

General Certificate of Secondary Education

Business & Communication Systems 3126

3126/2H Paper 2 Higher Tier

Mark Scheme

2006 examination - June series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Paper 2 Higher Tier 3126/2H

Task One - Notice	Total for this task: 10 marks
(a) Correct all errors.	(4 marks)
Errors corrected – fastned - fastened (1), (p)upils - Pupils (1), m beginers - beginners (1).	neters - metres (1),
(b) Key in a suitable, eye-catching heading.	(4 marks)
Heading = safety (1), rules/instructions etc (1).	
Use of 'eye-catching' features (2), eg larger font, different font alignment. One mark each for the appropriate use of two features.	
(c) The document should be in double line spacing.	(1 mark)
Double line spacing used.	
(d) Use bullet points for each instruction.	(1 mark)
Bullet points used consistently.	
(e) Save the file as SAFETY2 and print it.	

Task Two – Spreadsheet

Total for this task: 38 marks

- (a) Beth would like to use a spreadsheet to calculate the profit or loss. Recall the spreadsheet file **SCHOOL**.
 - (i) Complete the **Lesson Costs** table using as many **formulae** as possible. You will need the following information.
 - The cost of new equipment is £2000.
 - The cost of the instructor per pupil is £50.

These amounts **do not change** as the number of pupils increases.

(6 marks)

Correct figures, ie £2000 (1) and £50 (1) taken from the scenario. Correct formulae used for the following column (4x1).

Cost of	Cost of	Total cost	Total
new	instructor	of	lesson cost
equipment	per pupil	instructor	

(ii) Complete the **Lesson Income** table with as many **formulae** as possible. The income from each pupil is £100. (3 marks)

Correct figure, ie £100 (1) is used. Correct formulae used for the following columns (2x1).

Income per	Total
pupil	lesson
	income

(iii) Create a **new** table on this sheet to show the profit or loss of providing lessons for 1, 10, 20, 30, 40 and 50 pupils. Use as many **formulae** as possible to transfer data between tables. (8 marks)

Suitably emphasised (1) and suitably worded (1) table title used.

Suitably emphasised (1) and suitably worded (1) column titles used.

Data for pupil numbers correct (1).

Correct formulae used to transfer data from Seasonal Lesson Costs (1) and Seasonal Lesson Income (1) tables.

Correct formula to calculate profit or loss (1).

(iv) Format correctly the figures in all three tables.

(1 mark)

All appropriate cells (in any two out of the three tables) show currency values with \pounds . Note - mark from print out for (b) (ii).

(v) Save and print the spreadsheet showing the formulae.

(1 mark)

Print out with formulae shown.

Surf and Sail

Lesson Costs					
Number of pupils	Cost of new equipment	Costs of instructor per pupil	Total cost of instructor	Total lesson cost	
1	2000	50	=A5*C5	=B5+D5	
10	=B5	=C5	=A6*C6	=B6+D6	
20	=B6	=C6	=A7*C7	=B7+D7	
30	=B7	=C7	=A8*C8	=B8+D8	
40	=B8	=C8	=A9*C9	=B9+D9	
50	=B9	=C9	=A10*C10	=B10+D10	

Lesson Income					
Number of pupils	Income per pupil	Total lesson income			
1	100	=A14*B14			
10	=B13	=A15*B15			
20	=B14	=A16*B16			
30	=B16	=A17*B17			
40	=B17	=A18*B18			
50	=B18	=A19*B19			

Profit/loss				
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Number of pupils	Total cost	Total income	Profit or loss	
1	=E5	=C14	=C23-B23	
10	=E6	=C15	=C24-B24	
20	=E7	=C16	=C25-B25	
30	=E8	=C17	=C26-B26	
40	=E9	=C18	=C27-B27	
50	=E10	=C19	=C28-B28	

(b) (i) Change the **Cost of new equipment** to £2500.

(1 mark)

Cell edited.

(ii) Print the edited spreadsheet showing the figures.

