

Answer All Questions

1. Match the following Water Soluble Vitamins to their scientific names.

Insert an arrow or line to connect the answer

B1	→	Cobalamin
B2	→	Thiamin
B12	→	Ascorbic Acid
C	→	Riboflavin

(1 mark for each correct match)

(4 marks)

2. Name the vitamin in each of the following food source.



a) **Vitamin C**



b) **Vitamin B12**



c) **Folic acid**



d) **Vitamin B1 and B2**

(1 mark for each correct response)

(4 marks)

3. State two functions for each of the following vitamins.

Vitamin B1

- Needed for metabolic reactions that release energy from carbohydrates
- Needed for the normal growth of children.
- Needed for the function and maintenance of nerves

(Any two, 2 marks)

Vitamin B2

- Needed for normal growth.
- Needed for the release of energy from food, especially for amino acids and fats by oxidation.
- Helps maintain good vision, healthy hair, skin, and nails.
- Needed for red blood cell formation and respiration.
- Needed to regulate human growth and reproduction.

(Any two, 2 marks)

Vitamin B12

- Needed for the metabolism of amino acids and other enzyme systems in the body.
- Works with folate to make red blood cells.
- Needed for normal nerve function.
- Helps to build protein tissues.

(Any two, 2 marks)

Folic Acid

- Important for normal growth.
- Important for formation of red blood cells.
- Required for the release of energy from food, especially amino-acids
- Important for the production of the nucleic acids RNA and DNA.

(Any two, 2 marks)

Vitamin C

- Needed to make connective tissue which binds the body cells together.
- Helps absorb the mineral iron
- Helps build strong bones and teeth
- Required for the production of blood and blood vessels
- Needed for the building and maintenance of the skin and linings of the digestive system
- Helps vitamin E in its role as an antioxidant to prevent heart disease
- Needed to make collagen.

(Any two, 2 marks)

(10 marks)

4. a) Name the vitamin associated with the following deficiency diseases and give two symptoms of each disease.

BERI BERI

Vitamin B1 (Thiamin)
(1 mark)

Symptoms

- ▶ Loses weight
- ▶ Exhausted
- ▶ Weak muscles
- ▶ Swelling due to fluid in the tissues.

(Any two, 2 marks)

SCURVY

Vitamin C (Ascorbic acid)
(1 mark)

Symptoms

- ▶ Poor development of connective tissue
- ▶ Bleeding gums and loose teeth
- ▶ Weak blood vessels
- ▶ Cuts fail to heal
- ▶ Weak scar tissue that is easily broken
- ▶ Anaemia because iron isn't absorbed properly

(Any two, 2 marks)

(6 marks)

TOTAL 24 marks

22 – 24 Excellent 16 – 21 Good
15 and under – Review information and try again