

Principal Assessor Report 2006

Assessment Panel:

Technical Education

Qualification area

**Subject(s) and Level(s)
Included in this report**

Revised SG Technological Studies

Comments on candidate performance

General comments

The candidates' performance indicated that both Question Papers were fair and balanced. The full range of marks was achieved in each question and overall the 2006 exam was more accessible than in previous years.

Candidates once again performed better in Reasoning & Numerical Analysis (RNA) than in Knowledge & Understanding (KU).

Areas in which candidates performed well

General Level

Q1 (but not (b) (ii));
Q2 systems electronics;
Q4 pneumatics;
Q8 (a) flowcharting.

Credit Level

Q2 control diagrams;
Q3 pneumatics;
Q6 (a) flowcharting.

Areas which candidates found demanding

General Level

Q3 (b) naming worm and worm wheel;
Q7 describing ICs and wiring diagrams;
Q8 (b) & (d) PBASIC programming and number systems.

Credit Level

Q1 (a) & (b) naming mechanisms;
Q3 (e) restricting exhaust air;
Q4 (c) & (d) Boolean notation, describing ICs, and IC family characteristics;
Q6 (b) for...next loops;
Q8 (b) to (g) describing the function of the components in the circuit;
Q10 moments.

In both papers candidates consistently had problems with unit multipliers.

Advice to centres for preparation of future candidates

Centres may wish to apportion more time on the delivery of the following topics:

Applied Electronics

TTL and CMOS characteristics;
Wiring diagrams featuring ICs;
Developing Boolean statements from truth tables;
Operation of voltage divider circuits.

Mechanical Systems

KU (name and function) of the Mechanisms listed in the Arrangements;
Calculations involving the Principle of Moments.

Programmable Control

PBASIC commands associated with decisions and for...next loops;
Binary and decimal number systems.

Teachers may wish to note that KU mark allocation to Programmable Control, which in the past had been directly linked to the timing outlined in the Arrangements, has been reduced in both papers to reflect the limited examinable content of this topic.

Statistical information: update on Courses

Number of resulted entries in 2005	1,921
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Number of resulted entries in 2006	1,902
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Statistical Information: Performance of candidates

Distribution of overall awards

Grade 1	29.0%
Grade 2	27.4%
Grade 3	18.0%
Grade 4	14.8%
Grade 5	4.5%
Grade 6	4.5%
Grade 7	0.6%
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
KU	45	34	26	40	31	23	40	19	n/a
RNA	45	37	29	40	31	23	40	19	n/a