Glossary:

1) Receptor: It is a protein molecule on the extracellular surface that receives chemical signals and causes a response.

2) Epithelial cells: They are tissue lining that cover the glands, organs and cavities throughout the body.

3) Lamina propria: It is a loose connective tissue of the mucosa which has numerous cells with immune function. It is part of the intestinal villus which is supplied with capillaries and a single lacteal for the transportation of absorbed nutrients.

4) Villus: The mucosa of the small intestine is characterized by evagination called villi to increase the surface area for nutrient absorption.

5) Venule: They are small blood vessels that collect blood from the capillaries and merge to form veins.

6) Arteriole: It is a small arterial blood vessel located proximal to the capillaries.

7) Goblet cells: They are mucus secreting cells that facilitate movement and diffusion of gut content.

8) Apical membrane: It is any membrane located at the apex.

9) Micelles: They are emulsions mixed with bile salts to facilitate absorption of non-polar components such as cholesterol, fatty acids and monoglycerides into intestinal epithelial cells.

10) Lipolysis: Breakdown of triglycerides to release fatty acids.

11) Dissociation: The process of splitting of a molecule into ions.

12) Chylomicrons: Protein-coated spherical structure that solubilizes triglycerides, phospholipids and cholesterol and is absorbed into the lacteal of the villus in the small intestine.

13) Apolipoprotein: It is the protein component of a lipoprotein.

14) Retinoids: They are class of compounds that include pre-formed vitamin A.

15) Secosteroids: It is a subclass of steroids with a broken ring structure. Vitamin D is a secosteroid hormone with endocrine functions.

16) Chromatin: Chromatin is a complex containing DNA, protein and RNA that readily stains with basic dyes. Vitamin D binds to chromatin of target tissue and expresses the genes for calcium binding protein.

17) Cytosol: It is the fluid matrix present in the cytoplasm within a cell.

18) Peroxidation: The process of oxidative degradation of lipids.

19) Cyclization: The process of formation of ring structure.

20) Photoisomerization: The change in structure of isomers due to photoexcitation