

**Avinashilingam Institute for Home Science and Higher Education for Women
Coimbatore – 641 043**

**Master's Degree Examination – November 2017
III - Semester**

Class : II PG
Major : Food science and Nutrition

Time: 3 hours
Max. Marks: 60

12MFNC14 Macronutrients

Part A

10 x 1/2 = 5

Choose the correct answer

1. This is an example of soluble fibre.
a. cellulose b. hemicellulose c. pectins d. lignin
2. This food has moderate glycaemic index.
a. Bread b. Raisins c. Potatoes d. Icecream
3. ----- is found in particularly large amounts in the myelin sheath of nerve tissues.
a. phospholipids b. glycerophospholipids c. glycolipids d. sphingophospholipids
4. This is one of the ketone bodies.
a. acetoacetic acid b. beta hydroxy butyric acid c. acetone d. all of the above
5. This is an essential amino acid.
a. Histidine b. Alanine c. Asparagine d. Serine
6. ----- is the parent substance of carnitine which transports fatty acid within the mitochondria.
a. Arginine b. Lysine c. Tyrosine d. Phenylalanine
7. The RDA for calories of an adult woman doing sedentary work is ----- kilocalories.
a. 1800 b. 1850 c. 1900 d. 1950
8. This is an example of mono unsaturated fatty acids.
a. Palmitoleic acid b. Oleic acid c. Erucic acid d. All of the above.
9. The protein requirement for an adult man is ---- grams.
a. 60 b. 62 c. 65 d. 70
10. This is an example of simple protein.
a. Collagens b. Albumin c. Elastins d. Keratin

Part B

5 x 4 = 20

Answer ALL questions

Each answer should not exceed 200 words or one page

- 11.a. Write on thermic effect of food.
(Or)
11.b. What is meant by resting energy expenditure? Explain.
- 12.a. Explain glycaemic load.
(Or)
12.b. Explain the functions of carbohydrates.
- 13.a. Write on Net Protein Utilisation.
(Or)
13.b. Discuss Protein Efficiency Ratio.
- 14.a. Discuss the consequences of high and low fat intake.
(Or)
14.b. Explain the transport of lipids in the blood.
- 15.a. How is water balance maintained in the body?
(Or)
15.b. Discuss the distribution of the water in the body.

Part C

5 x 7 = 35

Answer ALL questions

Answer should not exceed 600 words or three pages

- 16.a. Explain the factors affecting BMR.
(Or)
16.b. How will you measure total energy requirement?
- 17.a. Discuss the role of dietary fibre in human nutrition.
(Or)
17.b. Explain the hormonal controls of blood sugar levels.
- 18.a. Explain the functions of proteins.
(Or)
18.b. How will you evaluate protein quality?
- 19.a. Write on essential fatty acids.
(Or)
19.b. Explain digestion and absorption of fats.
- 20.a. Discuss the hazards of hypo and hyper hydration.
(Or)
20.b. Explain the functions of water.
