ST	D-XII

## ONE MARK EXAMINATION-2023-24

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		-	0	during.	2.5
	7 -				
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$\overline{}$	TT	1.7	77	Π		,,,	17	~
	-		. 11		_		14	Y

	CHEMIST				Total Marks :100
1.	Which of the following is incorrect for Physisorption?	di.	Increases with increas	aga li	temperature -
IN .	a) Reversibles c) Low heat of adsorption Among the following cells I) Leclanche cell II) Nickel-	D)	Increases with increas	sos i	n surface area
	C) Low heat of adsorption	Coc	Imium cell III) Lead s	torac	e battery (V) Mercury
2.	coll Primary and	· Cat	iiiiiiiiiiii Coii iii) iasaa s		
	cell Primary cells  a) I and IV  b) I and III  Which of the following electrolytic solution has the least	(2)	III and IV	d)	II and III
3.	Which of the following electrolytic solution has the least a) 2 N b) 0.002 N During electrolysis of meltan Sodium Cholride the time	enoc	ilic conductance		
ა.	over the following electrolytic solution has the least	c)	0 02 N	(d)	0.2 N
4	During a last train of maltan Sodium Chalded the time	rogu	ired to produce 0.1 m	rols	of chlorine gas using a
4.					
To a	current of 3A is a) 55 minutes b) 107.2 minutes	(0)	220 Minutes	d)	330 minutes
4					
5.	How many faradays of electricity are required for the foll	OWILI	4E	dì	7 F
	How many faradays of electricity are required for the foll  a) 5 F  Faraday constant is defined as  a) charge carried by 1 electron  c) charge required to deposit one mole of substance  The number of electron that have a total charge of 9650	C)		u),	
6.	Faraday constant is defined as	ы	Charge carried by on	a mo	le of electron
-	a) charge carried by Telectron	D)	Charge carried by 6	22 v	101º electons
_	c) charge required to deposit one mole of substance	a)	Thange carried by 0.4	22 1	10 616010110
7.	The number of electron that have a total charge of 9650 a) $6.22 \times 10^{23}$ b) $6.022 \times 10^{24}$	Colui	6 022 v 1022	d	6.022 x 10-34
	a) 6.22 x 10 <sup>23</sup> b) 6.022 x 10 <sup>24</sup>	(C)	0.022 X 10	uj	0.022 x 10
8.	H <sub>4</sub> PO <sub>4</sub> the conjugate base of a) PO <sub>4</sub> The pH of 10 <sup>-6</sup> MKOH solution will be a) 9  If the solubility product of lead iodide is 3.2 x 10 <sup>-8</sup> its sol	-	U DO	41	HPO <sub>4</sub> <sup>2</sup>
	a) $PO_4$ b) $P_2O_6$	C)	H <sub>3</sub> PO <sub>4</sub>	u)	rir O <sub>4</sub>
9.	The pH of 10° MKOH solution will be	14	40	ď	none of these
d'	a) 9 b) 5	C)	19	. u)	7 (1987)
10.	If the solubility product of lead lodide is 3.2 x 10 % its sol	ılıanı	y will be	٠,٠	10 × 10 ± M
	a) $2 \times 10^{3} \text{ M}$ b) $6.022 \times 10^{24}$	(C)	1.6 X 10° M	(a)	1.0 X 10 - W
11.	Which of these is not likely to act as lewis base			-10	
	a) $2 \times 10^{-3}$ M b) $6.022 \times 10^{-24}$ Which of these is not likely to act as lewis base a) $BF_3$ Conjugate base for bronsted acids $H_2O$ and $HF$ are a) $OH$ and $H_2F$ N* respectively c) $OH$ and $F$ respectively The half life period of a radioactive element is 140 days	C)	Co	. a)	
12.	Conjugate base for bronsted acids H <sub>2</sub> O and HF are	****		April .	· 在外面是"一个大型。
	a) OH and H <sub>2</sub> F·N* respectively	b)	H <sub>3</sub> O and F respective	vely	A CONTRACTOR OF THE CONTRACTOR
	c) OH and F respectively	d) -	H <sub>3</sub> O and H <sub>2</sub> F respec	ctive	ly and the second
13.	The half life period of a radioactive element is 140 days.	. Afte	er 560 days, 1g of eler	nent	will be reduced to
	a) $(\frac{1}{2})$ g b) $(\frac{1}{4})$ g	(c)	$(^{1}/_{8})$ g	d)	( <sup>1</sup> / <sub>16</sub> ) g
14.	a) $\binom{1}{2}$ g  If the initial concentration of the reactant is doubled the time for	or ha	If reaction is also double	ther	the order of the reaction.
