

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2022  
(Second Semester)

Branch – FOODS AND NUTRITION

ADVANCED NUTRITION - II

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

- 1 Which of the following is the most important nutrient for a woman during her initial stages of pregnancy to prevent birth defects?  
(i) Thiamin (ii) Folic acid  
(iii) Vitamin C (iv) Vitamin E
- 2 Beriberi is caused due to the deficiency of-  
(i) Vitamin B12 (ii) Vitamin B2  
(iii) Vitamin B6 (iv) Vitamin B1
- 3 The absorption of calcium occurs in which part of the body?  
(i) Duodenum (ii) Oesophagus  
(iii) Nose (iv) mouth cavity
- 4 Which of the following minerals control growth and body weight?  
(i) Iodine (ii) Calcium  
(iii) Phosphorous (iv) All of the above
- 5 Probiotics are  
(i) Synthetic nutraceuticals (ii) Vitamin supplements  
(iii) Helpful bacteria (iv) Digestive enzymes

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 a Explain the physiological action of Vitamin A.  
OR  
b Discuss on digestion and absorption of fat-soluble vitamin C.
- 7 a State the functions of pyridoxine.  
OR  
b Explain the interaction between vitamins B3 with macronutrients.
- 8 a Analyze the regulation of calcium phosphorus ratio.  
OR  
b Enumerate and explain the signs and symptoms of iron deficiencies.
- 9 a Discuss the role of iodine in thyroxine formation.  
OR  
b Recommend the dietary sources of magnesium and zinc.
- 10 a Differentiate prebiotics and probiotics.  
OR  
b Determine the role of fruits as nutraceutical.

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Interpret on the interaction of fat-soluble vitamins with Carbohydrate and Protein.  
OR  
b Elucidate the digestion, absorption, transport, utilization, storage and excretion of Vitamin D.
- 12 a Predict the important physiological functions of folic acid in human beings.  
OR  
b Explain the inter relationship between water soluble vitamins and hormones.
- 13 a Categorize the factors influencing regulation of calcium concentration.  
OR  
b State the role of iron in prevention of anemia.
- 14 a Explain the deficiency and toxicity of selenium and chromium.  
OR  
b Enumerate and explain any four functions of Iodine.
- 15 a Explain the effect of Alcohol, caffeine, fruits and vegetables on gene interactions.  
OR  
b Classify Nutraceuticals with its toxicity.

Z-Z-Z

FND