



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

**MAIN CAMPUS AND KAKUMA CAMPUS
UNIVERSITY EXAMINATIONS
MAIN EXAM
2023/2024 ACADEMIC YEAR**

THIRD YEAR FIRST SEMESTER EXAMINATION

FOR THE DEGREE OF BACHELORS OF SCIENCE IN NUTRITION AND DIETETICS

COURSE CODE: HND 301

COURSE TITLE: NUTRITIONAL PHARMACOLOGY.

DATE: THUR 7TH DEC. 2023

TIME: 08:00 AM – 10:00 AM (2Hrs)

INSTRUCTIONS TO CANDIDATES:

Answer **ALL** questions in Section A and section B then Two questions in Section C.
TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

Paper Consists of 2 Printed Pages. Please Turn Over



SECTION A: Multiple Choice Questions (20 Marks):

1. What is a common dietary recommendation for managing peptic ulcers?
 - a. High caffeine intake.
 - b. Spicy foods.
 - c. Low-fat diet.
 - d. Excessive alcohol consumption

2. Which neurotransmitter plays a key role in the pharmacology of gastrointestinal motility?
 - a. Dopamine.
 - b. Serotonin.
 - c. Acetylcholine.
 - d. GABA.

3. What is a primary medical treatment for constipation?
 - a. Laxatives.
 - b. Antacids.
 - c. Antibiotics.
 - d. Diuretics.

4. Which class of drugs is commonly used for the medical treatment of hypertension?
 - a. Antibiotics.
 - b. Statins.
 - c. Antihistamines.
 - d. Antihypertensives.

5. What is the primary function of plasma lipid-modifying agents?
 - a. Increase blood pressure.
 - b. Lower cholesterol levels.
 - c. Improve gastrointestinal motility.
 - d. Enhance insulin sensitivity

6. Which nutrient deficiency is associated with iron deficiency anemia?
 - a. Vitamin B12.
 - b. Folic acid.
 - c. Iron.
 - d. Vitamin C.

7. What is a common side effect of nonsteroidal anti-inflammatory drugs (NSAIDs)?
 - a. Hypotension.
 - b. Gastric ulcers.
 - c. Insomnia.
 - d. Respiratory depression

8. Which hormone is suppressed by corticosteroids, a class of steroids anti-inflammatory drugs?
 - a. Insulin.
 - b. Thyroid hormone.
 - c. Cortisol.

- d. Testosterone
- 9. What is a key dietary recommendation for managing diabetes mellitus?
 - a. High sugar intake.
 - b. Low-carbohydrate diet.
 - c. Excessive protein consumption.
 - d. High caffeine intake
- 10. What is a primary focus in the treatment of eating disorders like anorexia and bulimia?
 - a. High-calorie intake.
 - b. Nutritional supplements.
 - c. Psychotherapy.
 - d. Sedative medications

SHORT ANSWER QUESTIONS; ANSWER ALL QUESTIONS (40 MARKS):

- 11. Describe the medical treatment options for peptic ulcers *(4 Marks)*.
- 12. Explain the pharmacology of gastrointestinal motility. *(4 Marks)*.
- 13. Outline the medical and dietary approaches to managing constipation. *(4 Marks)*.
- 14. Discuss the treatment of nutritional anemia with a focus on iron deficiency. *(4 Marks)*.
- 15. How do plasma lipid-modifying agents work, and what are their potential side effects? *(4 Marks)*.
- 16. Elaborate on the relationship between hypertension, medical treatment and diet. *(4 Marks)*.
- 17. Compare the medical and dietary treatment of diabetes mellitus. *(4 Marks)*.
- 18. Discuss the use of anti-obesity drugs in the context of treating eating disorders. *(4 Marks)*.
- 19. Explain the concept of drug-nutrient interactions and provide examples. *(4 Marks)*.
- 20. How can the efficacy and safety of pharmacological responses be influenced by diet and nutritional status? *(4 Marks)*.

LONG ANSWER QUESTIONS; ANSWER ANY TWO QUESTIONS (20 MARKS):

- 21. Explore the influence of drugs on nutrient utilization and nutritional status. *(10 Marks)*.
- 22. Evaluate the impact of steroids anti-inflammatory drugs on both nutrients and nutritional status. *(10 Marks)*.
- 23. Analyze the role of nutritional factors in the prevention and management of hypertension. *(10 Marks)*.

