

B.Sc. DEGREE END SEMESTER EXAMINATION OCTOBER 2017**SEMESTER – 3: CHEMISTRY (COMPLEMENTARY COURSE FOR ZOOLOGY AND BOTANY)****COURSE: 15U3PCHE3.2 – INORGANIC AND BIO-INORGANIC CHEMISTRY***Common for Regular (2016 Admission) & Supplementary / Improvement (2015 Admission)*

Time: Three Hours

Max Marks: 60

SECTION A

(Answer all questions, 1 mark each)

1. The metal ion present in Vitamin B₁₂ is
2. The gamma isomer of BHC is called
3. The plant type ferredoxine contains active center
4. In RNA, the sugar unit present is
5. Cis Platin is a drug
6. Main constituent of the pain reliever "Iodex" is
7. One plant growth hormone is
8. The increasing accumulation of insecticides in higher organism is called (1 x 8 = 8)

PART B

(Answer any 6 questions, 2 marks each)

9. Define exergonic reaction. Give one example.
10. Write the structure of DDT.
11. Give an account of elementary structure of ATP and ADP
12. What are holoenzymes?
13. What are tranquilizers? Give an example.
14. What is Aspirin? How does it differ from Dispirin
15. What does NPK value indicate?
16. Name two compounds used as anti-depressants (2 x 6 = 12)

PART C

(Answer any 4 questions, 5 marks each)

17. Write a note on sodium potassium pump?
18. Explain photophosphorylation.
19. What is myoglobin? How is it formed
20. What do you mean by drug addiction? How it can be prevented.
21. Explain the Michaelis-Menten theory of enzyme catalysis
22. Distinguish between photosynthesis and respiration (4 x 5 = 20)

SECTION D

(Answer any 2 questions, 10 marks each)

23. (A) What are fungicides? How Bordeaux mixture and dithiocarbamates acts as effective Fungicides?
(B) Explain how excessive use of pesticides becomes an environmental hazard.
24. (A) Write critical note on (1) antibiotics (2) sulpha drugs
(B) Explain chelation theory? Explain how it is used to treat excess copper, iron and mercury in human body.
25. (A) Write a note on carbonic anhydrase and cytochrome oxidase
(B) Discuss the structure and functions of of DNA and RNA
26. (A) What are antipyretics and analgesics? Describe.
(B) Explain Photosynthesis on the basis of photosystem I and II (10 x 2 = 20)
