



## **General Certificate of Education**

# **Applied Science**

## **8771/8773/8776/8779**

**SC15      The Role of the Pathology Service**

# **Report on the Examination**

*2007 examination - June series*

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## **General Comments – June 2007 Series**

### **The A2 Units – SC07, SC09, SC10, SC12, SC13, SC15 and SC16**

The entry for the specification has continued to grow and centres have continued to successfully guide candidates to achieve, this first cohort for the A2 award has generated much high quality work from centres. Due credit should be given to both teachers and students in making every effort to meet the requirements of a new specification, producing portfolios, in many areas, of a commendable standard of content, approach and presentation. Centre administration overall has been good. However a number of centres were very late in sending initial documentation to moderators and in sending off requested samples. A number of centres failed to fully complete candidate record forms, missing candidate names and numbers makes recognition of work very difficult and leads to frustration and the potential for mis-allocation of marks.

### **Unit 15 – The Role of the Pathology Service**

During the year AQA has had a number of queries about the terminology used in this unit. Some centres considering that the term Pathology (and references to forensics and criminology on page 148 of the specification) could be understood to mean criminal pathology. This is not what the specification means. In this unit, the term pathology is made in reference to the pathology departments found in hospitals and the term clinical pathology should be the one used. In different hospitals, the exact terminology used to describe departments may vary but the thrust of the unit is that 4 areas of the hospital medical service should be studied in equal detail:

- The biochemistry department
- The haematology department
- The microbiology department
- And what is more correctly called the histo-pathology department (since the term pathology is frequently used as an umbrella term for all these departments together.)

Candidates should then carry out a microbiological analysis and either a chromatographic or electrophoresis analysis. Candidates in AO3(ii) are asked to compare the same procedure used in school with that used in the hospital environment. Many candidates outlined the work of the appropriate departments but some paid insufficient attention to the requirements of the specification on pages 149 to 153. In order to access high marks, all these areas should be addressed. Frequent omissions were the organisational structure of departments linked to the role and the qualifications of personnel, the tracking and disposal of specimens and health and safety legislation.

Candidates need to consider how they structure their portfolios for this work. Some made a general account of hospital procedures for health and safety, tracking of specimens and their analysis and disposal. Others repeated exactly the same material in each section of their portfolio with additions as appropriate. It seems sensible to provide a general account overall and then explain how this differs for each department as it is considered, rather than keep repeating things.

Almost every candidate carried out the two analyses but they demonstrated a wide range of levels of skill and challenge ranging from the chromatography of inks (which is inappropriate at A2 level in this unit) to detailed electrophoresis of DNA which had been extracted by candidates. Many used microbiological analysis very similar to the work submitted for Unit 12. Since candidates need to know the about Grams staining technique in this unit, it would seem sensible to use this technique for the identification of non-pathogenic microbes in an appropriate investigation.

Centres are again warned about the use of down-loaded materials. Their use in this unit was also considered to be a likely possibility. Centre assessors MUST warn candidates that the straight downloading of materials into portfolios is plagiarism. Where it is clearly identifiable, candidates WILL have portfolios sent to malpractice at AQA head offices and, as has happened in a number of cases this year, a centre investigation results. The outcome in all cases has been a very significant reduction in candidate's marks.

## **Mark Ranges and Award of Grades**

Grade boundaries and cumulative percentage grades are available on the [Results statistics](#) page of the AQA Website.