> Database Design Fundamentals		
<b>DV6L 34</b> PC: First Line Support		
		<b>70 marks</b>

Half marks must not be awarded for any question. To achieve a pass in this Graded Unit, candidates must achieve a minimum number of marks in each section as shown in the table below.

Section	Available Marks	Minimum Mark
1	30	15
2	70	25

The examination will be marked out of 100. Assessors will aggregate the marks achieved by the candidate to arrive at an overall mark for the examination. Assessors will then assign a grade to the candidate for this Graded Unit based on the following grade boundaries:

- ◆ A = 70% — 100%
- ◆ B = 60% — 69%
- ◆ C = 50% — 59%

## Higher National Graded Unit specification: Instructions for designing the assessment task and assessing candidates (cont)

### Section 1

The format of the objective response questions will be restricted to:

Multiple-choice questions (MCQs)

Multiple-response questions (MRQs)

The majority of questions will be MCQs, consisting of a single key and three distractors. A minority of the questions will be MRQs, consisting of two or more keys selected from four options. MRQs should be marked in the same way as MCQs. Either a mark is awarded or it is not. To gain a mark for an MRQ, candidates must choose all of the correct keys. MRQs should be used as discriminators to differentiate candidate performance at the upper grade boundaries.

### Section 2

The format of this section will be constructed response questions (short answer and extended response questions).

The majority of these questions will be short answer responses (consisting of one or two sentences). A minority of the questions will be extended response, to provide candidates with the opportunity for extensive writing on a specific topic. Ten marks will be used for an integrative question requiring the candidate to integrate knowledge and understanding from more than two units. This question will serve to discriminate between candidates at the upper grade boundaries.

The question paper should cover the full range of cognitive competencies. The majority of the available marks should be awarded for low-order cognitive skills (knowledge, comprehension and analysis). The distribution of marks across the competences is illustrated below:

Knowledge	25%
Understanding	25%
Analysis	20%
Application	10%
Synthesis	10%
Evaluation	10%

Centres may alter this allocation while retaining its general distribution.

## **Higher National Graded Unit specification: Instructions for designing the assessment task and assessing candidates (cont)**

### **Candidates with Disabilities and/or Additional Support Needs**

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments or considering special alternative assessment arrangements. For information on these, please refer to the SQA document *Guidance on Alternative Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs*, which is available on SQA's website: [www.sqa.org.uk](http://www.sqa.org.uk).