

M .A H.sc -302 Bio chemistry(core compulsory)

Objectives:

- .to understand relation between nutrition and biochemistry.
- To acquire knowledge about metabolism of various nutrient nutrient
- To get knowledge about chemical composition and chemical structure of various
To understand relation between nutrition and biochemistry.

Unit 1:

1. Relation between nutrition and biochemistry.
2. Chemical composition of carbohydrate and chemical classification of carbohydrate.
3. Metabolism of carbohydrate.

Unit 2:

1. Chemical composition of protein .
2. Metabolism of protein.
3. Nitrogen balance and urea cycle.

Unit 3:

1. Chemical composition and structure of lipids.
2. Metabolism of fatty acid.
3. Analytical test for lipid.
4. Cholesterol ,its composition and merits and demerits of cholesterol.

Unit 4:

1. Vitamins – function , classification ,and chemical structure of various vitamins.
2. Calcium -- absorption ,regulation ,biological function.
3. Iron - biological function , metabolism.

Practicals:

- Qualitative tests for carbohydrate.
- Saponification of oil.
- Qualitative test for protein.
- Study of physical characteristic of urine.
- Urine sugar test.
- Blood group analysis.

References:

- Jyoti v. parghi “ biochemistry “ gujarat university.
- Biochemistry harbasanlal.
- Practical manual of biochemistry s.p. Singh 6th edition.