DKM COLLEGE FOR WOMEN (AUTONOMOUS),VELLORE-1.

DEPARTMENT OF FOODS AND NUTRITION

ESSENTIALS OF MACRONUTRIENTS

Subject code – 15CPFN3A

UNIT-I SECTION-A 6 MARKS

1. Enumerate the functions of carbohydrates.
2. Explain the history of carbohydrates.
3. Give the short notes on absorption of carbohydrates.
4. List out the sources of carbohydrates.
5. Explain the storage of carbohydrates.
6. Explain the hormonal regulation of blood glucose.
7. Bring the notes on role of carbohydrates in dental caries.
8. Give the notes on dietary fibre.
9. Explain the development and concept of the dietary fibre.
10. Explain the role of fibre in lipid metabolism.
11. Explain the colon function.
12. Give the notes on blood glucose level and GI tract functions.
13. Explain the disadvantages of dietary fibre.
14. Briefly explain in digestion of carbohydrates.
15. Discuss the role of small intestine in digestion of carbohydrates.
16. Bring the notes on active absorption.
17. Explain in detail about the simple diffusion in absorption of carbohydrates.

SECTION-B 15 MARKS

1. Give the classifications of carbohydrates.
2. Explain the history of carbohydrates in detail.
3. Explain in detail about the digestion of carbohydrates.
4. Give the notes on sources and storage of carbohydrates.

5. Give the importance of hormonal regulations in carbohydrate metabolism.
6. Elaborate the dietary fibre.
7. Explain in detail about the structural and non structural dietary fibre.
8. Discuss about in detail of blood glucose level and GI tract fuctions.
9. Explain in detail about the role of fibre in lipid metabolism.
10. Explain in detail about the functions of carbohydrates.

UNIT-II SECTION-B 6 MARKS

1. Explain the functions of lipids.
2. Give the notes on sources of lipids.
3. Give the notes on absorption of lipids.
4. Explain the effects of deficiency and excess of fat.
5. Explain the lipotropic factors.
6. Give the notes on role of saturated fat in lipid metabolism.
7. Explain the history of lipids.
8. Bring the notes on triglycerides.
9. Discuss in detail about EFA.
10. Explain the storage of lipids in detail.

SECTION-B 15 MARKS

1. Explain the classifications of lipids in detail.
2. Bring the notes on history of lipids.
3. Discuss in detail about the sources and storage of lipids.
4. Elaborate the utilization of lipids.
5. Discuss the effects of deficiency and excess of fat.
6. Explain the role of saturated fat in lipid metabolism.
7. Explain in detail about the lipoprotein.
8. Give the notes on triglycerides.
9. Explain in detail about the EFA.
10. Elaborate the digestion of lipids.
11. Explain in detail about the initial fat absorption.

12. Bring the notes on distribution of fat stores.
13. Explain the role of enzymes in the pancreas during lipid metabolism.
14. Discuss the bile from the liver and gallbladder.
15. Explain the role of enzymes in small intestine.

UNIT-III SECTION-A 6 MARKS

1. Explain the functions of proteins.
2. Give the notes on history of protein.
3. List out the food sources of protein.
4. Bring out the animal sources of protein.
5. Explain the role of protein in maintenance of tissues.
6. Discuss the regulatory functions of protein.
7. Protein is a precursor of enzymes-explain.
8. Explain the energy supply.
9. Give the notes on role of pepsins in protein digestion.
10. Explain the action of rennin in protein metabolism.
11. Bring the notes on digestion in duodenum.
12. Explain the proteolytic functions of trypsin.
13. Explain the “chymotrypsin”.
14. Explain in detail about the carboxy peptidases.
15. Explain the digestion in small intestine.
16. Discuss the protein utilization.
17. Explain the absorption of amino acids.

SECTION-B 15 MARKS

1. Explain the classifications of proteins.
2. Give the notes on sources and storage of protein.
3. Discuss in detail about the digestion of protein.
4. Explain in detail about the protein quality evaluation.
5. Explain in detail about the nutritional classification of amino acids.
6. Give the notes on amino acid balance.

7. Elaborate the notes on amino acid balance and imbalance.
8. Explain the toxicity of proteins.
9. Discuss the amino acid pool.
10. Give the notes on importance of amino acid balance.

UNIT-IV SECTION-A 6 MARKS

1. Explain the history of energy.
2. Give the notes on energy value of foods.
3. Explain in detail about the SDA.
4. Bring the short notes on the energy production.
5. Explain in detail about the thermogenesis.
6. Give the notes on factors affecting thermogenesis.
7. Explain the energy utilization by cells.
8. Explain energy output in detail.
9. Discuss the notes in detail on BMR.
10. Give the short notes on physical activity.
11. Give the notes on factors affecting energy input.

SECTION-B 15 MARKS

1. Explain in detail about hunger, appetite, energy balance.
2. Discuss the measurement of energy content of food.
3. Explain in detail about the energy utilization by cells.
4. Elaborate the history and energy value of foods.
5. Discuss in detail on the energy output.
6. Bring the notes on energy balance.
7. Discuss in detail the SDA.
8. Discuss in detail about the factors affecting energy input.
9. Give the notes on energy input-hunger, appetite, energy balance.
10. Explain in the measurement of energy content of food.

UNIT-V SECTION-A 6 MARKS

1. Explain the history of carbohydrates.
2. Discuss the difference between carbohydrate and fat.
3. Give the notes on nutritional adaptation.
4. Explain the process of hypothesis.
5. Bring the notes on functions of protein.

SECTION-B 15 MARKS

1. Explain the inter relationship between carbohydrates and fat.
2. Explain the difference between protein and fat.
3. Bring the notes on nutritional adaptation.
4. Elaborate the hypothesis.
5. Explain the functions of lipids.
6. Explain the functions of protein.
7. Discuss the functions of carbohydrates.
8. Explain the carbohydrate metabolism.
9. Give the notes on carbohydrate digestions.
10. Bring the notes on protein metabolism.
11. Explain the digestion of protein.