

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2018**  
**I Year II Semester**  
**Allied - Paper II**  
**ALLIED CHEMISTRY -II**

**Time : 3 Hours**

**Max.marks :60**

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

Answer any **TEN** questions

1. Write the IUPAC name for  $[\text{Co}(\text{NH}_3)_6]$
2. Give the structure of  $[\text{Ni}(\text{CO})_4]$
3. What are the causes for diabetes ?
4. What is mutarotation?
5. What is denaturation?
6. What are the components of RNA?
7. Define standard electrode potential.
8. What are fuel cells?
9. What is principle of volumetric analysis?
10. What is a stationary phase?
11. Write down Henderson equation.
12. What is effective atomic number?

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

Answer any **FIVE** questions

13. Explain the postulates of Pauling's theory.
14. Describe the interconversion of glucose to fructose.
15. Explain the preparation of a dipeptide using Bergman method .
16. What is electrochemical series? Give any two applications.
17. Explain separation by distillation process.
18. Discuss the biological role of haemoglobin.
19. Explain nickel plating process.

**Section C** ( $3 \times 10 = 30$ ) MarksAnswer any **THREE** questions

20. a. Discuss the postulates of Werner's theory. (6)  
b. Describe the estimation of Nickel using DMG. (4)
21. Discuss the open and ring structure of glucose.
22. Describe the primary and secondary structure of proteins.
23. a. Explain the determination of pH by colorimetric method.(5)  
b. What is corrosion? Explain any two methods of preventing corrosion.(5)
24. Explain the principle and applications of column chromatography.

16UFMAT2AC2

**B.Sc. DEGREE EXAMINATION, NOVEMBER 2018****I Year II Semester****Allied - Paper II****ALLIED CHEMISTRY -II****Time : 3 Hours****Max.marks :60****Section A** ( $10 \times 1 = 10$ ) MarksAnswer any **TEN** questions

1. Write the IUPAC name for  $[\text{Co}(\text{NH}_3)_6]$
2. Give the structure of  $[\text{Ni}(\text{CO})_4]$
3. What are the causes for diabetes ?
4. What is mutarotation?
5. What is denaturation?
6. What are the components of RNA?
7. Define standard electrode potential.
8. What are fuel cells?
9. What is principle of volumetric analysis?
10. What is a stationary phase?
11. Write down Henderson equation.
12. What is effective atomic number?

**Section B** ( $5 \times 4 = 20$ ) MarksAnswer any **FIVE** questions

13. Explain the postulates of Pauling's theory.
14. Describe the interconversion of glucose to fructose.
15. Explain the preparation of a dipeptide using Bergman method .
16. What is electrochemical series? Give any two applications.
17. Explain separation by distillation process.
18. Discuss the biological role of haemoglobin.
19. Explain nickel plating process.

**Section C** ( $3 \times 10 = 30$ ) MarksAnswer any **THREE** questions

20. a. Discuss the postulates of Werner's theory. (6)  
b. Describe the estimation of Nickel using DMG. (4)
21. Discuss the open and ring structure of glucose.
22. Describe the primary and secondary structure of proteins.
23. a. Explain the determination of pH by colorimetric method.(5)  
b. What is corrosion? Explain any two methods of preventing corrosion.(5)
24. Explain the principle and applications of column chromatography.