



External Assessment Report 2009

Subject	Graphic Communication
Level	Standard Grade

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

As with last year, the approach to marking BS building/architectural symbols was to only accept the correct BS terms. Many centres had paid attention to the update on this resulting in greater use of the correct terms. Unfortunately there were a number of centres where this information had not been passed on to the candidates.

Once again the level of draughtsmanship across all levels continues to be disappointing, in particular differentiation between outlines and construction. Too many candidates fail to outline their drawing at all making them difficult to mark.

At General and Credit levels time is an issue with a significant number of candidates failing to complete all the questions. Each year we ensure the questions are accessible but the issue remains.

Centres should be aware that the CAD questions are only related to 2D CAD. We are aware that many centers now use 3D CAD packages but the arrangements state 2D only.

Credit

The candidates appropriately presented for the Credit paper performed very well, but there were fewer very high performers. True Credit level candidates tended to attempt every question. Again differentiation between general and credit was built into the questions.

General

Amendments to the Drawing Abilities proved to be successful as the questions proved to be more accessible than last year. The tighter marking of the architectural symbols question again resulted in a drop in overall performance in Knowledge and Interpretation but there was an improvement from last year.

True Foundation candidates continue to find the jump to General too difficult.

Foundation/General

Foundation candidates were better this year but some continue to find the drawing abilities difficult. Each year we debate over the degree of difficulty of the question while still meeting the Grade Related Criteria at this level. However, most candidates continue to do extremely well in Knowledge and Interpretation at Foundation level.

Areas in which candidates performed well

Credit paper Knowledge and Interpretation

Question 1(a) and (b) – Advantages/disadvantages of using computers
This is clearly being taught well as most candidates are picking up most of the marks. Some do not read the question though and still gave ‘speed’ as an advantage.

Question 2 - Colour Theory

Once again this was well answered and good to see that this has been the case for a few years now. There are a number of candidates who do not give the answers in the correct context. They have correctly memorized 'psychology of colour' but their answer may not be appropriate to the question being asked.

Question 3- 3D modelling

Once again this was answered extremely well by most candidates. Those candidates who performed poorly did not answer the question but answered it as advantages/disadvantages of computers.

Question 4 (a) (b) and (c) - Pictorial views and scales.

This was very well answered by most candidates. There was a mixed response for the factors that affect the scale used, but it was still answered better than expected

Credit paper Drawing Abilities

Question 5 - Orthographic Projection

This proved to be a good lead-in question and most candidates scored highly.

Question 7 - Isometric

This topic is usually done well at Credit level. Only the back curve on the main body caused problems. Some candidates are not taking enough points to accurately draw the isometric circle. It is expected that at least 12 points are required to draw this accurately.

Question 9 - Sectional Assembly

Once again this challenging topic was tackled well. Assembling the parts correctly was the only failing but the marking scheme allowed for this. A number of General level candidates did not complete it.

General paper Knowledge and Interpretation

Question 1– Architectural plans

The whole cohort from centers who taught this topic well, performed well. There are still many candidates using the incorrect BS terminology.

Question 2– Safety signs

General/Credit candidates answered this extremely well but unfortunately the Foundation candidates performed poorly.

Question 3 (a) - CAD

Probably the best answered question across all levels.

General paper Drawing Abilities

Question 5 - Orthographic views

As with the Credit paper this proved to be a good lead-in question and most candidates scored highly. This was also the question that the Foundation candidates made the best effort at.

Question 6 - Isometric

As expected this was very well attempted. It was disappointing though that very few candidates got the setting back of the shelves correct but the marking scheme allowed for this. The basic shape allowed the Foundation/General candidates to make a good start at the question.

Question 8 - Planometric

As usual this was well attempted. It was not done as well as in previous years even though it was no more challenging.

Question 9 - Cylinder

As last year this was well answered by almost all of the Credit/General candidates but was too challenging for Foundation candidates. The General element of the Foundation/General candidates did well. This was one of the best attempted questions across all 3 papers.

Foundation paper Knowledge and Interpretation

As usual the vast majority of candidates answered the KI section very well.

All questions were very well answered, with this year being one of the best. In particular question 4 (a) was answered better than ever before.

As indicated last year the candidates are being very well prepared at this level.

Foundation paper Drawing Abilities

The General candidates found the DA straightforward and therefore performed very well in all questions. The Foundation candidates continue to find it very difficult.