	a) Zero b) One	c)	Fraction	d)	None
15.	The rate constant of the reaction is 5.8 x 10 <sup>-2</sup> S <sup>-1</sup> . The o	tder	of the reaction	1 -1	
	a) First Order b) Zero Order	c)	Second Order	' d)	Third Order
16.	The addition of a catalyst during chemical reaction alter	s wh	ich of the following qu	uanti	ties
,	a) Enthalpy b) Activation energy	c)	Entropy	d)	Internet energy
17.	The decomposition of phosphine (PH3) an tungsten at le	a wo	ressure is a first orde	r rea	ction it is because the
• • •	a) Rate is proportional to the surface coverage b)				to the surface coverage
	c) Rate is independent of the surface coverage		Rate of decomposit		
18	The Crystal with a metal defeciency defect is	$\mathcal{T}$	, rate of accomposit		7 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
ίζ.	a) NaCl b) FeO	c)	ZnO	4	) KCI
10	The cation leave its normal position in the crystal and m				
13.	is know as	OVC	to some intersitial pe	Joilio	in the delect is the crysta
		· h)	Foontor		
		, p)	F center	406	
00	c) Frenkel defect	d)	Non - stochiometric	aere	ect
20.	The yellow colour is NaCl crystal is due to			- 4	
	a) Extraction of electrons in F center	b)		om (	Clion a as the surface
	c) Refraction of light from Na* ion	d)	All of the above		
21.	The Vacant space is bcc lattice unit cells is				
	a) 48% b) 23%	c)	32%	C	) 26%
22.	Solid Co <sub>2</sub> is an example of			· /-	
	a) Covalent Solid b) Metallic Solid	c)	Molecular solid	C	) Ionic Solid
23.	Choose the correct statement.	V			
	a) Square planar complexes are more stable than octa	ahec	ral.		
	b) The spin only magnetic moment of [Cu(Cl) <sub>4</sub> ] <sup>2</sup> is 1.7			plan	ar structure.
	c) Crystal field splitting energy ( $\Delta_0$ ) of [FeF <sub>e</sub> ] <sup>4</sup> is higher				
	d) Crystal field stabilization energy of V(H <sub>2</sub> O) <sub>2</sub> <sup>2+</sup> is high				lization of (Ti(H O) 12+
					,,

	24	Which of the following is paramagnetic in nature	Sh-			E. L. LANGET C
	26	a) [Zn(NH <sub>3</sub> ) <sub>4</sub> ] <sup>2*</sup> b) [Co(NH <sub>3</sub> ) <sub>4</sub> ] <sup>3*</sup> A complex is which the Oxidation number of the metal is	(0,	[NI(H,O),]2+	d)	[NI(CN)]2
	25.	A complex is which the Oxidation number of the metal is	3 20	ro la	-,	and programme and the
		8) IS IF e(CN) 1 b) IF e(CN) (NH ) 1	115	Illa/Cal I	d)	Both (b) and (c)
	20,	vynich kind of isomerism is possible for a complex ((Cot)	NH,	), Br. Ci?	1.	- 10 h 1 h 1
		a) Sectifical and ionization	b)	Geometrical and optic	al	
	27	c) Optical and ionization	d)	Geomatrical only		
	21.	Which type of isomerism if exhibited by Pt(NH,),Cl,j?		,		
		a) Coordination isomerism	b)	Linkage isomerism		
	20	c) Optical isomerism	d)	Geometrical Isomeris	m,	
	28,	IUPAC name of the complex K <sub>3</sub> [Al (C <sub>2</sub> O <sub>4</sub> ) <sub>3</sub> ] is				
		a) Potassiumtrióxiatoaluminium (III)		b) Potassiumtrioxiato	alur	niniate (II)
		c) Potassium trisoxilato aluminate (III)	d)	Potassium trioxilato al	umli	nate (III)
	29,	The actinoid element which show the highest exidation a	state	of +7 are	3	400
