

NOVEMBER 2017

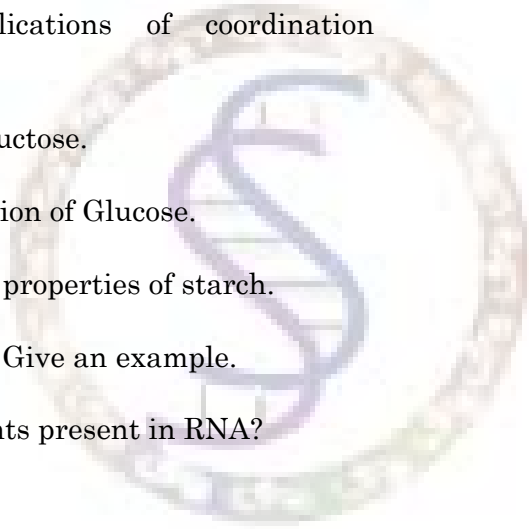
1713103/UCYA21A

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer any TEN questions.

1. Name the following complexes :
    - (a)  $K_4[Fe(CN)_6]$
    - (b)  $[Pt(NH_3)_2Cl_2]$ .
  2. Define Chelation.
  3. Give any two applications of coordination compounds.
  4. Give the structure of fructose.
  5. Write any one preparation of Glucose.
  6. Write any two physical properties of starch.
  7. Write are amino acids? Give an example.
  8. What are the components present in RNA?
  9. What is corrosion?
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10. Define pH.
11. Name any two good adsorbents.
12. Write the principle behind TLC.

SECTION B — ( $5 \times 5 = 25$  marks)

Answer any FIVE questions.

13. Write the postulates of Pauling's theory.
14. Discuss about open and ring structure of Glucose.
15. How proteins are classified?
16. Discuss any two applications of electro chemical series.
17. Explain the industrial applications of buffer.
18. Write a note on distillation.
19. List out the applications of ion exchange chromatography.

SECTION C — ( $3 \times 10 = 30$  marks)

Answer any THREE questions.

20. (a) Explain the biological role of Hemoglobin.  
(b) Explain the separation of copper and cadmium.
21. Give a brief account on causes and control measures of diabetes.

22. Discuss about denaturation and colour reactions of proteins.
23. (a) Write a note on chrome plating.  
(b) Derive Henderson's equation.
24. Write note on the following :  
(a) Extraction  
(b) Crystallization.

