



Maximum

Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)
Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Bachelor's Degree Examination – June/July 2021
II Semester

Class : I UG
Major : Food Service Management and Dietetics

Time : 3 Hours
Max. Marks : 100

18BFDI02 DSE II Chemistry Theory for Food Service Management and Dietetics

Part A
Choose the Correct Answer

10 x 1 = 10

1. Select the glassware used for measuring the solution in fraction of mL
a. Beaker b. RB Flask c. Burette d. Conical Flask
CO1K1
2. Pick up the indicator added for acid base titrations
a. Phenolphthalein b. Murexide c. Eriochrome black - T d. Starch
CO1K1
3. Choose the organic compound from the following:
a. Sodium chloride b. Acetone
c. Calcium chloride d. Sodium hydroxide
CO2K2
4. Select the compound with unsaturated double bond
a. propane b. ethyl alcohol c. methane d. vinylchloride
CO2K2
5. Pick up the carbohydrate from the following:
a. Glycine b. Glucose c. Keratin d. Methionine
CO3K3
6. Which of the following useful as textile fibre?
a. Starch b. Glucose c. Fructose d. cellulose
CO3K3
7. Choose the compound containing both $-NH_2$ and $-COOH$ groups
a. fibroin b. cellulose c. starch d. glucose
CO4K4
8. Which of the following is not an enzyme?
a. Amylase b. Maltase c. Cellulose d. Lipase
CO4K4
9. A technique used to determine the concentration of a coloured solution is
a. TEM b. SEM c. Colorimetry d. XRD
CO5 K5
10. The electrokinetic process that separates charged particles in a fluid using a field of electrical charge is
a. Electrophoresis b. FTIR c. TLC d. Colorimetry
CO5K5

Part B

5 x 6 = 30

Answer ALL questions

Each answer should not exceed 400 words or two pages

- 11.a. Citing examples, write the importance of acids and bases in the laboratories. CO1 K2
(or)
11.b. Describe the use of burette and pipette in titrimetric analysis. CO1K2
- 12.a. Write a note on standard enthalpy of formation. CO2K2
(or)
12.b. Discuss about heat of reaction at constant pressure and constant volume. CO2K2
- 13.a. Explain the basic properties of glucose and fructose. CO3K3
(or)
13.b. Give a brief note on the uses of starch and cellulose. CO3K3
- 14.a. Discuss the properties of amino acids. CO4K3
(or)
14.b. Explain the catalytic power of enzyme. CO4K3
- 15.a. Write the principle and applications of flame photometry. CO5K5
(or)
15.b. Describe the important aspects involved in the paper chromatography. CO5K5

Part C

5 x 12 = 60

Answer ALL questions

Each answer should not exceed 800 words or four pages

- 16.a. Discuss about the necessary steps and procedure required for the waste chemical handling. CO1 K2
(or)
16.b. Explain the importance of making up process, diluting solutions and use of burette and pipette. CO1K2
- 17.a. Write an detail the significance of sodium, potassium and calcium elements. CO2K3
(or)
17.b. Elaborate on Hess's law of heat of summation. CO2K3
- 18.a. Discuss on the open chain and ring structures of glucose and fructose. CO3K4
(or)
18.b. Summarize on the similarities and differences between starch and cellulose. CO3K4
- 19.a. Discuss about the tertiary and quaternary structure of proteins. CO4K4
(or)
19.b. Elaborate on the chemical and biological catalysis aspects of enzymes. CO4K3
- 20.a. Detail on the principle and applications of spectrophotometry. CO5K5
(or)
20.b. Discuss the principle and applications of thin layer chromatography. CO5K5
