

KAMARAJ COLLEGE (Autonomous)

Accredited with A+ Grade by NAAC

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

(4 Pages)

Reg. No:.....

Question Code: 26E01522

Course Code: 25USMB21

UG Degree - End Semester Examinations, April 2026

Second Semester
B.Sc., MICROBIOLOGY

Nutrition and Health Hygiene

(For those who joined in June 2025 onwards)

Time : 3Hours

Maximum : 75 Marks

PART - A (10 × 1 = 10 Marks)

Answer ALL Questions

Choose the correct answer:

- CO:1 1. Identify the nutrient that serves as the primary source of energy
K:1 for the body.
- (a) Protein (b) Carbohydrate
(c) Vitamin (d) Mineral
- CO:1 2. Recognize the deficiency condition caused by lack of iron.
K:1
- (a) Goitre (b) Rickets
(c) Anaemia (d) Scurvy
- CO:2 3. Select the statement that defines a balanced diet correctly.
K:2
- (a) Only carbohydrates (b) Only vitamins and minerals
and proteins
(c) Only vitamins and (d) Only energy giving foods
minerals
- CO:2 4. Identify the condition during which protein requirement
K:1 increases significantly.
- (a) Old age (b) Adolescence
(c) Pregnancy (d) Sedentary lifestyle
- CO:3 5. Recognize the group commonly affected by Protein Energy
K:1 Malnutrition.
- (a) Overfed Adults (b) Growing children
(c) Athlets (d) Elders only

- CO:3 6. Identify the major cause of obesity.
K:1 (a) Undernutrition (b) Excessive calorie intake
(c) Vitamin deficiency (d) Water deficiency
- CO:4 7. Select the correct components included under determinants of
K:2 health.
(a) Genetics, environment (b) Only income
and lifestyle
(c) Only food habits (d) Only climate
- CO:4 8. Recognize the area addressed by Ayushman Bharat Digital
K:1 Mission.
(a) Food safety (b) Digital health infrastructure
(c) School education (d) Water supply
- CO:5 9. Expand the term WASH in public health context.
K:1 (a) Water and Sanitary (b) Water, Sanitation and Hygiene
Health
(c) Welfare and Social (d) Water and Safety for Homes
Health
- CO:5 10. Identify an example of personal hygiene practice.
K:2 (a) Safe disposal of waste (b) Hand washing and cleanliness
(c) National health policy (d) Immunization programme

PART - B (5 X 5 = 25 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 250 words.

- CO:1 11. (a) Explain the functions of proteins.
K:2
(OR)
(b) Describe vitamins and their deficiency diseases.
- CO:2 12. (a) Apply the principles of nutrition to explain a balanced diet for
K:4 pregnant and lactating women.
(OR)
(b) Analyze the nutritional requirements during infancy and
adolescence.
- CO:3 13. (a) Explain malnutrition and undernutrition with reference to
K:2 their causes and symptoms.

(OR)

(b) Explain Protein Energy Malnutrition (PEM).

CO:4 14. (a) Apply the concept of determinants of health to describe key
K:3 health indicators.

(OR)

(b) Classify the principles of health education and the National Health Policy of India.

CO:5 15. (a) Explain personal and community hygiene in relation to
K:2 disease prevention.

(OR)

(b) Describe the determinants of health.

PART - C (5 X 8 = 40 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 500 words.

CO:1 16. (a) Explain carbohydrates, proteins and lipids with their
K:3 functions, sources, and deficiency effects.

(OR)

(b) Discuss vitamins and minerals with their sources and deficiency disorders.

CO:2 17. (a) Explain balanced diet for different life stages with a suitable
K:3 diet chart.

(OR)

(b) Discuss the nutritional requirements for infants, children, adults and elderly.

CO:3 18. (a) Describe the malnutrition, under-nutrition and over-
K:3 nutrition with their health impacts.

(OR)

(b) Explain obesity and its causes, effects and prevention.

CO:4 19. (a) Explain the health indicators and their importance in public
K:4 health assessment.

(OR)

(b) Discuss the National Health Policy of India and major health programs.

CO:5 20. (a) Elaborate on medical and culinary hygiene practices.

(b) Explain the WASH programme and propose its role in improving rural community health.