# PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS)

# BSc DEGREE EXAMINATION MAY 2017 ^HDOOS~

(Second Semester)

#### Branch - NUTRITION, FOOD SERVICE MANAGEMENT & DIETETICS

## **PRINCIPLES OF NUTRITION**

Time: Three Hours Maximum: 75 Marks

## **SECTION-A** (20 Marks!

Answer **ALL** questions

ALL questions carry EQUAL marks (10x2 = 20)

- 1 Define calorie.
- 2 Define Jule.
- What is meant by specific dynamic action of food?
- 4 Expand BMR.
- 5 Define carbohydrate.
- 6 What is meant by electrolyte?
- 7 List the sources of fibre.
- 8 Mention the buffer system in blood.
- 9 Classify lipids.
- What is meant by PUFA?

#### **SECTION - B (25 Marksl**

Answer ALL Questions

**ALL** Questions Carry **EQUAL** Marks (5x5 = 25)

11 a Explain body building foods.

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b Give a note on research finding in nutrition.

12 a Explain the process of digestion and absorption of protein.

OR

b Write about the physiological effects of fibre.

13 a Discuss the deficiency symptoms of essential fatty acids.

OR

- b Discuss the functions of essential fatty acids.\*
- 14 a How do you determine the energy value of food?

OR

- b Discuss the importance of water in the body.
- 15 a Give a note on functions of phosphorus.

OR

b Write about the importance of folic acid.

#### **SECTION - C (30 Marks!**

Answer any **THREE** Questions

**ALL** Questions Carry **EQUAL** Marks  $(3 \times 10 = 30)$ 

- 16 . Explain the working principles of (i) Bomb calorimeter (ii) At water and Rosa respiration.
- 17 Elaborate on the functions, digestion and absorption of carbohydrates.
- Explain the functions and sources of lipids.
- What is water balance of the body? How does body maintain water balance and explain the sources of water for the body?
- Explain the role of minerals in the body.