**PSG COLLEGE OF ARTS & SCIENCE**
**(AUTONOMOUS)**

**BSc DEGREE EXAMINATION MAY 2017**
**(Second Semester)**

**Branch - NUTRITION, FOOD SERVICE MANAGEMENT & DIETETICS**

# CHEMISTRY - II

Time : Three Hours Maximum : 75 Marks

## SECTION-A (20 Marks)

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

1 What do you understand by the term 'Sublimation'?
2 Define : Rf value.
3 Give the uses of permono sulphuric acid and perdisulphusic acid.
4 Define the term chelation.
5 Give the reduction reaction of furan.
6 What is denaturation of protein?
7 State Faraday's law.
8 Define the terms : $p^H$ and buffer.
9 Write a note on COD and BOD.
10 What is acid - rain?

## SECTION - B (25 Marks)

Answer **ALL** Questions
**ALL** Questions Carry **EQUAL** Marks (5 x5 = 25) .

11 a Write a note on purification of organic compounds by distillation under reduced pressure.

OR

b What is green chemistry? Write the twelve principles of green chemistry.

12 a Discuss the preparation and properties of permono sulphuric acid.

OR

b Explain the Werner's coordination theory.

13 a What are amino acids? How are they classified?

OR

b Discuss the structure of proteins.

14 a Explain the following terms:
(i) Molar conductance (ii) Equivalent conductance.

OR

b State and explain Ostwald's dilution law.

15 a Give an account on global warming.

OR

b Write in detail about the factors affecting the soil pollution.

## SECTION - C 130 Marks)

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

16 Explain the principle and applications of ion-exchange chromatography.

17 Discuss the biological role of chlorophyll and haemoglobin.

18 What are the heterocyclic compounds? Give the preparation, properties and uses of pyridine.

19 a Define Kohlrausch's law and give its applications in brief. (5)
b What are complex reactions? Discuss their types with suitable examples.(5)

20 Describe in detail the following waste water treatment methods: