Designing Exam Papers

There is a list of acceptable answers in the mark scheme. However, whilst the setters of the question paper are restricted by the syllabus content, the candidates are not. A correct response should always gain the stipulated number of marks if it answers the question. In this respect the standardising meeting is extremely important and it is also at this meeting that we try to eradicate bias because of cultural or social issues that have not yet come to light. We also hope to have seen the types of response that the candidates are making. It is also necessary to accept that there are always two mark schemes for any paper. One is the official mark scheme and the other is what will be accepted despite not being the expected responses.

Example:

The manager of a shop wants to use a mail merge process to produce reminders to customers that owe money on their account. It is decided to use generic application software for this task.

Give **two** advantages of using generic application software rather than a custom written piece of software for the purpose.   [2]

The mark scheme might say that the answers are that the software is readily available; tried and tested and bugs will have been sorted out. However, the candidate writes down that there will be a large user base available which can be used to help the manager if they get stuck. It may not be on the mark scheme, but it is a perfectly reasonable answer so the candidate must get the credit.

Note in this example the word 'two' is in bold. This, together with the mark allocation of 2 shows clearly the expectation that the examiner is placing on the response. Always remember that the examiner is looking to reward what the candidate knows rather than penalise them for what they do not know. To this end, the candidate should always give one more than required, the examiner will find the best ones. Do not give a shopping list!

Example:

Describe **two** facilities on an electronic mail system.   [4]

Notice that there are 4 marks but only two things have been asked for. The mark scheme may start:

- Forward messages (1) to another recipient or recipients (1) using addresses in the address book (1)
- Auto acknowledgement can be used (1) for messages where it is important to know that the message has been received (1)
- Messages can be classified when they are sent (1) a message may be classified as urgent using an ! symbol (1)

There are many more possible answers but the point can now be made. There are four marks available but the question asked for only two facilities so four marks can be made but only from two bullet points. Again, the examiner will find the best two facilities if the candidate has given three. If the candidate gives four then the examiner will revert to choosing the best two.

Notice that the mark schemes are bulleted and consequently there can be no problem with the same being true for your candidates' responses. If you have candidates who

are determined to use prose, make them mark each other's work sometimes and see how difficult it is to give credit.

Please be aware that the examples given in this document do not all relate to this syllabus as this is a general document and that they have not been through the rigid question setting process. Indeed, some are deliberately poor in order to illustrate points of interest.

The keywords in a question
Each question may have a stem, but will then have a keyword at the start of the question sentence. These keywords have specific meanings:

State
A simple statement of fact, this may be a one word answer. Questions like this will be the only occasion that a one word response is acceptable.
Example:
An operating system contains a number of different types of utility programs.
State **three** utility programs that would be available in all personal computer operating systems.   [3]
The expected answers are: File handlers; virus checkers; hardware drivers…
A single word or phrase is all that is required. Other correct answers are possible and the candidate will get credited for these but be careful of grey areas…

Give
Generally requires a sentence for a mark.
Example:
The software needed to solve a problem can most easily be produced by splitting the main problem into modules.
Give **two** reasons why the problem should be modularised.   [2]
'The program is produced faster' would be a 'state' type of answer. Compare that with:
'The program can be produced faster because different programmers can work on the different modules. Notice how this also raises the answer above an IGCSE type of response into a higher level type of response.

Describe
The candidate has to say something and then expand on what they have said for a second mark. The describe type of question is normally worth two marks per point.
Example:
Describe the features of a spreadsheet package that allow models to be set up.

- A spreadsheet has rows and columns forming cells in which data items can be kept
- A spreadsheet gives the user the ability to use formulae in order calculate specific values based on others which may themselves alter
- A spreadsheet gives the user a series of pre determined formulae which can be used to manipulate data

The question is which of these answer the question that has been asked? How many of them is the candidate expected to come up with? How many marks is each one worth?
Example:
A word-processing package is used by both a technical author and an office secretary. The author uses it to produce scientific books, the secretary uses it for letters to customers.
a) Describe **two** features of a word-processor that would be important to the author but not necessarily to the secretary. [4]
b) Describe **two** features of the word-processor which would be important to the secretary but not necessarily to the author. [4]
We would expect the answer to part a to include thesaurus, special symbols, technical dictionary, page numbering, autoformat…
For part b the candidate should think about mail merge, standard letter templates, images…
The answers above would each be worth a mark but this is a describe question. The second mark needs to be for a description: Thesaurus for looking up synonyms of words; mail merge to send letters to all the people in a particular town who are also customers of the firm.
Note the layers!

Explain
Tends to be very similar to describe except that the first point has already been given. 'Explain mail merging using a word processor'. There is now no mark for 'mail merge'.
Example:
… Explain why the mail merge feature of the word processor would be useful to the secretary. [4]

- Because the secretary does not have to conduct their own search of the customer database in order to find those inhabitants who are customers.
- This will save paper and postal costs because they will not have to write individual letters to too many people.

One way of asking an explain question is to ask for advantages and disadvantages of something. The format of the questions makes the candidate consider both sides of an argument and should involve a conclusion of some sort.

Discuss

A very rare type of question as it typically asks for a prose type of answer. We do not expect prose answers at all and consequently would still want this answered in bullet point form. A discussion question should always contain points from both side of an argument and should ideally come to a conclusion.

Example:

Discuss the use of the internet by young people in school time.   [6]

Notice the high tariff for this question in comparison to others.

Inevitably the higher marks are expected to be attainable only by the higher ability candidates.

This question might have been asked as:

Explain the advantages and disadvantages of young people being able to use the internet during school time.   [6]

Or:

Describe **two** advantages and **one** disadvantage of letting young people use the internet during school time.   [6]

Other factors to consider in exam preparation:

Emboldening and what to look for

Use of source material

Any other keywords: 'What do you think should be…?'

Layering

Keep to the syllabus content otherwise confusion occurs