



**Technological Studies  
Standard Grade  
External Assessment Report 2008**

**The statistics used in this report are pre-appeal.**

**This report provides information on the performance of candidates which it is hoped will be useful to teachers/lecturers in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding. It would be helpful to read this report in conjunction with the published question papers and marking instructions for the Examination.**

# Comments on candidate performance

## General comments

The slight change in the percentage of overall awards was, in part, an indication of the ability profile of this year's cohort as reflected in the performance in the directly graded AT element and in the teacher's estimates.

It was disappointing to note that there was a drop of over 350 candidates presented at SG this year without any rise in the number of entries at Intermediate 2 level.

## Areas in which candidates performed well

General paper

Q1 (a) pneumatic symbols

Q2 systems

Q4 (d) energy

Q6 pneumatic piping

Credit paper

Q3 pneumatic description

Q5 (b) to (f) energy

Q6 (b) Boolean statements

## Areas which candidates found demanding

General paper

Q3 (b) PBASIC commands

Q3 (c) function of microcontroller sub-systems

Q5 (d) resistor colour coding

Q8 (a), (b) and (e) pulse generator, latch and comparator electronic system boards

Credit paper

Q1 (b) output driver

Q4 For...next loop

Q5 (a) two methods of reducing friction

Q6 (c) IC family characteristics

Q7 (b) (ii) ratio of mark to space period that determines motor speed

Q8 (a) converting mass to weight

## Advice to centres for preparation of future candidates

Centres may wish to address the following specific aspects where poor performance was noted:

- ◆ Candidates tend to list characteristics when answering questions that ask for the function of a component/sub-system to be stated.
- ◆ It is apparent that many candidates do not refer to the Data Booklet when completing a flowchart or when developing a PBASIC program.
- ◆ The use of a *for...next* loop and the inclusion of a *return* at the end of a sub-procedure present difficulties for many candidates.
- ◆ A significant number of candidates appear to be unable to use the Data Booklet for certain tasks such as converting mass to weight or accessing the resistor colour code.
- ◆ Knowledge of TTL and CMOS families is limited.

## Statistical information: update on Courses

Number of resulted entries in 2007	1,771
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Number of resulted entries in 2008	1,405
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## Statistical Information: Performance of candidates

### Distribution of overall awards

Grade 1	28.8%
Grade 2	25.3%
Grade 3	19.4%
Grade 4	13.4%
Grade 5	7.8%
Grade 6	3.9%
Grade 7	0.2%
No award	1.2%

### Grade boundaries for each assessable element in the subject included in the report

Assessable Element	Credit Max Mark	Grade Boundaries		General Max Mark	Grade Boundaries		Foundation Max Mark	Grade Boundaries	
		1	2		3	4		5	6
<b>KU</b>	<b>45</b>	33	24	<b>40</b>	27	19	<b>40</b>	16	n/a
<b>RNA</b>	<b>45</b>	34	25	<b>40</b>	28	22	<b>40</b>	17	n/a