	MUSJET 233 3 MARKING SCHEME
3	TABLE I 5MARKS
7	distributed as follows:- bout a
A	Complete table at - revious surprogress 1 mik szin.
	Decimal Lymb 900 - D - pod 1 mousollot
	(1dip or 2 dip used consistently. If 2 dip are
	used, the last digit should be a or stice
C	Accuracy 1mk
	Principle of averagingura & LMK H9A92
	Final accuracy
	. Scale
	Calculations poittol9.
(ii)	moles of sodium thiosulphate used: 29121 Agon
	DIX average Volume in (i) send out out out
	point that is above all deoxplotted points.
NP	The first line of best fewaractooned the
	the first plotted point (Temperature
(ià)	Molar Concentration of Copper (11) ions in solution A.
	Moles of Cu2+ in 25 cm = Correct ans. in (ii)
	Molarity of A2 = 1000 x Correct ans in (ii)
	25 sutrognal
	= Conswer (1)
	$C_1V_1 = C_2V_2$
	C, x25 = answer (X 250 To amulov
	(11)
ネイ	T) Correct value from a 025x (3) regular de al Jupi
	Showing on the graph. I time
	= Correct ans:
	I) Highest temperature value from the graph of mik
	TABLE I Highest ENDAM + temperature act- Valunce II
	distributed as follows in a dang man
	Complete table 1mk
В	becimal 1mk.
	(1d.p. used Consistently as . 0 or . 5)
C	Accuracy Imk

Not	MUSTET 233/3 MARKING SO
	TABLE I SMARKS
D	Trend Trend 2001107 (1mx) which
	· Rise in temperature values to a maximum a
	followed by a drop (1mk) lombed &
9	so Rise in temperature values to a maximum
	without a dropilions tipils to (12 mK) been
	C Accurage 1 me
	GRAPIT Ind (3 mxs) distributed as follows -
•	habelling of axes 1/2 mx so land of
	Scale
	Plotting 1mk 2 mitololo
	Graph Lines of best fit light would in 1 mkz to solom (ii)
	NB . The two lines of best of to must intersect at a
	point that is above all the plotted points.
	. The first line of best fit must pass through
	the first plotted point (Temperature
	(ii) Molar Concentration of Copper (11) ions in sofultion A
	Mobs of Cust in 25 cm = Comect and in (ii)
	Moranty of A2 = 1000 x Correct ans in/(ii)
	lemperature (°C)
	= Resi answer (
	$C_1V_1 = C_2V_2$
	Volume of NaOHX (cm²) suzno = 20x,)
(1	
	I) Correct value from a correctly extrapolated graph v
	Showing on the graph. Limk
	- Conect ans
	I) Highest temperature value from the graph v 1 mk.
	DT = Highest temperature at volume I time!
	distributed as follows = d to darp mort
	A Complete table 1mt.
	8 becimal 1mk.
	(1d.p. used consistently as . 0 or . 5)
	C Accuracy 1mk

-

QUESTION 2.	GUESTION 3
(9) DESERVATIONS	INFERENCE'S AS 280 (A)
Green-solid ahanges to black you	
on heating.	· Acidic gassal7
· blue litmus paper turns red	
and redulitmus paper remains red.	(b) OBSERVATIONS
	Dissolves to form a c
(b) OBSERVATIONS	INFERENCES HUTZ
· Black solid dissofues to form a	· Gu ^{2t} present
blue solution.	(C/ii) DBSERVATIONS
R-COOH piesent.	Effernescance bubbles
C(1) OBSERVATIONS	INFERENCES
Blue ppt that dissolves in	Cast present (11)
excess NH3(aq) to form a 1000	Orange acidified to
deep blue solution.	turns green.
(ii) DRSPRVATIONS	2 INFERENCES (III)
· Blue Solution fades gradually	
to colourless	· Cu ²⁺ displaced
Brown Sofid deposited.	. Solid K is a strong
	Oxidising agent.
	•

QUESTION 3	CUESTION 2
(9) OBSERVATIONS	7 INFERENCES (D)
Burns with a yellow smoky soot	
flame orbina	On hearing.
	blue litmus paper turns
	en copy sumillaterences
Dissolves to form a Colourless	
Solutions assaul	(b) OBSERVATIONS
form a . Gist present	Black solid dissolved to
(C)(i) OBSERVATIONS	MOHUMINIERENCES.
Effervescence bubbles	R-COOH present.
INFERENCES	CUI ORSTRUATIONS
	230 3230 that that dissafres
Orange acidified K2Cr2O7	ROH presents.
turns green.	deep blue salution.
(11) OBSERVATIONS	THO NEGRENCES!
is decolourised.	obtas solution finales
prote P 21 X bilos .	
	bytizogsb bitR-OHUTBRESENT'
Oxidising agent:	
	0
	•

3	
Gil	Motar tenthalpy change for the reaction
Citi	Total volume = 20+ Correct ans in (ii) (I) = m
	$\Delta H = MC\Delta T$
	$= m \times 4.2 \times 6.4$ 1000
	= ans®
	Moles of Cu2+ used = Correct ans in procedure I(iii) x 20
	(000 Aug Taki v 20)
	Motor enthalpy - ans (*) : (Correct ans in procedure I (iii) x 20),
	= Conect auswer.
_	
* - *	
*	
	5 Y d