B.Sc. DEGREE EXAMINATION,NOVEMBER 2018
II Year IV Semester
Core Major - Paper VIII
GENERAL CHEMISTRY -VIII

Time : 3 Hours **Max.marks :60**

Section A $(10 \times 1 = 10)$ Marks

Answer any **TEN** questions

1. Write Gibb's Duhem Equation
2. What is chemical Potential?
3. Define Gibb's free Energy
4. What is the unit of entropy?
5. Define Fugacity
6. Write the mathematical form of third law of thermodynamics
7. What are ethers?
8. Write the molecular formula for Ethyl methyl ether
9. What is Organo Metallic compounds?
10. Write any synthetic uses of Grignard reagent
11. What is ideal or perfect gas?
12. Give the IUPAC name for Alkyl thio alcohol

Section B $(5 \times 4 = 20)$ Marks

Answer any **FIVE** questions

13. What is partial molar property?
14. Define the terms activity and activity coefficient
15. Brief note on Nernst heat theorem
16. Explain Williamson's synthesis
17. Write the preparation of Grignard Reagent
18. What is free energy?How can you predict the spontaneity of a reaction from free energy change?
19. Give any two chemical behaviour of mustard oil

Section C $(3 \times 10 = 30)$ Marks

Answer any **THREE** questions

20. Derive the Duhem -Margulus equation

21. Derive an expression to calculate variation equilibrium constant with temperature

22. Discuss the determination of absolute entropy of solids by using III law of thermodynamics

23. Explain any five General chemical characteristics of Mercaptans

24. Give the preparation and any two chemical behaviour of Organo Lithium Compounds

B.Sc. DEGREE EXAMINATION,NOVEMBER 2018
II Year IV Semester
Core Major - Paper VIII
GENERAL CHEMISTRY -VIII

Time : 3 Hours **Max.marks :60**

Section A $(10 \times 1 = 10)$ Marks

Answer any TEN questions

1. Write Gibb's Duhem Equation
2. What is chemical Potential?
3. Define Gibb's free Energy
4. What is the unit of entropy?
5. Define Fugacity
6. Write the mathematical form of third law of thermodynamics
7. What are ethers?
8. Write the molecular formula for Ethyl methyl ether
9. What is Organo Metallic compounds?
10. Write any synthetic uses of Grignard reagent
11. What is ideal or perfect gas?
12. Give the IUPAC name for Alkyl thio alcohol

Section B $(5 \times 4 = 20)$ Marks

Answer any FIVE questions

13. What is partial molar property?
14. Define the terms activity and activity coefficient
15. Brief note on Nernst heat theorem
16. Explain Williamson's synthesis
17. Write the preparation of Grignard Reagent
18. What is free energy?How can you predict the spontaneity of a reaction from free energy change?
19. Give any two chemical behaviour of mustard oil

Section C $(3 \times 10 = 30)$ Marks

Answer any **THREE** questions

20. Derive the Duhem -Margulus equation

21. Derive an expression to calculate variation equilibrium constant with temperature

22. Discuss the determination of absolute entropy of solids by using III law of thermodynamics

23. Explain any five General chemical characteristics of Mercaptans

24. Give the preparation and any two chemical behaviour of Organo Lithium Compounds