Surf and Sail

Lesson Costs					
Number of pupils	Cost of new equipment	Costs of instructor per pupil	Total cost of instructor	Total lesson cost	
1	£2 500	£50	£500	£2 550.00	
10	£2 500	£50	£500	£3 000.00	
20	£2 500	£50	£1 000	£3 500.00	
30	£2 500	£50	£1 500	£4 000.00	
40	£2 500	£50	£2 000	£4 500.00	
50	£2 500	£50	£2 500	£5 000.00	

Lesson income					
Number of pupils	Income per pupil	Total lesson income			
1	£100	£100			
10	£100	£1 000			
20	£100	£2 000			
30	£100	£3 000			
40	£100	£4 000			
50	£100	£5 000			

Profit/loss				
Number of pupils	Total cost	Total income	Profit or loss	
1	£2 550	£100	-£2 450	
10	£3 000	£1 000	-£2 000	
20	£3 500	£2 000	-£1 500	
30	£4 000	£3 000	-£1 000	
40	£4 500	£4 000	-£500	
50	£5 000	£5 000	£0	

(c) (i) Create a line chart to show **Total lesson cost** and **Total lesson income**. The figures for the **Numbers of pupils** should be used as the *x* axis labels.

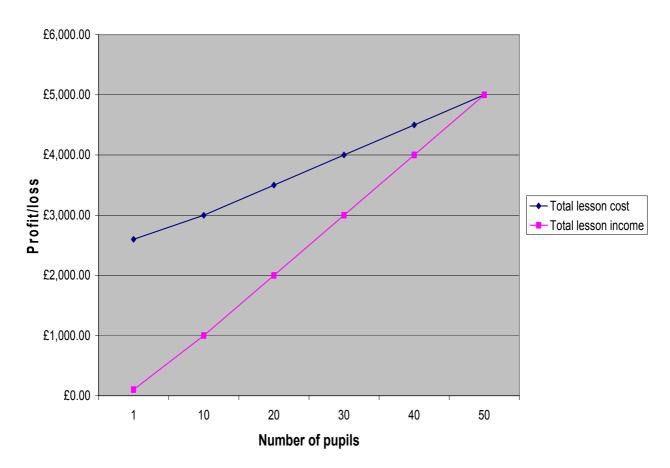
(6 marks)

Total Lesson Cost and Income shown (1) and no other data series (1). Suitable title (1) and axis titles (2x1).

Values for Number of Pupils form *x* axis (1).

(ii) Save and print the chart.

Surf and Sail profit/loss



(d) (i) Recall the word processing file **MEMO** which is a copy of *Surf and Sail's* memo heading. Use it to write a memo to Beth. (1 mark)

Memo correctly completed, eg To – (Beth Watson), From – the candidate, Date – test taken, Subject – Spreadsheet file, Profit.

(ii) Describe **one** way in which the **information** in the chart would be of value to Beth. (2 marks)

Level	Marks	Descriptor	Example
2	2	Comment on the profit/ relationship between costs and income as the number of pupils changes.	The business's costs are greater than the income but the difference falls as more students are taught.
1	1	Comment on costs and/or income and/or profit.	The business's costs are greater than the income.

(iii) Explain to Beth what happens to her profits or losses when the **Cost of new** equipment changes to £2500. (2 marks)

Either losses greater or profits lower (1) because costs increase (1).

(iv) Explain the advantages to Beth of **this** spreadsheet when carrying out these calculations. (4 marks)

Level	Marks	Descriptor	Example
4	4	Advantage explained by reference to either both costs and income or profitability with a specific example from the spreadsheet.	It is quick because costs are automatically re-calculated to show how profit changes, eg when the cost of new equipment rose to £2500.
3	3	Advantage explained by reference to either both costs and income or profitability.	It is quick because costs are automatically re-calculated to show how profit changes.
2	2	Advantage explained by reference to either costs or income.	It is quick because costs are automatically re-calculated.
1	1	Statement of an advantage.	It is quick.

(v) Save and print the memo.

You will be awarded up to three marks for accurate spelling, punctuation and the correct use of specialist terms.

(3 marks)

Level 3	Good command of grammar and spelling, good use of specialist	3 marks
	terms.	
Level 2	Reasonable command of grammar and spelling, some use of specialist terms.	2 marks
Level 1	Basic command of grammar and spelling, few if any specialist terms.	1 mark

Task Three - Database of accommodation

Total for this task: 24 marks

(a) The **Age** field stores a general comment about the age of the building. There are only **two** possible entries, either **New** or **Old**. Use the information from the cards on the opposite page to complete the **Age** field.

(3 marks)

Correct data entered including correct spelling, etc (2 if no mistakes, 1 if 1 mistake). Correct options chosen – ie either New or Old (1).

(b) (i) Add **four** extra fields to the database to store some of the remaining details. Give each field a heading. (5 marks)

Four fields added (1). With suitable titles for each one (4x1).

