



**B. Sc. (MICROBIOLOGY) SEMESTER-VI  
Paper-I  
(Immunology)**

**UNIT-I**

Hematopoiesis

<https://youtu.be/0deCbmh7PHs?feature=shared>

Cells of Immune System

<https://youtu.be/k9QAYp3bYmc?feature=shared>

Non specific defences of the host

- i. First line of defence

<https://youtu.be/OL2mhlF9T3s?feature=shared>

- ii. Second line of defence

<https://youtu.be/ZO4XevaHznM?feature=shared>

Humoral Components

- Defensins

[https://youtu.be/mW\\_XOd-rPbU?feature=shared](https://youtu.be/mW_XOd-rPbU?feature=shared)

- Pattern recognition protein & PAMPs

<https://youtu.be/3gOnsgJcaNc?feature=shared>

- Complement proteins

<https://youtu.be/d6qFPegEYV0?feature=shared>

- Kinins

<https://youtu.be/M6mNZNipTnk?feature=shared>

- Acute phase proteins

<https://youtu.be/sN14ZQiMrJc?feature=shared>



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Inflammation, Complement system, Phagocytosis

<https://youtu.be/Uc4nq4Lazo4?feature=shared>  
<https://youtu.be/Fbzb75HA9M8?feature=shared>  
<https://youtu.be/sJ8Sz0CcNko?feature=shared>

### UNIT-II

Antigens

[https://youtu.be/sJptG3\\_uiVg?feature=shared](https://youtu.be/sJptG3_uiVg?feature=shared)

Concepts and Factors affecting immunogenicity

<https://youtu.be/nXyMzp2ICDs?feature=shared>

Antigenic determinants

<https://youtu.be/XSeaG-UHYIQ?feature=shared>

Haptens

<https://youtu.be/unm-vjs5CTY?feature=shared>

Cross Reactivity

[https://youtu.be/usP4\\_ZPsalE?feature=shared](https://youtu.be/usP4_ZPsalE?feature=shared)

Types of Antigen

<https://youtu.be/xUzuTA1ZiDA?feature=shared>  
<https://www.youtube.com/live/qNf7Xkao6sI?feature=shared>

Immunoglobulin: Structure, Function and Characteristics

<https://youtu.be/wsZwuZLMG4A?feature=shared>

Characteristic of Domain structure of Immunoglobulin

<https://youtu.be/ELZ4030Lyv4?feature=shared>



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Function of Heavy and Light chain

<https://youtu.be/yuM6TwRuVu4?feature=shared>

Molecular basis of Antibody Diversity

<https://youtu.be/biljSDmE7Y8?feature=shared>

Classes of Immunoglobulins and functions

<https://youtu.be/rfaC2GfIMrg?feature=shared>

Organs of Immune system

<https://youtu.be/OIW74k0P7qw?feature=shared>

**UNIT-III**

Acquired Immunity: Active and Passive Immunity

<https://youtu.be/VRZLFSMIscK?feature=shared>

Primary and secondary immune response

[https://youtu.be/LYZzvrg\\_qIM?feature=shared](https://youtu.be/LYZzvrg_qIM?feature=shared)

Clonal selection and Clonal deletion

<https://youtu.be/SGWWqSDqLag?feature=shared>

<https://youtu.be/QFenYzZkaqE?feature=shared>

B cell biology

<https://youtu.be/9DxqAvHXF9A?feature=shared>

Role of cytokines in Activation and Differentiation of B cell

<https://youtu.be/iIJulGXWm6Q?feature=shared>

[https://youtu.be/\\_qF2jEe7ZWc?feature=shared](https://youtu.be/_qF2jEe7ZWc?feature=shared)

Cell mediated immune response

<https://youtu.be/ALZGpVS2bEg?feature=shared>



Activation and differentiation of T cells

[https://youtu.be/A3Yr\\_tlp4?feature=shared](https://youtu.be/A3Yr_tlp4?feature=shared)

CTL mediated cytotoxicity

<https://youtu.be/GRdARalkTkQ?feature=shared>

ADCC

<https://youtu.be/H3I0GcsP4h4?feature=shared>

T cell dependent immune response

<https://youtu.be/gE6yLv6mMAU?feature=shared>

T cell independent immune response

<https://youtu.be/rLsLuxB07a8?feature=shared>

Types of T cells and Cluster of differentiation

<https://youtu.be/jWkFTsX9154?feature=shared>

T cell receptors

<https://youtu.be/W0d5ZDu9dgE?feature=shared>

Cytokines, IFNs, ILNs

<https://youtu.be/9wdZLvNKyQY?feature=shared>

#### **UNIT – IV**

Affinity and Avidity

<https://youtu.be/E6bWCz2Mq6A?feature=shared>

Ratio of Antigen Antibody

<https://youtu.be/HZn7nAlhHdk?feature=shared>

Antibody titre test

<https://youtu.be/DPKHx8GshzI?feature=shared>



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Agglutination reactions

<https://youtu.be/3W67OH3v2IU?feature=shared>

Precipitation reaction

<https://youtu.be/Ew15yHuqzmY?feature=shared>

Tagged antibody Elisa test

<https://youtu.be/d4d7p70m3mA?feature=shared>

Hypersensitivity reactions

<https://youtu.be/jXTW4F-8jd4?feature=shared>

Anaphylaxis

<https://youtu.be/5Sn4bi3t7YE?feature=shared>

Blood grouping Rh compatibility

<https://youtu.be/u669fwjPMRM?feature=shared>

Arthus reaction

<https://youtu.be/cwLXKraRIKU?feature=shared>

Mantoux test

[https://youtu.be/7jJBGxS\\_6\\_Q?feature=shared](https://youtu.be/7jJBGxS_6_Q?feature=shared)