

2022

**Multi Skilled Health Worker (MSHW)  
(B.Voc. First Semester End Examination-2022)**

**PAPER-102T**

*Full Marks: 40*

*Time: 02 Hrs*

*The figures in the right hand margin indicate marks  
Candidates are required to give their answers in their own words as  
far as practicable*

*Illustrate the answers wherever necessary*

**Group-A**

- 1. Answer any five question of the following:                      2x5 = 10**
- a. Draw the chemical structure of oleic acid and DHA.
  - b. What do you mean by buffer and pH?
  - c. What is alpha helix of protein?
  - d. Define Mularotation.
  - e. What is omega -6 fatty acid?
  - f. Write the name of two sulfur containing amino acid.
  - g. Define colloids.
  - h. Define iso enzyme with two examples.

(2)

**Group-B**

2. Answer any four questions of the following: 5x4 = 20

- a) i) Write the biological importance of surface tension.  
ii) Distinguish reducing and nonreducing sugars with example.  $2\frac{1}{2} + 2\frac{1}{2}$
- b) i) Write the function of carbohydrate.  
ii) Define pyranose-furanose isomerism. 3+2
- c) i) Write the nutritional importance of omega-3 fatty acid.  
ii) Briefly discuss the adverse health effects of saturated fatty acid.  $2\frac{1}{2} + 2\frac{1}{2}$
- d) i) Define Beer-Lambert law.  
ii) Write the application of chromatography. 2+3
- e) i) Briefly discuss the enzyme inhibition. 5
- f) i) Derive the Michaelis-Menten equation  
ii) Briefly discuss the specificity of enzymes.  $2\frac{1}{2} + 2\frac{1}{2}$

**Group-C**

3. Answer any one question of the following: 1x10=10

- a) i) Write the name of any two of three branched chain amino acid & briefly discuss their function.

(3)

ii) Distinguish between tertiary and quaternary structure of protein.  $2+3+2\frac{1}{2}+2\frac{1}{2}$

- b) i) Briefly discuss the health benefits of unsaturated fatty acid.  
ii) What are the factors affecting diffusion? Define hypertonic solution and osmotic pressure. 5+(3+2)
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