	-	a) Np, Pu, Am b) U, Fm, Tn	C)	U, Tn, Md	d)	Es, No, Lr
	30.	Which of the following oxidation states is most common	am	ong the lanthanold	1	II.
		a) +4 , b) +2		+5	d)	+3
	31.	Which of the following lanthanold ion is diamognetic			20	1 27 6
		a) Eu <sup>2</sup> b) Yb <sup>2</sup>	c)	Ce2+	d)	Sm <sup>2</sup>
	32.	In acid medium potassium permanganate oxidized oxalle	cac	ld to	-,	100
		a) Oxolate b) Carbon dioxide		Acetate	d)	Acetic acid
	33,	The magnetic moment of Mn <sup>2+</sup> ion is			-,	, issued asia
	12000000	a) 5.92 BM b) 2.80 BM	C)	8.95 BM	d	3.90 BM
	34.	Which one of the following is has the same number of up	pai	red electrons as presse	entic	n V3+
		a) Ti <sup>3</sup> * b) Fe <sup>3</sup> *	c)	Ni <sup>2+</sup>	d)	Cr3+
	35.	Which of the following is strongest acid among all	•,		۵,	201
	وح إلى	a) Hi b) HF	c)	HBr	ď	HCI
•	36.	Most easity liqueficable Gas is	٠,		u)	TICI
	470	a) Ar b) Ne	c)	He	d)	V-
7	37.	Assertion: bond dissociation energy of fluorine is greate	r the	n chloring and	uj	N
	40	Reason: Chlorine has more electronic repulsion than fluc	rine	in chlorine gas		2225
		a) Both assertion and reason are true and reason is the	71116		J	
	100	b) Both assertion and reason are true but reason is not	the	rect explanation of ass	enic	on in A
	and and	<ul> <li>b) Both assertion and reason are true but reason is not</li> <li>c) Assertion is true but reason is false</li> </ul>	me	Correct explanation of	ass	ertion.
	38		a)	Both assertion and rea	asor	are false
	30.	The basicity of Pyrophosphorus acid (H <sub>4</sub> P <sub>2</sub> O <sub>6</sub> ) is	_			
		a) 4 b) 2	c)	3	d)	5
•	39.	In which of the following NH, is not used?		The second		
		a) Nessler' reagent b)		agent for the analysis o	HIV	group basic radical
	•	c) Reagent for the analysis of III group basic radical	d)	Tollen's reagent		
4		Duralumin is an alloy	CI			
			c)	Al, Mn	d)	Al, Cu, Mn, Mg
- 2		Which of the following is not Sp <sub>2</sub> hybridised		WARREN DE LA CALL		
			c)	Fullerene	d)	Dryice
. 4	12.	The basic structural unit of silicates is		THE FIRST OF STEEL	A.,	
		a) $(SiO_4)^{2}$ b) $(SiO_4)^{2}$	c)	(SiO)	d)	(SiO <sub>4</sub> )4-
-2		Oxidation state of carbon in its hydrides	۷, ۱	and the state of the second	1. 18	
			c)	+3	d)	+2
1		In diborane the number of electrons that accounts for ban				
				Four	d)	Three
		The incorrect statement among the following is	٠,	A CONTRACTOR OF THE PROPERTY O	u,	THICC
			b)	Titannium is refined by	vai	Arkel's process
		c) Zinc blande is concentrated by froth flotation	٠,	That is the state of the state	144	Trancis process
		d) In the metallurgy of gold the metal is leached with dilu	ıta s	odium chloride sodium		The state of the s
/		Zinc is obtianed from Zno by	ile s	sociali cilionae sociali		
,			ы.	Peduation using Cilvar	. : .	
