

2025

5th Semester Examination (CCFUP : NEP)

NUTRITION

Paper : MDSE 1-T (Single Core Major Elective-1)  
(Nutrition and Immunity)

Full Marks : 40

Time : Two Hours

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers  
in their own words as far as practicable.*

**Group - A**

Answer any *five* questions : 2×5=10

1. Mention two functions of T-helper cells. 1+1
2. State immune functions of Vitamin A.
3. Write any two importance of IgG.
4. What is meant by passive immunity? Give one example. 1+1
5. What is antigen-antibody interaction?
6. What is haptan?
7. Define bioactive peptides with one example.

P.T.O.



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8. Name two dietary sources rich in immunomodulatory polyphenols.

Group - B

Answer any *four* questions : 5×4=20

9. Discuss the anti-inflammatory and pro-inflammatory effects of polyunsaturated fatty acids.
10. Explain the role of vitamin C in immune defence mechanisms.
11. Write a short note on gut-immune Axis.
12. What is the role of IgM in immune response? Differentiate innate immunity and acquired immunity. 2+3
13. Explain the mechanism of probiotics influenced immune response.
14. Write short note on Human Leukocyte Antigens (HLA) and their significance.

Group - C

Answer any *one* question : 10×1=10

15. Explain the role of macronutrients in immune function, with special reference to dietary fibre. Describe the effect of vitamin D on immune cell activation. 6+4



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16. 'Probiotics and prebiotics act in united way' — justify. Discuss the role of functional foods in immune modulation, highlighting the contribution of polyphenols and flavonoids. 5+5

