PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2017
(Fourth Semester)

Branch- BOTANY

CHEMISTRY - II .

Time : Three Hours Maximum : 75 Marks

SECTION-A (20 Marks!
Answer ALL questions
ALL questions carry EQUAL marks (10 x 2 = 20)

1 Write IUP AC name of the following compounds

(i) $[A1^{III}(0H)(H_20)_5]^{2+}$ ii) K_2 [Pt Cl_6].

2 . Define: Fertilizers.

3 • ‘ What is coenzyme? •

4 Give the preparation of fiiran.

5 Illustrate normality. . , • -

6 Write a note on steam distillation.

7 * What is specific conductance?

8 State chemisorption with example.

9 What do you understand by the term atom economy?

10 Draw the structure of haemoglobin.

SECTION - B (25 Marks!
Answer ALL Questions
ALL Questions Carry EQUAL Marks >(5 x 5 = 25)

11 a Write the preparation and properties of permonosulphuric acid.

OR >

b Discuss the classification of fertilizers.

12 a How are amino acids, classified? •

OR

b Explain the mechanism of enzyme action.

13 a How will you purify the liquid using fractional distillation?

OR '

• b Explain the principle and applications of thin layer chromatography.

14 a What is cell constant? How will you determine the cell constant?

OR

b Explain Langmuir adsorption isotherm.

15 a Discuss the role of following elements in biological system
(i) Fe (ii) Mg (iii) Ca (iv) K

OR .

b . Explain the toxicity of mercury, cadmium and lead.

SECTION - C (30 Marks!
Answer any THREE Questions |
ALL Questions Carry EQUAL Marks (3.x 10 = 30)

16 i) What is EDTA? Explain its applications. v (6)
ii) Write a note on functions of haemoglobin. (4)

17 Draw and explain the structure of proteins.

18 i) Discuss the principle and applications of Column chromatography. (5)
ii) How will you purify the solids using fractional crystallization? (5)

19 i) Discuss the applications of adsorption. • (6)
ii) Define: a) Kohlrasc'h law b) Oswald’s law. (4)

-20 Describe the twelve nrinrinlpc of