

SERIES 11 EXAMS
233/3 – CHEMISTRY PAPER 3 - MARKING SCHEME

Table I

(6 marks)

Volume of water in the boiling tube (cm ³)	4	6	8	10
Temperature at which crystals of solid A first appear (°C)	73	62	55	49
Solubility of solid A	125.0	83.3	62.5	50.0

Row II

(a) Complete table.

(2 marks)

- Complete table with four readings (2 marks)
- Incomplete table with 3 readings (1 ½ marks)
- Incomplete table with 2 readings (1 mark)
- Incomplete table with one reading (0 mark)

Conditions

- Penalize ½ mark @ for temperature reading above 76.5°C or below 10°C to a maximum of (1 mark)
- (b) Use of decimals. (1 mark)
- Accept only if ALL readings are recorded consistently to either as whole numbers to 1 d.p of '0' or 5 otherwise penalize fully.
- (c) Accuracy (½ mark)
- * Compare the candidates 1st temperature reading (at 4cm³) to the S.V if within ± 2°C award ½ mark otherwise penalize fully
- (d) Trend (½ mark)
- * Award ½ mark for continuous drop in temperature readings otherwise penalize fully.

ROW III

- Award ½ mark for @ value of solubility correctly calculated, otherwise penalize fully.
- Indicate each entry by ticking (√) or crossing (X).
- Ignore units (g) if attached to correct answer otherwise penalize if wrong units are used to a maximum of ½ mark.