Question 5 - Orthographic

As always this was one of the best answered questions and was answered well again this year but the level of draughtmanship was poor.

Question 7 - Orthographic

It was expected that the Foundation candidates would struggle with this but this was one of the best answered questions.

Areas which candidates found demanding

Credit paper Knowledge and Interpretation

Question 1 (c), (d) and (e)

Too many candidates continue to give commercial software package names instead of the generic names in the arrangements CAD, DTP and paint/illustration. A number of candidates did not know what a scanner was. These are common questions that are continually being poorly done.

Question 4 (e) – Dimensioning

Very few received full marks for this question and many candidates did not achieve any marks. Even though all the answers can be found in Question 9, Sectional Assembly, candidates did not answer this question.

Credit paper Drawing Abilities

Question 6 – Cone

Candidates either knew or did not know this. A significant number did not know how to put generators onto the views and therefore could not answer the question. Even candidates who achieved near to full marks for the cylinder at General level using generators could not apply them here. There were also a number of candidates who drew this as a square pyramid.

Question 8 – Hexagonal pyramid

The true shape was done very well but the plan or end elevation was not. Those that could not do it did not start with a pyramid and tended to draw vertical sides, or drew it as a cone. There were a significant number of candidates who made these same errors.

The transfer of the shape to the end elevation proved problematic due to not drawing it as a pyramid. Many drew the end elevation as a prism.

Question 9 – Hatching

Every year candidates find it extremely difficult to identify the correct areas to hatch in a sectional view. In addition there are still a number of candidates that sketch the hatching. These must be drawn at the correct angle of 45 degrees.

General paper Knowledge and Interpretation

Question 1 – BS symbols used in the building industry

Unless the correct BS terms are used no marks are awarded. There were still many candidates who used the incorrect terms or did not know what most of these are. There are still a significant number who do not know what the 3 plan types are.

Question 4 - Pictorial views

Candidates cannot identify pictorial views and more than half of the candidates cannot name more than one type of pictorial view. This also applies to Credit candidates.

General paper Drawing Abilities

Question 7 – Triangular pyramid

The majority of candidates have no idea of how to find the apex of a pyramid. In addition most are not aware that the width of the end elevation is different from the elevation. Some candidates achieved full marks but the majority struggled.

Foundation paper Knowledge and Interpretation

No issues with the KI.

Foundation paper Drawing Abilities

There was an improvement this year but the poor level of performance again resulted in a low pass mark. It is disappointing that a number of candidates do not even attempt any of the questions therefore receiving no marks at all.

Question 6 - Perspective

Those who knew what a perspective was had no trouble at all. Unfortunately a significant number of candidates are not aware of the purpose of vanishing points or have no understanding of proportion or foreshortening.

Question 8 - Development

Typical style of question but again proved to be difficult.

Question 9 - Section

Most candidates were able to draw the outline shape but again a large percentage of candidates failed to show hatching. There were also many candidates who did not even attempt the question.

Advice to centres for preparation of future candidates

General feedback

Unfortunately the standard of draughtsmanship continues to be very poor even at Credit level. A large proportion of candidates at all levels do not distinguish between construction lines and outlines. This is a major concern, and there appears to be no sign that this is improving. This creates problems for those progressing to Higher where the penalties are greater.

Knowledge and Interpretation (KI)

As in previous years areas of concern are:

- Knowledge of BSI conventions. This is a problem at Standard Grade that continues into Higher. Teachers need to ensure that candidates only use the recognised BSI terminology. SQA have issued an update indicating what is acceptable.
- Where required Credit candidates should give a description and not single word answers.

Drawing Abilities (DA)

Pictorial views continue to be well taught and therefore very well done by most candidates.

There was a continued improvement in sectional views but as mentioned earlier identifying the correct areas to hatch continues to prove difficult at both Foundation and Credit levels.

Other areas of concern are:

- Quality of draughtsmanship
- Transferring of widths from plans to end elevations. This is fundamental but is very poorly done by a surprisingly large number of candidates.

Statistical information: update on Courses

Number of resulted entries in 2008	9289
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Number of resulted entries in 2009	9206
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Statistical Information: Performance of candidates

Distribution of overall awards

Grade 1	18.2%
Grade 2	30.3%
Grade 3	22.3%
Grade 4	17.0%
Grade 5	8.5%
Grade 6	1.9%
Grade 7	0.1%
No award	1.8%

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
KI	40	27	21	35	17	13	30	17	13
DA	70	48	31	60	35	24	50	22	12