Question 1

The candidate was awarded 3 out of 4 marks.

- ✓ Evidence of knowing how to calculate a percentage decrease.
- ✓ Evidence of repeating this for 3 years.
- * Error in calculation.
- ✓ Answer rounded to 3 significant figures.

Candidate 2

Question 1

The candidate was awarded 1 out of 4 marks.

- * No evidence of knowing how to calculate a percentage decrease.
- ✓ Power identified.
- Calculation not of the required form. Please see note 2 of the marking instructions.
- * Answer incorrectly rounded.

Candidate 3

Question 2

The candidate was awarded 1 out of 3 marks.

- * No attempt to substitute into the formula for the arc.
- ✓ Missing straight length accounted for (2300-1400).
- Calculation not of the required form. Please see note 6 of the marking instructions.

Candidate 4

Question 2

The candidate was awarded 2 out of 3 marks.

- * No attempt to substitute into the formula for the arc.
- ✓ Missing straight length calculated.
- ✓ Calculation not of the required form. Please see note 6 of the marking instructions.

Question 3

The candidate was awarded 1 out of 6 marks.

- × Attempt at Pythagoras.
- **×** Please see note 4 of the marking instructions.
- ✓ Total cost consistent with previous working.

Candidate 6

Question 3

The candidate was awarded 4 out of 6 marks.

- ✓ Correct substitution into Pythagoras' Theorem.
- ✓ AC calculated correctly.
- * Incorrect substitution into Pythagoras' Theorem.
- ✓ Length of BC calculation consistent with previous working.
- **×** Inappropriate rounding.
- ✓ Total cost consistent with previous working.

Candidate 7

Question 4(a)

The candidate was awarded 1 out of 2 marks.

- ✗ Incorrect radius used.
- ✓ Final answer consistent with previous working.

Candidate 8

Question 4(a)

The candidate was awarded 1 out of 2 marks.

* Area of semi circles incorrect.

 $\checkmark\,$ Final answer consistent with previous working. Please see note 2 of marking instructions.

Question 4(b)

The candidate was awarded 0 out of 2 marks.

- × Incorrect cost picked from table.
- * Wrong cost multiplied by 3, please see note 2 of marking instructions.

Candidate 10

Question 4(b)

The candidate was awarded 1 out of 2 marks.

- ✓ Evidence of correct costs picked from the table.
- * Incorrect total cost. Please see commonly observed response 2.

Candidate 11

Question 5(a)

The candidate was awarded 3 out of 4 marks.

- ✓ Mean calculated correctly.
- ✓ Alternative strategy: 14 and 32 correct.
- ✓ Correct substitution into formula for standard deviation.
- × Standard deviation incorrect.

Candidate 12

Question 5(a)

The candidate was awarded **2/4 marks**.

- ✓ Mean calculated correctly.
- ★ Error in calculations in table (1.21 is incorrect).
- * Incorrect substitution into formula for standard deviation (should be 5.2).
- ✓ Standard deviation consistent with previous working.

Candidate 13

Question 5(b)

The candidate was awarded 1 out of 2 marks.

✓ Valid comment concerning mean. Please see note 3 of the marking instructions.

✗ Invalid comment concerning standard deviation. Please see commonly observed response 2.

Candidate 14

Question 5(b)

The candidate was awarded 2 out of 2 marks.

- ✓ Valid comment concerning mean. Please see note 3 of the marking instructions.
- ✓ Valid comment concerning standard deviation.

Candidate 15

Question 5(c)

The candidate was awarded 2 out of 3 marks.

- ✓ Beginning of a valid inverse proportion strategy.
- ✓ Time for five workers calculated correctly.
- * Should be 6:06pm or 1806. Please see commonly observed response 1.

Candidate 16

Question 5(c)

The candidate was awarded 1 out of 3 marks.

- Hours for one worker not calculated.
- ✓ Hours for five workers consistent with previous working.
- ★ Finish time not calculated.

Candidate 17

Question 6(a)

The candidate was awarded 0 out of 3 marks.

- × Number of Zlotys incorrect.
- * Remaining Zlotys incorrect.
- Cannot be awarded as remaining Zlotys calculated was negative. See note 4 of the marking instructions.

Question 6(a)

The candidate was awarded 3 out of 3 marks.