				Reduction using Silver	)	
			d)	Acid leaching		
		Flux is a substance which is used to Convert		to the state of the state of		
				Infusible impurities to	olu	ble impurities
		c) Soluble impurities to infusible impurities	d)	All of these	1	X
,		The stable impurities to initialize in injurities		,	8 11	
2	18.	Wolframite orc is separed from tinstone by the process of	100	The second	10	The second second
2	18.	Wolframite orc is separed from tinstone by the process of	100	Warry Parade	ro N	lagnetic Separation

	49.	Which of the motal is extracted by Halt Harrytt areas		Although the said		1.00
	, 0,	Which of the metal is extracted by Halt - Heroult proces  a) Al b) Ni	88	<b>.</b>		***
	50		C	Cu	d)	Zn
	00.	Which one of the following represents Calcination.				
		a) 2Zn+O <sub>2</sub> >2Zno c) MgCO <sub>3</sub> >MgO+CO <sub>2</sub>	_ b)		0+28	Ю,
	64	The management of the contract	d)	Both (a) and (c)		
	51.	The monomer Unit of Natural rubber is		Charles and the second		
	50	a) Cis-isoprene b) Trans-isoprene	C)	Cis-Chloroprene	d)	Trans Chloroprene
	52.	When lodine is added to amylopectin colour is appeared	d			,
		a) Scarlet Red b) Blue		Purple	d)	Colourless
	53.	Which is more basic in nature	,		,	
		a) $(C_2H_8)_2NH$ b) $(C_2H_8)_3N$	(c)	C,H,NH,	ďΪ	NH,
	54.	IUPAC name of Acetaldol	-,	2. 8	۵,	,
ě		a) 2-Hydroxy butanclk b) Hydroxy butane	. (1)	3-Hydroxy butanal	cO	1-Hydroxy butanal
	55.	Fentons reagent is		5-riyaraxy batanar	u,	1-Hydroxy butanai
	8	a) FESO, + H,O, b) CuSO, +H,O,	-1	F050 + H 0	0	CCO
	56	The size of colloidal particle ranges form	C)	FeSO, + H,O	u)	CuSO, + H,O
	00.	a) 10°M to 10°M. b) 10°M to 10°M.	1	401044 - 40144	. 6	460441
	67	a) 10°M to 10°M b) 10°M to 10°M	c)	101º M to 10º M	d)	10°M to 10-4M
,	31.	EMF of standard hydrogen electrode is assigned as	,		100	
		a) 0 V b) 1.1V	c)	0.76V	d)	1.2V ·
*	58.	The solution containing aceticacid and soldium acetate	is			
		a) Basic Buffer solution b) Acidic buffer Solution	(c)	Neutral solution	d)	None of these
. !	59.	The ratio of ionic Product of water at 25°C is			4	
		a) 1x10 <sup>-7</sup> b) 1x10 <sup>-14</sup>	c)	1x10 <sup>7</sup>	(b)	1x10 <sup>14</sup>
(	60.	Example for Zero order reaction	-		-,	
		a) Iodination of acetone is acid medium	b)	decomposition of din	troa	en nantovide
		c) Isomerisation of cyclo propane to propene	d)	Hydrolysis of ester in		
(	61.	The radius ratio is 0.225 - 0.414 predict the structure	٠. ت	riyardiysis of ester in	2010	mediam
		a) Trigonal planer b) Tetrahedral	۵۱	Octobodes	~	Cubia
	32	An example for antidentate ligard is	c)	Octahedral	a)	Cubic
						SA. COMPANY
•	33		C)	Ammonia	a)	Pyridine
,	٠٥,	Zeigler - Natta Catalylst is				
*		a) A mixture of TiCl, and trialkyl aluminium		TiCl <sub>2</sub> and ethyl bromid	е	
,		c) Vcl <sub>4</sub> and Aluminium chloride	d)	None of these		
C		The Shape of Ammonia is				plicate it
31		a) Tetrahedral b) Trigonal	c)	Planar	d)	Pyramidal
6	55.	is employed septic agent to arrest bleeding			,	9
		a) Potassium chloride b) Aluminium chloride	(c)	Potash Alum	d)	Zeolite
- 6	6.	Which is used as a collector is froth flotation method	•			
		a) Sodium ethyl xanthate b) Sodium acetate	c)	Sodium hydroxide	. d)	Sodium
6		The polymer used is making blankets (artificial wool) is				Sociality
		a) Polystyrane ,b) PAN	c)	Polyester	ď	Polythene
6		Which one of the following is a bio degradable polymer	, j /	1 olyester	u	-Olytherie
Ī		a) Hope b) PVc	<b>C</b> )	Nylan 6	٠.	DUD.
6		Natural rubber has	C)	Nylairo	(a)	PHBv
,		a) alternate cis and trans - Configuration	L	Dendendalar It.		
			D)	Random cis - and tran	is - C	ontiguration
7		c) All cis - Configuration	d)	All trans - Configuration	on -	
`'		Aspirin is a   an	113			the state of the s
		a) Acetylsalicylic acid b) benzoyl Salicylic acid	C)	Cholorobenzoic acid	d) .	Anthranilic acid
1	٦,,_	Which of the following is an analygesic	· 40	make the state of the		Andria Company of the
9	- ;	a) Streptomycin b) Chloromycetin	c)	Asprin	d)	Pencillin
7	2.	α-D(+) glucose and β-D(+) glucose are	350			
		a) Epimers b) Anomers	c)	Enentiomers	d)	Carformational
7	3.	Vitamin B <sub>2</sub> is also known as	1/21/2			70
	2		c)	Nicotinamide	d)	Pyridoxine
7		Among the following the achiral aminoaicd is	-,		٠,	Judovino
			c)	2-hydrocymethylserine	'q/	Tryptophon
7		In a proternvarious amino acids linked together by	110	- mydrodynneunyisenne	u)	Tryptophan
5		a) Peptide bond b) Dative bond	c)	a-Glycosidio band	41	0 Chaociais
7		Which are given below is a non reducing sugar	٠,	α-Glycosidic bond	u)	β-Glycosidic bond
			C) .	Maltose	4	
		u) Guciuse	c)	Maltose.	u) l	Lactose
	. 3		1.	1 3 m	15	

				A STATE OF THE STA		
7	77.	Which of the following amines does not undergo acetylati	on	and the same of th		and the second
			c)	Diethylamine	d)	Triehtylamine
7	78.	Secondary nitro alkanes react with nitrous acid to form	14.	a chestory.		Valley Solution
_	٠, ٠	a) Red Solution b) Blue Solution	c)	Green Solution	d)	Yellow Solution
-	79.	Nitrobenbenzene and reaction with Ca HNO <sub>3</sub>   H <sub>2</sub> SO <sub>4</sub> at 8	0-10	00°C forms which are	of the	1,3 - dinitrobenzene
		a) 1,4 - diffit obenzene b) 2,4,6 - trinitrobenzene	C)	1,2 dinitrobenzene	d)	1,3 - 01111110001120110
Č	30.	The product formed by the reaction an aldehyde with a pr			-15	Votono
	0.4	a) Carbonylic acid b) Aromatic acid	C) ,	Schiffasbase	a)	Ketone
,	31,	Which are of the following will not undergo Hoffman brom	amı	de reaction	۵۱)	C H CONH
	ລາ	a) CH <sub>3</sub> CO NH CH <sub>3</sub> b) CH <sub>3</sub> CH <sub>2</sub> CO NH <sub>2</sub> Which of the following regent canbe used to convert nitro	C)	CH <sub>3</sub> CONH <sub>2</sub>	a)	C <sub>6</sub> ri <sub>6</sub> CO mi <sub>2</sub>
•	32.	a) Sn / HCl b) ZnHg / NaoH	ben	zene to aniline	-0	All of these
,	22	a) Sn / HCl b) ZnHg / NaoH Carbonylic acids have higher boiling points than aldehydes, I	C)	Zn/NH <sub>2</sub> Cl	(0)	anarable molecularmas
•	JJ.	It is due to their	Kelo	ries and even alconois d	of COLL	iparable molecular
		a) More extensive association of carbonylic aidd via var	der	wasts force of attraction	20	
		b) Formation of carboxylate ion	c)	Formation of intramol	ocula	r H-bonding
		d) Formation of intermolecular H-bonding	, 0,	1 ormation of intraffici	CCUIC	1.17. A.A.
