



MAR IVANIOS COLLEGE (AUTONOMOUS)
THIRUVANANTHAPURAM

Reg. No.:

Name:

Fifth Semester B.Sc. Degree Examination, November 2016

First Degree Programme under CBCSS

Core Course: Zoology – V

AUZO543: Immunology and Microbiology

Time: 3 Hours

Max. Marks: 80

Instruction: Draw diagrams wherever necessary.

SECTION – A

Answer ALL questions in one or two sentences.

1. Define Innate immunity.
2. Write a short note on MALT.
3. What are NK Cells ?
4. What are Haptens ?
5. What do you mean by Opsonisation ?
6. Elaborate ICTV and mention two of its objectives.
7. What are Viroids ?
8. What is Bioterrorism ?
9. Comment on Cyanobacteria
10. What are Microbial toxins ?

(10 × 1 = 10 Marks)

SECTION – B

Answer any EIGHT questions, not exceeding a paragraph.

11. Illustrate a Bacteriophage.
12. Give an account on Autotrophs.
13. Briefly discuss the fungal diseases in man.

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- Mention the economic importance of Candida.
- Write a note on Giardia.
- What is Mycoplasma ?
- Comment on DPT vaccine.
- Give an account on AIDS.
- What is MHC ?
- What are Adjuvants ?
- What are Probiotics ?
- What are Prions ?

(8 × 2 = 16 Marks)

SECTION – C

*Short essay type : Answer any **SIX** questions.*

- Give an account on Lymphoid organs.
- Explain the formation and maturation of T and B cells.
- List out the factors affecting antigenicity.
- Explain the mechanism of antibody functions.
- Mention the components of complement system.
- How are micro-organisms classified ?
- Enumerate the characteristic features of viruses.
- With the help of a suitable diagram, explain the organisation of typical bacterium.
- How will you categorise extremophiles ?

(6 × 4 = 24 Marks)

SECTION – D

*Long essay type : Answer any **TWO** questions.*

- Write an essay on microbial diseases in man.
- Account on the applications of microbiology.
- Classify grafts and add a note on immunological basis of graft rejection and retention.
- Describe immune deficiency diseases in man.

(2 × 15 = 30 Marks)

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