Sanjay Ghodawat University, Kolhapur

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

2020-21

EXM/P/09/00

Year and Program: 2020-21, B.SC	**School of Science**	**Department: Chemistry**
Course Code: CHS-303	**Course Title: Inorganic Chemistry**	**Semester : V**
Day : Thursday **Date : 17 Dec., 2020**	**End Semester Examination**	**Time : 2 Hrs.** **Max Marks : 50**

Instructions: 1) All Questions are compulsory.

			Marks	Bloom's Level	CO
Q.1		**Answer the following (any Two)**–			
	a)	What are the boranes? How they are classified? Explain synthesis, properties and structure of diboranes (B_2H_6)?	8	1	1
	b)	Write a note on polymorph of phosphorous. Explain oxyacids of sulphur with proper structure .	8	2	1
	c)	Describe the hybridization with proper structure of xenon compounds XeF_2, XeF_4, XeF_6 and $XeOF_2$.	8	3	2
Q.2		**Answer the following (any two)** –			
	a)	Write a note on silicones and borazine.	8	1	2
	b)	Explain the method of preparation, general properties and uses of metal carbonyls compounds.	8	2	3
	c)	What is active transport? Explain the mechanism of transportation of metal ions through Na/K pump.	8	3	4
Q.3		**Answer the following (any two)** –			
	a)	What are inorganic polymers? Explain synthesis, properties and application of polythiazenes i.e sulphur – nitrogen compounds?	9	2	2
	b)	What are metal sandwich complexes? Explain synthesis of ferrocene and give in detail acetylation, metallation, mannich condensation reactions of ferrocene with proper example.	9	3	3
	c)	Define metallo-enzymes. Explain in detail carboxy peptidase and carboxy anhydrase.	9	2	4

*****