- (ii) Enter the details in the fields that you have added.
 - The data in **one** of your fields must consist of only two or three possible entries like the **Age** field in task 3(a) above.
 - No field entry can have more than **four** words.

(6 marks)

Correct data entered in each one of four fields (4x1). Information in one field is grouped (1). All entries 4 or fewer words (1).

(iii) Save and print the database showing the field headings.

Example containing possible field titles and appropriate data.

Name	Age	Rooms	Price	Location	Features	Accommodation
The Old School House	Old	7	25	Town centre	Log fire	Bed and breakfast
The George Hotel	Old	22	40	Town centre	Four poster bed	Hotel
The Haven Hotel	New	22	35	Town centre	Extensive menu	Hotel
The Place	New	20	50	Beach	Organic foods	Hotel
The White Cottage	New	4	20	In countryside	Beautiful garden	Bed and breakfast
The Old Vicarage	Old	7	25	Beach	Antique furniture	Bed and breakfast
The Regent Motel	New	15	15	Town centre	Satellite TV	Motel
The Beach House Hotel	Old	14	50	Beach	Beauty treatments	Hotel

(c) (i) Sort the database in **ascending** order, using a field of your choice.

(1 mark)

Data sorted in ascending order.

(ii) Add a title identifying what you have just done to the data.

(2 marks)

Title correct, ie sort on identified field (1) in ascending order (1).

(iii) Print the sorted database in list format, showing the field headings.

(1 mark)

Printed in list format showing field headings.

(iv) Search the database to find all the **old** buildings.

(1 mark)

Data queried to find old buildings.

Note 1- if original data entry in 3(a) is incorrect this should be allowed for.

Note 2 - order of records is unimportant.

(v) Print the selected records in list format.

The Old School	Old	7	25	Town centre	Log fire	Bed and
House						breakfast
The George Hotel	Old	22	40	Town centre	Four poster	Hotel
					bed	
The Old Vicarage	Old	7	25	Beach	Antique	Bed and
					furniture	breakfast
The Beach House	Old	14	50	Beach	Beauty	Hotel
Hotel					treatments	

(d) (i) Write a note to Beth. Identify another search which Beth could carry out on the **PLACESTOSTAY** database. (3 marks)

Title correct, ie Field (1), eg location, Condition Statement (1), eg equals, value (1), eg beach.

(ii) Explain the benefit of this search.

(2 marks)

Simple statement identifying value (1), eg many pupils might want accommodation by the beach, relevance to business commented on (1), eg so that they will be near the windsurfing school.

(iii) Save and print the note.

Task Four – Letter composition

Total for this task: 16 marks

(a) Set out the letter correctly using fully blocked style and open punctuation, including all the parts of a letter in the correct places. (10 marks)

Set out letter correctly.

Correct details: Date (1), addressee (1), address (1), salutation (1), complementary close (1), and signatory (1).

Correct layout: All parts in correct order (1), lines left justified (1), correct line spacing (1), open punctuation (1).

Letter Layout

SURF AND SAIL

43 North Street Denam East Sussex DM31 7HJ

16 May 2006 or 16th May 2006

Ms Katie Kosonie or Ms K Kosonie 29 Winchelsea Road Longhampton or LONGHAMPTON Surrey LN3 7EJ

Dear Katie or Ms Kosonie or Madam

Yours sincerely or Yours faithfully (to match Madam)

Beth Watson or B Watson (Ms)

(b) Thank Katie for her enquiry.

(1 mark)

Sentence, or up to end of part, thanking Mrs Kosonie.

(c) Reply to the points Katie has made.

(4 marks)

Apologise for failure (1), next date is 24 June (1), can arrange accommodation (1) + extra detail (1).

(d) Ask Katie to contact Beth if she wishes to go ahead.

(1 mark)

Please contact me, etc.

(e) Save and print your letter.

Task Five – Logo

Total for this task: 12 marks

(a) Use your computer to draw this logo. It should be about the same size as Beth's sketch. (8 marks)

Logo has continuous border (1), a title (1) which is centred (1). In the lower half is a circle (1) which is cut off at bottom (1). There is a straight line (1), across the lower quarter/third (1), the resulting bottom rectangle is filled (1).

- (b) Save your logo as **LOGO** and print it.
- (c) Re-open the word processing file SAFETY2 used in Task One.
- (d) Copy and paste the logo onto the safety instructions. Reduce it to about half size and place it alongside the heading. (4 marks)

The complete logo is pasted in document (1), size reduced (1), alongside title (1) without the other text being disrupted (1).

(e) Save the edited file and print it.