- ✓ Number of Zlotys calculated correctly. Please see note 2 of the marking instructions.
- ✓ Remaining Zlotys calculated correctly.
- ✓ Correct conversion to Euros. Please see note 3 of the marking instructions.

Candidate 19

Question 6(b)

The candidate was awarded 2 out of 2 marks.

- ✓ Alternative strategy: saving calculated for Deal A.
- $\checkmark\,$ Saving calculated for Deal B and Deal C with correct conclusion.

Candidate 20

Question 6(b)

The candidate was awarded 1 out of 2 marks.

- ✓ Cost of Deal C correct.
- ✗ No attempt to calculate cost of Deal B.

Candidate 21

Question 6(c)

The candidate was awarded 0 out of 3 marks.

- * Volume of hemisphere incorrectly calculated.
- × Volume of cube incorrect.
- * Incorrect units. Please see note 2 of the marking instructions.

Candidate 22

Question 6(c)

The candidate was awarded 2 out of 3 marks.

- * Volume of hemisphere incorrect.
- ✓ Volume of cube calculated correctly.
- ✓ Total volume consistent with previous working plus correct units.

Question 7(a)

The candidate was awarded 2 out of 2 marks.

✓✓Valid strategy for calculating gross pay.

Candidate 24

Question 7(a)

The candidate was awarded 0 out of 2 marks.

- * Incorrect strategy for calculating overtime pay.
- * £392 not calculated. Please see note 3 of the marking instructions.

Candidate 25

Question 7(b)

The candidate was awarded 1 out of 2 marks.

- Mark unavailable as only 13 numbers were in the ordered list. Please see note 4 of the marking instructions.
- ✓ Mark awarded as quartiles consistent with the list. Please see note 4 of the marking instructions.

Question 7(c)

The candidate was awarded 1 out of 2 marks.

- ✓ End points consistent with the list.
- * Median line not included in the boxplot.

Question 7(d)(i)

The candidate was awarded 0 out of 1 marks.

× IQR incorrect.

Question 7(d)(ii)

The candidate was awarded **1 out of 1 marks**.

✓ Valid comment consistent with the previous working.

Question 7(e)(i)

The candidate was awarded 2 out of 3 marks.

- ✓ National insurance correct for 13.25% band.
- ★ National insurance incorrect for 3.25% band.
- ✓ Total national insurance payment consistent with previous working. Please see note 5 of the marking instructions.

Question 7(e)(ii)

The candidate was awarded 1 out of 2 marks.

- Calculated 4.5% of the wrong amount. Please see note 2 of the marking instructions.
- ✓ Mark awarded as 3 is the 'valid' amount subtracted from £1052. Please see note 4 of the marking instructions.

Candidate 27

Question 7(e)(i)

The candidate was awarded 0 out of 3 marks.

- * Incorrect national insurance calculation for first band.
- * Incorrect national insurance calculation for second band.
- * Incorrect calculation for total weekly national insurance contribution.

Question 7(e)(ii)

The candidate was awarded 0 out of 2 marks.

- **×** Pension contribution incorrectly calculated.
- Mark not awarded as only two amounts were subtracted from £1052. Please see note 4 of the marking instructions.

Candidate 28

Question 8(a)

The candidate was awarded 0 out of 2 marks.

- * Profit calculated incorrectly.
- Mark not awarded as the calculation is invalid. Please see note 4 of the marking instructions.

Question 8(a)

The candidate was awarded 1 out of 2 marks.

✓ ★ Please see commonly observed response 3

Candidate 30

Question 8(b)

The candidate was awarded 1 out of 3 marks.

- * Total price incorrectly calculated.
- ✓ Deposit consistent with previous working.
- * Mark not awarded as the final payment was not subtracted before dividing.

Candidate 31

Question 8(b)

The candidate was awarded 1 out of 3 marks.

- ✓ Total price correct.
- ★ Deposit calculated incorrectly.
- * Monthly instalment divided by 12 instead of 10.

Candidate 32

Question 8(c)

The candidate was awarded 1 out of 3 marks.

- ★ Alternative strategy: mark not awarded as 9 hours added on.
- ✓ Delivery time consistent with previous working.
- * Delivery date inconsistent with previous working.

Candidate 33

Question 8(c)

The candidate was awarded 2 out of 3 marks.

- ➤ Delivery time incorrect.
- ✓ 9 hours subtracted from delivery time.
- ✓ Delivery date consistent with previous working.