**ST MARY’S UNIVERSITY**

**TWICKENHAM, LONDON**

BA//BSc Degree Examination students registered for

Level FOUR

Title**: Introduction to Nutrition 2**

Code: **NUT4033**

Semester: **RESIT**

Date: **2nd July 2019**

Time: **09:30 – 11 AM**

TIME ALLOWED: **ONE HOUR AND THIRTY MINUTES**

Answer **ALL** questions on the separate multiple choice answer form for **Section A** and in an answer booklet for **section B.**

Remember to enter your Name, the Module Title, Module Number, your

Regnum (Student ID Number) on **ALL** your answer forms and booklets.

You may use an approved calculator

**Section A (chose one answer)**

1. Which protein is responsible for storing iron in the liver and heart?
2. Ferritin
3. Hepcidin
4. Insulin
5. Albumin
6. Which is a feature of Wilson’s copper toxicity disease in 95 % of cases?
7. Keyser-fleisher ring
8. Silvery sparse hair growth
9. Retinal detachment
10. Yellow Skin
11. Primary deficiency of Vitamin K occurs in?
12. Vegetarians
13. Children
14. Housebound people
15. New born babies
16. Which one of the statements is true?
17. Vitamin E requirement depends on the carbohydrate content of the diet
18. Vitamin E requirement depends on the polyunsaturated content of the diet
19. Vitamin E requirement depends on the saturated fat content of the diet
20. Vitamin E requirement depends on the protein content of the diet
21. In children, iodine deficiency leads to:
22. Down’s syndrome
23. Rickets
24. Cretinism
25. Anaemia
26. Toxicity of fluoride:
27. Is not possible because fluoride cannot be stored
28. Is possible and is called fluoridation
29. Is possible and is called fluorosis
30. Is possible and is called fluoride intoxication
31. Vitamin A and zinc are linked in vision in that:
32. Zinc is needed for the enzyme that converts retinol to retinal
33. Zinc is needed for the enzyme that converts retinol to retinoic acid
34. Vitamin A binds to zinc in the retina
35. Zinc and vitamin A are not linked to vision
36. The current UK reference nutrient intake for selenium for male adults is:
37. 25 µg/day
38. 50 µg/day
39. 100 µg/day
40. 75 µg/day
41. Selenium deficiency leads to:
42. Keshan disease
43. Goitre
44. Marasmus
45. Hypothyroidism
46. Which of the following statements is TRUE?
47. 1g sodium = 1g salt
48. 1g sodium = 2.5g salt
49. 1g salt = 2.5g sodium
50. 1g sodium = 4.2g salt
51. Content of vitamin A in foods is often expressed as:
52. Retinol equilibrium
53. Retinol excess
54. Retinol elements
55. Retinol equivalents

1. The availability of iodine is linked to the functioning of which hormone?
2. Adrenalin
3. Thyroxin
4. Insulin
5. Aldosterone
6. Which of the following are associated with high dietary salt intake?
7. Raised blood pressure
8. Raised HDL cholesterol
9. Raised plasma glucose
10. All of the above
11. A lacto-vegetarian eats:
12. Eggs and milk
13. Eggs and fish
14. Milk and fish
15. None of the above
16. Which of the following is NOT a clinical feature of pellagra?
17. Dermatitis
18. Diarrhoea
19. Dementia
20. Bitot spots
21. A vegan’s source of calcium includes:
22. Orange juice
23. Cheese
24. Fortified soya milk
25. Bananas
26. Good sources of folic acid (folate) are:

a. Salmon

b. Lean chicken

c. Drak green leafy vegetables

d. Cauliflower

1. Which of the following are good sources of Vitamin D?
   1. Oily fish
   2. Bread
   3. Potatoes
   4. Onions
2. What is the most reliable food source of zinc?
3. Orange juice
4. Meats and seafood
5. Dark green vegetables
6. Bread
7. Choose the correct response which explains the difference in bone mass
8. Bone mass reaches its peak by the end of adolescence in both males and females
9. Peak bone mass is NOT affected by genetics, gender or ethnicity/race.
10. On average males have the same Peak bone mass as females
11. In females around the time of menopause rate of bone mineral loss accelerates to as high as 4-8% per annum.
12. What is goitre?
13. A smaller than normal thyroid gland
14. A smaller than normal pituitary gland
15. A larger than normal thyroid gland
16. A larger than normal pituitary gland

22. Vitamin D toxicity can lead to (please choose one):

1. Hypercholesterolemia
2. Hypocholesterolemia
3. Hypercalcaemia
4. Hypocalcaemia
5. Which of the following statements for vitamin D is true (please choose one):
6. The RNI is 10 milligrams per day
7. There is no RNI for vitamin D
8. There is only an RNI for pregnant and lactating women and the elderly
9. The RNI for vitamin D is 10 micrograms per day
10. Transferrin is:
11. Storage form of iron
12. Other form of haemoglobin
13. The iron-protein carrier in the blood
    1. Type of red blood cells
14. Bowed legs, an enlarged and misshapen head, and enlarged knee joints in children are all symptoms of
15. Rickets
16. Xerophthalmia
17. Osteoporosis
18. Vitamin D toxicity
19. Which of the following B vitamins helps prevent Neural Tube Defects in children when consumed in adequate amounts during pregnancy?
20. Folate
21. Thiamin
22. Niacin
23. Vitamin B12
24. Which is not a function of zinc:
25. Stabilising DNA folds
26. Stabilising cell membranes
27. Makes iron more soluble
28. Assist with immunity and blood clotting
29. Which statement is true about the absorption and excretion of calcium?
30. Approximately 30-40% absorbed in adults,
31. Approximately 50% is absorbed in pregnancy
32. Excretion mainly via kidneys and this increases when large amounts of protein is consumed
33. All of the above
34. Which of these are all antioxidants?
    1. Folate, Vitamin C and magnesium
    2. Vitamin A, Vitamin C and folate
    3. Beta carotene, vitamin C and vitamin E
    4. Vitamin C, beta carotene and folate
35. Which of these food groups are higher in phytates and oxalates?
36. Fish
37. Citrus fruits
38. Dairy produces
39. Leafy vegetables

**SECTION B SHORT ANSWERS 2 Marks**

1. List the 4 signs of iron deficiency
2. List 4 foods or beverages with low iron bioavailability
3. List 4 factors that’s increase calcium absorption
4. List 4 food sources of copper
5. Describe the main sources of vitamin D
6. What is a reactive oxygen species?
7. List 4 risks of zinc deficiency
8. Give 2 main conditions caused by a deficiency of Vitamin B2 (Riboflavin Deficiency)
9. Describe 2 ways to measure hydration
10. List 4 ergogenic aids

**END OF EXAMINATION**

NUT4033 Multiple Choice Answer Sheet

**Regnum:…………………**

Insert the letter of your chosen answer into the column below.

|  |  |
| --- | --- |
| **Question** | **Answer (a, b, c, d)** |
| **1** |  |
| **2** |  |
| **3** |  |
| **4** |  |
| **5** |  |
| **6** |  |
| **7** |  |
| **8** |  |
| **9** |  |
| **10** |  |
| **11** |  |
| **12** |  |
| **13** |  |
| **14** |  |
| **15** |  |
| **16** |  |
| **17** |  |
| **18** |  |
| **19** |  |
| **20** |  |
| **21** |  |
| **22** |  |
| **23** |  |
| **24** |  |
| **25** |  |
| **26** |  |
| **27** |  |
| **28** |  |
| **29** |  |
| **30** |  |

**Please attach this to your exam script with the treasury tag provided.**