

Roll No.

Total Pages : 03

LMDE/M-24

7049

ADVANCED HUMAN NUTRITION–II

FND-201

(w.e.f. 2020-21)

Time : Three Hours]

[Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. 1 is compulsory. All questions carry equal marks.

(Compulsory Question)

1. Discuss the following : **4×4=16**

- (a) Thermogenesis
- (b) Effects of electrolytes on water balance
- (c) Indirect determination of body fat
- (d) Hunger physiology in brief.

Unit I

2. (a) Elaborate indirect method of energy metabolism of humans in detail. **8**
- (b) Write the factors affecting the BMR. **8**

3. (a) What are the methods to calculate gross and physiological calorific value of food ? Explain in detail. **8**
- (b) What are the components of energy expenditure ? Describe in detail. **8**

Unit II

4. (a) Describe the absorption, transportation and excretion process of electrolytes in detail. **8**
- (b) What are functions and dietary sources of sodium and potassium ions ? **8**
5. Elaborate in detail water homeostasis in human body. **16**

Unit III

6. Describe human body composition. Explain the direct and indirect methods of determination of cell mass in human body. **16**
7. (a) Describe the changes in body composition throughout life. **8**
- (b) How will you determine extra cellular water in human body ? Write direct and indirect methods. **8**

Unit IV

8. Define and differentiate anorexia nervosa and anorexia bulimia. What are the behavioral and clinical signs ? How can these be prevented and managed ? Explain in detail. **16**
9. Explain in detail drug-nutrient interaction with suitable examples. **16**