

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2019
(First Semester)

Branch - NUTRITION, FOOD SERVICE MANAGEMENT & DIETETICS

CHEMISTRY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10x1 = 10)

- 1 The indicator used in acid-base titration is

(i) Methyl orange	(ii) NaOH
(iii) Bromine	(iv) Eriochrome black. T
- 2 The square of standard deviation is known as

(i) Variance	(ii) Non-variance
(iii) Mean	(iv) Errors
- 3 Covalent bonds are formed by _____ of elements.

(i) Sharing	(ii) Donation
(iii) Transfer	(iv) All the above
- 4 Platinum is used as strong _____ agent.

(i) Oxidizing	(ii) Reducing
(iii) Polymer	(iv) Catalyst
- 5 Identify the amino acid which is not optically active?

(i) alanine	(ii) Glycine
(iii) Cysteine	(iv) Lysine
- 6 Which is not prepared from acetylene

(i) Thiophene	(ii) Pyrrole
(iii) Pyridine	(iv) Furan
- 7 Which is called Queen of drugs

(i) Sulpha drugs	(ii) Penicillin
(iii) Streptomycin	(iv) Chloromycetin
- 8 Identify the Chromophore

(i) -NH ₂	(ii) -NO ₂
(iii) -OH	(iv) -NR ₃
- 9 Gel is a colloidal solution of

(i) Solid in gas	(ii) Liquid in solid
(iii) Liquid in liquid	(iv) Solid in liquid
- 10 Lyophobic Sol is also called as

(i) Reversible sol	(ii) True solution
(iii) irreversible sol	(iv) Suspension

SECTION - B (25 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 5 = 25)

11' a Out line the principles of volumetric analysis.

- 11 b Discuss about types of errors and elementary treatment of errors.
- 12 a What is hydrogen bonding? Discuss about the types and consequences.
OR
b Discuss about oxidizing and reducing agents with example.
- 13 a Write about the oxidation and coupling reactions of pyrrole.
OR
b Explain isoelectric point of amino acids.
- 14 a Describe about antibiotics and antiseptics.
OR
b State chromophore and auxochromophores. Five examples.
- 15 a Differentiate between true solution and colloidal solutions.
OR
b Explain the cleansing action of soap.

SECTION -C (40 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 8 = 40)

- 16 a Explain in detail about the following
i) Mean and median ii) Precision and accuracy
OR
b Discuss about laboratory hygiene, safety and handling of toxic and poisonous chemicals.
- 17 a Explain the methods of preparation of colloids.
OR
b What are emulsifying agents? Discuss their properties and uses.
- 18 a Describe Lewis concept of acids and bases with examples.
OR
b Discuss about ionic bond in detail.
- 19 a Discuss about primary, Secondary and tertiary structure of proteins.
OR
b What are amino acids? How are they classified?
- 20 a What are sulpha pyridine?
OR
b Explain the classification of drugs based on mode of application and chemical composition.

Z-Z-Z

END