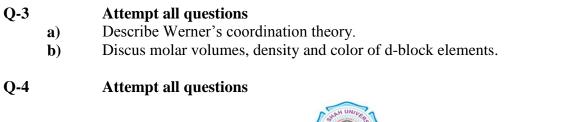
I	Enrollm	ent No: Exam Seat No:	_
		C.U.SHAH UNIVERSITY	
		Summer Examination-2019	
\$	Subject 1	Name: Inorganic Chemistry-II	
S	Subject (	Code: 4SC04ICH1 Branch: B.Sc. (Chemistry, Physics)	
\$	Semestei	r: 4 Date: 22/04/2019 Time: 02:30 To 05:30 Marks: 70	
I	(2) I (3) I	Ons: Use of Programmable calculator & any other electronic instrument is prohibited. Instructions written on main answer book are strictly to be obeyed. Oraw neat diagrams and figures (if necessary) at right places. Assume suitable data if needed.	_
Q-1		Attempt the following questions:	(14)
	a) b) c) d) e) f) g) h) i) j) k) n)	What is double salt? Give example.  Define chelate.  Give an example of bidentate ligand.  Give an example of geometrical isomerism in 6 coordinated complex.  Coordination number of Fe in [FeICl <sub>2</sub> (CO) <sub>2</sub> ] is?  Why transition element's compounds are colored?  Electronic configuration of Cr <sup>+2</sup> .  Define transition elements.  Electronic configuration of Ag <sup>+</sup> .  Which compounds are known as organometallic compounds?  What is operator?  Define Eigen function.  Give second postulate of wave mechanics.	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
Attem	pt any f	four questions from Q-2 to Q-8	
Q-2	a) b)	Attempt all questions Describe optical isomerism in 4 and 6 coordinated complexes. Give IUPAC name of below complexes. i) K[BF <sub>4</sub> ] ii) [CoCl <sub>2</sub> (en) <sub>2</sub> ]SO <sub>4</sub> iii) [PdI <sub>2</sub> (ONO) <sub>2</sub> (H <sub>2</sub> O) <sub>2</sub> ] iv) [(NH <sub>3</sub> ) <sub>5</sub> Co-NH <sub>2</sub> -Co(NH <sub>3</sub> ) <sub>4</sub> (H <sub>2</sub> O)]Cl <sub>5</sub>	(14) (10) (4)



Q-3

a)



**(14)** 

**(7)** 

**(7)** 

**(14)** 

	a)	Give name, symbol and electronic configuration of 2 <sup>nd</sup> transition metal series.	<b>(7</b> )
	<b>b</b> )	Write note on structural isomerism.	<b>(7</b> )
Q-5		Attempt all questions	(14)
	a)	Give name, symbol and electronic configuration of 1 <sup>st</sup> transition metal series.	<b>(7</b> )
	<b>b</b> )	Discus metallic character and tendency to form complexes of d-block elements.	<b>(7</b> )
Q-6		Attempt all questions	(14)
	a)	Derive equation when electron in a ring.	<b>(7)</b>
	<b>b</b> )	Describe additional operator, multiplication operator, linear operator and commutator.	(7)
Q-7		Attempt all questions	(14)
	a)	Derive equation when electron in one dimensional box.	(8)
	<b>b</b> )	Write note on organo-lithium compound.	<b>(6)</b>
Q-8			
-		Describe the structures of tri methyl aluminium, zeise salt and ferrocene.	(14)

