**NAME: ODOK-OGAR DIVINE ONYODUMA**

**MATRIC NUMBER: 18/MHS05/009**

**DEPARTMENT: PHYSIOLOGY**

**COURSE: BCH 204**

**QUESTIONS:**

**1.** What do you understand by the term ''biological value of proteins"

**2.** List and explain the various methods of assessment of protein quality.

**ANSWERS:**

1. The biological of protein is a measure of the proportion of absorbed protein from a food which becomes incorporated into the proteins of the organism's body. It captures how readily the digested protein can be used in protein synthesis in the cells of the organism.
2. Methods of protein assessment.
* Biological value of protein: it is the ratio between the amount of nitrogen retained and nitrogen absorbed during a specific interval.
* Net protein utilization (NPU): Like Biological Value, NPU estimates nitrogen retention but in this case by determining the difference between the body nitrogen content of animals fed no protein and those fed a test protein. This value divided by the amount of protein consumed is the NPU which is defined as the "percentage of the dietary protein retained.
* Limiting Amino Acids: certain proteins are deficient in one or more essential amino acids. If this particular protein is fed to a young rat as the only source of protein, it fails to grow. This amino acid is said to be **limiting amino acid.** Limiting amino acid is that which limits the weight gain when a protein is supplied to an animal.
* Mutual Supplementation: this problem may be overcome by taking a mixture of proteins in the diet. **Mutual supplementation of proteins** is thus achieved.