

UG 4th Semester Examination 2020

CHEMISTRY

[HONOURS]

Course Code: CEMHT-9 (Inorganic)

Full Marks: 10

Answer any *five* questions from the following:

[2x5=10]

1. Define mass defect and packing fraction.
2. What is radiocarbon dating?
3. Write the structure and properties of Borazine.
4. What are pseudo halides? Write two dissimilarities between halides and pseudo halides.
5. Define ionization isomerism of coordination compounds and give an example of it.
6. i) Write IUPAC name of the following compound:
 $[\text{Cu}(\text{NH}_3)_4][\text{PtCl}_4]$
ii) What is the EAN of Fe in $\text{Fe}_2(\text{CO})_9$
7. Which geometrical isomer of $[\text{Co}(\text{en})_2\text{Cl}_2]^+$ shows optical isomerism? Draw the structure of its geometrical and optical isomers.