

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2018  
(Fourth Semester)

Branch- ZOOLOGY

CHEMISTRY - II

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks!

Answer ALL questions

ALL questions carry EQUAL marks

(10x2 = 20)

- 1 Define fertilizer.
- 2 What is meant by chelation?
- 3 What is vinegar?
- 4 Give the uses of alanine.
- 5 Define normality.
- 6 Give the principles of chromatography.
- 7 State Lambert's and Beer's laws.
- 8 What is meant by quantum yield?
- 9 Give the toxin nature of lead.
- 10 What is the antidote for arsenic poisoning?

SECTION - B (25 Marks)

Answer ALL Questions.

ALL Questions Carry EQUAL Marks (5x5 = 25)

- 11 a Explain the biological functions of chlorophyll.

OR

- b Give the IUPAC name of the following complexes



- 12 a How is ethyl alcohol prepared from molasses?

OR

- b What are proteins? How are they classified?

- 13 a Explain the distillation method.

OR

- b Write down the advantages of ion exchange chromatography.

- 14 a Drive Ostwald's dilution law.

OR

- b Explain the variation of conductance with dilutions.

15. a Give the biological functions of hemoglobin.

OR

- b Write down the toxin effects of cadmium.

SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3x10 = 30)

- 16 Give the postulates of Werner's coordination theory.
- 17 Give the preparation, properties and uses of pyridine.
- 18 Write down the principles and applications of column chromatography.
- 19 Give the experimental determination of cell constant and conductance.
- 20 Explain the role of essential and trace elements in biological system.