Paper Reference(s)

5381H/6B

Edexcel GCSE

Mathematics (Modular) – 2381

Paper 6 – Section B (Non-Calculator)

Higher Tier

Unit 1 Test – Data Handling

Thursday 17 November 2011 – Morning

Time for Section B: 20 minutes

Materials required for examination
Ruler graduated in centimetres and
millimetres, protractor, compasses,
pen, HB pencil, eraser.
Tracing paper may be used.

Items included with question papers
Nil

Instructions to Candidates

In the boxes above, write your centre number, candidate number, your surname, initials and signature.
Check that you have the correct question paper.
Answer ALL the questions. Write your answers in the spaces provided in this question paper.
If you need more space to complete your answer to any question, use additional answer sheets.

Information for Candidates

The marks for individual questions and the parts of questions are shown in round brackets: e.g. **(2)**.
This section has 5 questions. The total mark for this section is 15. The total mark for this paper is 30.
There are 8 pages in this question paper. Any blank pages are indicated.
Calculators may be used for Section A only.

Advice to Candidates

Show all stages in any calculations.
Work steadily through the paper. Do not spend too long on one question.
If you cannot answer a question, leave it and attempt the next one.
Return at the end to those you have left out.

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SECTION B

Answer ALL FIVE questions.

Write your answers in the spaces provided.

You must write down all stages in your working.

You must NOT use a calculator in this section.

1. Nathalie wants to carry out a survey to find out how much money her friends spend on buying music.

   She uses this question in a questionnaire.

   "How much money do you spend on buying music?"

   A little? ☐   Not much? ☐   Quite a lot? ☐

   (a) Write down **two** things wrong with this question.

   1 ....

   ....

   2 ....

   ....

   (2)

   (b) Write a better question for Nathalie to use on her questionnaire.

   (2) Q1

   (Total 4 marks)

2. Josie rolls a biased dice.

The probability that the dice will land on 1 or 2 or 3 or 4 or 5 is given in the table.

Score	1	2	3	4	5	6
Probability	0.15	0.25	0.20	0.10	0.15	

Work out the probability that the dice will land on 6

....

(Total 2 marks)

3. The probability of rain as Peter is going to work is 0.05

Peter goes to work on 180 days in the year.

Work out an estimate for the number of days in the year it rains as Peter is going to work.

.... days

(Total 2 marks)

Turn over

P 4 0 1 0 7 A 0 3 0 8

4. The table shows the number of digital radios sold by a shop during 2009 and 2010
The table also shows some of the 4-point moving averages.

Time period	Number sold	Moving average
Jan '09 – Mar '09	8	
Apr '09 – Jun '09	4	6.25
Jul '09 – Sep '09	6	5.5
Oct '09 – Dec '09	7	5.25
Jan '10 – Mar '10	5	4.75
Apr '10 – Jun '10	3	....
Jul '10 – Sep '10	4	
Oct '10 – Dec '10	6	

(a) Work out the missing 4-point moving average.

....
(2)

(b) What do the moving averages show about the trend?

....
(1)

(Total 3 marks)

5. Mandeep and Preet have 10 bottles of juice in their fridge.

They have

     5 bottles of orange juice
     3 bottles of cranberry juice
     2 bottles of mango juice

They each take a bottle, at random, from the fridge.

What is the probability that they each take a bottle of the same type of juice?

....

(Total 4 marks)

Q5

TOTAL FOR SECTION B: 15 MARKS
TOTAL FOR PAPER: 30 MARKS

END

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