MARKING SCHEME

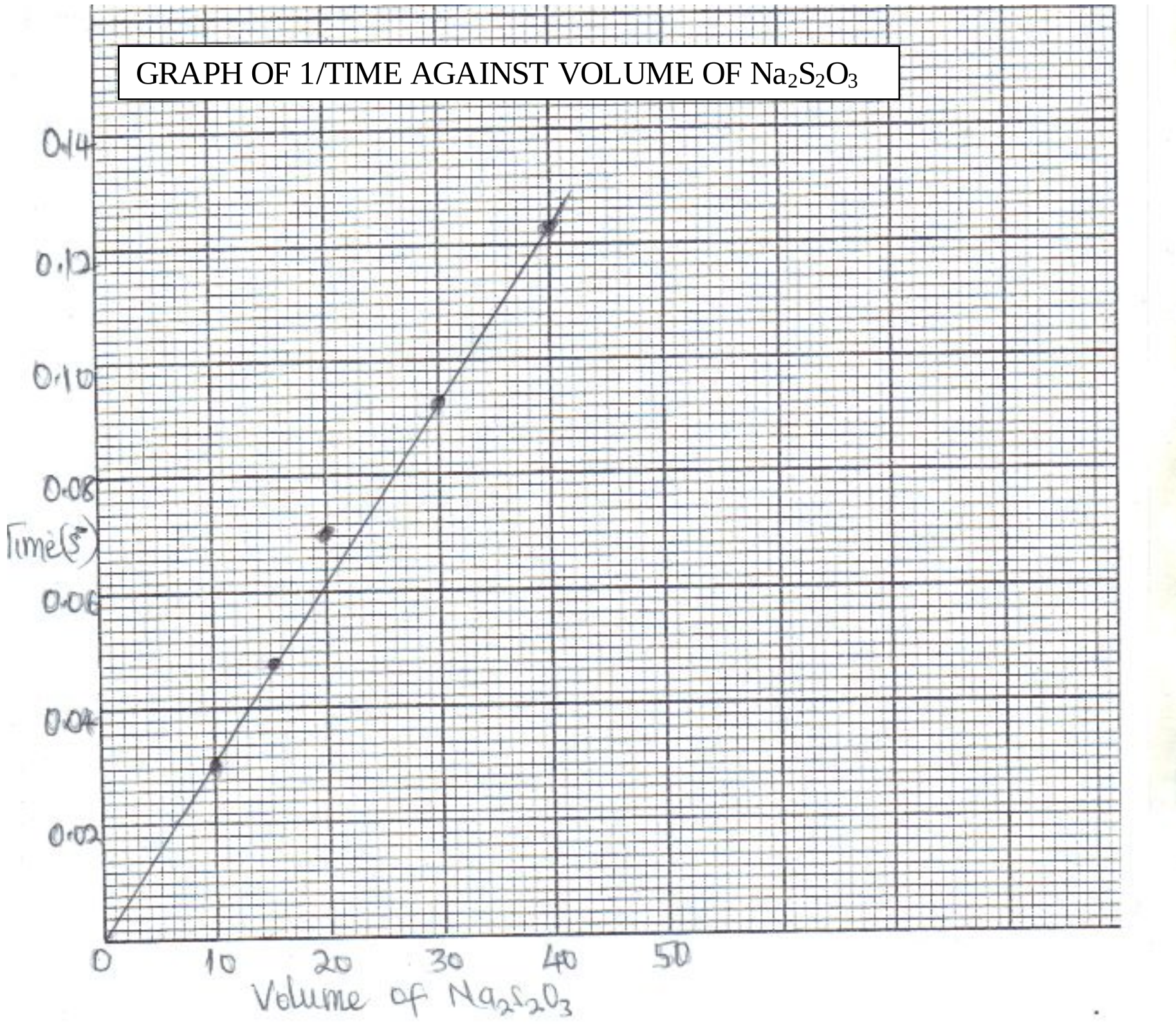
CHEMISTRY PAPER 11

SECTION A (20 marks)

1. a. -To vary the concentration of sodium thiosulphate or
(1 mark)

-To maintain the volume of sodium thiosuphate at 40 cm3

b.



c. 16.5 sodium thiosulphate and 23.5 of water
(1 mark)

d. -effect of concentration
-conclusion is that the higher the concentration,the faster the reaction
(2 marks)

e. $S_2O_3^{2-}{}_{(aq)}$ + $2H^+{}_{(aq)}$ ----------$SO_{2(g)}$ + $H_2O_{(l)}$ +$S_{(S)}$
(1 mark)

2.a. is a solution of known concentration ----------1 mark

b. m=M*V*RFM
=0.2*0.25*142 ----------2 marks
= 7.1g
-Calculate the required mass of Na_2SO_4 as above
-Weigh 7.1g of Na_2SO_4 using a balanced
-Dissolve the mass in little water in a beaker
-Transfer the content in a 250cm^3 volumetric flask (1 mark each step)
-Rinse the beaker with distilled water ,then transfer content into the flask
-Add more distilled water to the flask up to the mark
-Put a stopper and shake to mix completely

NOTE:
-For questions 3 and 4,subject teacher will do the experiment before the actual day of examinations and marking key

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