

**Savitribai Phule Pune University**  
Anekant Education Society's  
**Tuljaram Chaturchand College, Baramati**  
B.Voc. Food Processing and Post-Harvest Technology  
Semester Examination, April 2019-2020  
Semester II, Paper FP - 4, Nutrition Science

**Question Bank**

**Q. 1 Objective type questions**

**13M**

**Tick mark (✓) in front of correct & mark (X) in front of wrong sentence.**

- Sugars are simple carbohydrates and consist of monosaccharides & disaccharides.
- Haemoglobin is an example of a structural protein
- Oils and fats are esters of fatty acids with glycerol.
- Glucose is an aldohexos while fructose is a ketohexose

**Fill in the blank Spaces in the following with appropriate words.**

- (a) Meat is composed of three tissues: Muscles Tissue, Connective Tissue and .....
- (b) The titrable acidity of Buffalo milk varies on an average from ..... to.....%.
- (c) The protein content of soybean is ..... %
- (d) Oils provide ..... times more energy than protein and carbohydrates.
- (e) Minerals constitute \_\_\_\_\_ per cent of the total body weight.
- (f) Carbohydrate in a diet should not be more than \_\_\_\_\_ of the daily calorie requirement of person.
- (g) \_\_\_\_\_ is the condition which results when in sufficient food is eaten over an extended period of time.
- (h) A fatty acid with a single double bond is called ----- and A fatty acid contain two or more double bonds then it is called as a \_\_\_\_\_
- (i) The percentage of endosperm, germ & bran of cereal are ..... & ..... respectively.
- (j) Meat is composed of three tissues: Muscles Tissue, ..... and adipose tissue
- (k) The titrable acidity of Buffalo milk varies on an average from ..... to.....%.
- (l) The percentage of endosperm, germ and bran of cereal are .....respectively.
- (m) Simple Oils and Fats are esters of fatty acids with .....
- (n) A fatty acid contain two or more double bonds is called .....
- (a) Sugars are consist of monosaccharide & .....
- (b) ..... is an example of a transport protein
- (c) Starch is a mixture of two large polymers; amylose and .....
- (d) A fatty acid contain one double bonds is called .....
- (e) Carotenoids is a precursor of Vitamin .....
- (f) Minerals constitute ..... per cent of the total body weight.
- (o) Sugars are simple carbohydrates and consist of monosaccharide & .....
- (p) Haemoglobin is an example of a ..... protein

**Define the Following Terms**

- (a) Nutrition
- (b) Malnutrition
- (c) Basal Metabolic Rate (BMR)
- (d) Lipids

- (e) Simple Proteins
- (f) Lipoprotein

**Match the contents of column A and column B correctly**

<b>Column 1</b>	<b>Column 2</b>
i) Vitamin D	a) Precursor to Vitamin A
ii) Carotenoids	b) Deficiency leads to bow legs
iii) Vitamin K	c) Used as an antioxidant
iv) Vitamin E	d) Essential for blood clotting

**Q. 2 & 3 Write short notes on any three of the following. 25M**

- (a) Classify the carbohydrates with example?
- (b) Describe the physico-chemical properties of carbohydrates?
- (c) Describe the major and minor milk constituents and write the composition of buffalo milk
- (d) Describe Assimilation of Carbohydrates, Fats and Protein in Metabolism?
- (e) Define Recommended Dietary Allowance (RDA)? Which factors are affected RDA?
- (f) What are the Nutritional importance of oilseeds? Write in brief the functions of oils and fats in foods.
- (g) Describe biochemical composition of fruits?
- (h) Write notes on Chemical Composition of Meat?
- (i) What are the Toxic constitute of pulses and their elimination?
- (j) Classify the lipids with examples?
- (k) Describe biochemical composition of fruits?
- (l) Discuss the physical composition of Meat.
- (m) Recommended Dietary Allowances (RDA)
- (n) Food Groups
- (o) Carbohydrate Metabolism or Protein and Amino Acid Metabolism
- (p) Classification of Lipids
- (q) Explain sequence of nutritional deficiency and specificity of assessment of nutritional status.
- (r) What are the causes and types of malnutrition?
- (s) Explain types of simple protein with examples
- (t) What are the functions of food?
- (u) Classify proteins on the basis of their composition and quality.
- (v) Classify the lipids based on the structure
- (w) Describe the fatty acids in brief.

**Q. 5 Case Study or Long answer type question 12M**

- (a) What are the role of Fat in the body metabolism in terms of Chemical Composition, classification, digestion, function, deficiency systems and sources?
- (b) Define Malnutrition? What are the causes of malnutrition and types of malnutrition?
- (c) What are the role of Protein in the body metabolism in terms of Chemical Composition, classification, digestion, function, deficiency systems and sources?
- (d) What are the role of Carbohydrate in the body metabolism in terms of Chemical Composition, classification, digestion, function, deficiency systems and sources?
- (e) Describe the Fitness and Its Measurement in Details.
- (f) Answer the following questions
  - (a) Define vitamins and classify them
  - (b) Explain the following in brief
    - ❖ Role of vitamin E in vision
    - ❖ B-Complex vitamins and energy metabolism

(g) Classify the mineral elements. List the five major minerals and describe the functions, deficiency symptoms and sources of these 5 minerals.