١,	84.	In which of the following reaction new carbon - carbon bo	ond	is not formed		
		a) Aldol condensation b) Friedel craft reaction	c)	Kolbe's reaction	d)	Wolfkishner reduction
	85.	The reagent used to distinguish between acitaldehyde a	nd b	enaldehyde is	10	the stage of
		a) Tollens reagent b) Fehlign's solution	c)	2,4 dinitrophenyl hyd	rozin	e d) Semicarbazide
	86.	Which are of the following reaction is an example of dun	prop	ortienation reaction		
		a) Aldol condensation b) Cannizaro reaction	c)	Benzoin Condensation	n d)	None of these
	87.	Which are of the following reduces tollen's reagent		The second second		
		a) Formic acid b) Acetic acid	c)	Benzophenone	d)	None of these
		CH <sub>3</sub> Br $\xrightarrow{\text{KCN}}$ (A) $\xrightarrow{\text{H}_3\text{O}+}$ (B) $\xrightarrow{\text{PCI}_3}$ (C) a) Acetyl chloride b) Chloroacetic acid c)	4			
	88.	$CH_3 Br \xrightarrow{KCIV} (A) \xrightarrow{n_3 \circ} (B) \xrightarrow{1CI_5} (C)$	Pr	oduct is		
		a) Acetyl chloride b) Chloroacetic acid c)	α	chloro cycno ethanoid	acid	d) none of these
	id.	H <sub>2</sub> SO <sub>4</sub>			1.7 -5	
	89.	In the following reaction HC≡CH → x Produc			1100	5 EV
		HgSO₄ a) Tollen's test b) Victor meyer test		30 30 31		Fabling polytion tost
	-	a) Tollen's test b) Victor meyer test	(C)	lodoform test	a)	
	90	An reacting with neutral ferric chloride phenol gives		Dork Croon Colour	47	No Colouanation
	~4	a) Red colour b) Violet Colour	C)	Dark Green Colour		NO Colodaliadori
	91	Which of the following compound can be used as antifra	aese	Neopentyl alcohol	. y)	Ethan -1,2 diol
	00	<ul> <li>a) Methanol</li> <li>b) Ethanal</li> <li>Isoprophylbenzene an air oxidation in the presence of control</li> </ul>			a)	Lindii 1,2 dioi
	92	a) C <sub>k</sub> H <sub>k</sub> COOH  b) C <sub>k</sub> H <sub>k</sub> COCH <sub>3</sub>	C'	C H COC H	d)	C <sub>E</sub> H <sub>E</sub> OH
	U3	a) C <sub>6</sub> H <sub>6</sub> COOH b) C <sub>6</sub> H <sub>6</sub> COCH <sub>3</sub> Assertian: Phenol is more acidic than ethanol		6.15006.15	in at 1	6.5
	93	Reason: Phenoxide ion is resonance stabilised				
		a) Both assertion and reason are true and reason is the	ne c	orrect explantion of as	sertic	on
		b) Both assertion and reason are true but reason is no	ot th	e correct explantion of	asse	ertion
		c) Assertion is true but reasonis false	d	) Both assertion and	reasc	on are false
	Q,	4. Carbolic acid is	1			
		a) Phenol b) Picric acid	· C	) Benzonic acid	. d)	Phenylacetic acid
	۱۵	5. Which are of the following is the strongest acid	7		72 3	
		a) 2 Nitrophonol b) 4-Chlorophenol	C	) 4-Nitrophenol	d)	3-Nitrophenol
	a	6. Adsorption of a gas is solid metal surface is spontaneous	ous'	and exothermic then		
		b) A Li increases b) A S increases	- 0	) A G IIICI cases	d)	Δ S decreases
	a	su sulla de la completa de la completa de la composição d	ous	catalysis		
	3	<ul> <li>7. Which are of the following is an example of nomogeneral.</li> <li>a) Manufacture of ammonia by Haber's process</li> </ul>	, ,	landiacture of surprise	ic ac	d by contact process
		i i i i i i i i i i i i i i i i i i i	. (		36 111	presence or antitor
	9	8 The Phenomenon observed when a beam of light is pa	asse	d through a colloidal s	olutic	ONS IS
		a) Cataphoresis h) Flectrophoresis	, ,	) Coagulation	a	) Tyndall effect
	9	9. The most effective electrolyte for the coagulation of AS	S <sub>2</sub> S,	Solis .	1 7 1	AL (SO.)
		a) NaCl b) Ba (No <sub>3</sub> ) <sub>2</sub>	, ,	$K_3[Fe(CN)_6]$	ď	) $Al_2(SO_4)_3$
	1	00. Fog is colloidal solution of	* .	Liquid is gas	J	) Gas is liquid
	-	) L\ \(\mathrea{1}{2} = \text{in and} \)		. I IUIUIU IS UAS	_	,