

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2017
(Third Semester)

Branch - **ZOOLOGY**

CHEMISTRY -1

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 x 2 = 20)

- 1 State Pauli's exclusion principle.
- 2 What is meant by oxidation number? Give an example.
- 3 How are terpenoids classified?
- 4 Write any two uses of terylene.
- 5 How will you distinguish antiseptic from disinfectant?
- 6 What are the requisites of dyes?
- 7 Write short note on consecutive reaction.
- 8 What is meant by promoters? Give an example.
- 9 What is green house effect?
- 10 What are pesticides? Give an example.

SECTION- B (25 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a Write notes on (i) Aufbau principle (ii) Hund's rule.
OR
b Explain oxidizing and reducing agents with examples.
- 12 a Give the preparation and uses of nicotine.
OR
b Explain the method of isolation and uses of menthol.
- 13 a Explain antibiotics and anesthetics.
OR
b Explain the applications of phenolphthalein and alizarin.
- 14 a Explain the pseudomolecular reaction with an example.
OR
b Explain the following terms: i) Catalytic poisoning ii) Enzyme catalysis.
- 15 a Write notes on : (i) Acid rain (ii) BOD and COD. (2+3)
OR
b Discuss the impact of pesticides on environment.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 i) Explain VSEPR theory. Explain the shapes of BF₃ and SF₆. (7)
- ii) Write note on reduction with example. (3)
- 17 i) State and explain Huckel's rule. (4)
- ii) Discuss the preparation and uses of Teflon and terylene. (6)
- 18 i) Define the terms antipyretics and sulphadiazine with examples. (4)
- ii) Discuss the preparation of malachite green and methyl orange. (6)
- 19 i) Write notes on order and molecularity. (4)
- ii) Explain the following terms:
a) Chain reaction b) Auto catalysis c) Negative catalysis. (6)
- 20 i) Write a short note on water pollution. (4)
- ii) What is soil pollution? Give the reasons for soil pollution. (6)

Z-Z-Z

END