Class test Science

Components of food

1. Read the case study

   Fortification is the process of adding Fortified Rice Kernels (FRK), containing FSSAI prescribed micronutrients (Iron, Folic Acid, Vitamin B12) to normal Rice (Custom Milled Rice) in the ratio of 1:100 (Mixing 1 Kg of FRK with 100 Kg custom milled rice). Fortified rice is nearly identical to traditional rice in aroma, taste, and texture. This process is done in the rice mills at the time of milling of rice.

   Rice fortification ecosystem has been enhanced significantly on boarding rice millers, FRK manufacturers, industries and other stakeholders for production and supply of fortified rice to meet the target requirement. As on date, there are more than 9000 rice mills in the country which have installed blending infrastructure for production of fortified rice and their cumulative monthly production capacity is around 60 LMT which is increased by more than 4 times since last year.

   a. As per your class five days, write the full form of FSSAI.

   b. What is required for the production of fortified rice?

   c. With 100kg normal rice, how much fortified rice they add? **3marks**

2. A common misconception is that everyone should drink eight glasses of water per day, but since everyone is different, daily water needs will vary by person. How much water you need is based on differences in age, climate, and exercise intensity. About 60-70% of your body weight is made up of water, and every part of your body needs it to function properly. Water helps the kidneys remove wastes from your blood in the form of urine. Water also helps keep your blood vessels open so that blood can travel freely to your kidneys, and deliver essential nutrients to them. But if you become dehydrated, then it is more difficult for this delivery system to work. Mild dehydration can make you feel tired, and can impair normal bodily functions. Severe dehydration can lead to kidney damage, so it is important to drink enough when you work.

   a. Water consumption amount depends on various thing, write two such factors.

   b. Write the effect of mild dehydration?

   c. How water helps the kidney? **3marks**

3. a. Write the concept of deficiency disease. **1marks**

   b. If a person eliminates the food items that are rich in Vitamin D from his diet, then write the expected deficiency disease.

4. Write the test for protein for food like raw egg. Explain the requirement of more protein for school student than your teacher. (2+1)**3marks**