



Smt. Nathibai Damodar Thackersey Women's University, Mumbai (SNDT University)

Suman Madhav Mahila Mahavidyalaya, Zari, Nanded

On the Occasion of National Science Day (February 28)



Organized at: Suman Madhav Mahila Mahavidyalaya, Zari

Date: 28th February

★ Encouraging Scientific Thinking, Innovation & Creativity among Students ★

Principal
Dr. Digvijay Deshmukh

Organizing Committee
Department of Science

Poster Presentation Competition Organized on the Occasion of **National Science Day Zari**, February 28: On the occasion of National Science Day, a Poster Presentation Competition was organized at **Suman Madhav Mahila Mahavidyalaya, Zari**. The inauguration of the event was done by the Principal, **Dr. Digvijay Deshmukh**. On this occasion, **Prof. Gautam Kamble**, Head of the Microbiology Department, was present on the dais. National Science Day is celebrated every year on February 28 in memory of the discovery of the 'Raman Effect' by Sir C.V. Raman. On this occasion, a poster presentation competition was organized for the students at the college. 35 students from the Science stream participated in this competition. The students expressed their views through posters on topics such as 'Innovative Science for a Strong India', 'Pollution Control', and 'Conservation of Natural Resources'. The results of the competition were decided by Prof. Laxman Bodke and Prof. Dr. Dharaba Gunde. The winning students were honored with certificates and prizes by the Principal. The introductory remarks were made by the Head of the Science Department, Prof. Gautam Kamble, while the anchoring was done by Prof. Santosh Thakur. All the professors and non-teaching staff of the college contributed their efforts for the success of the event.



श्रीमती नाथीबाई दामोदर ठाकरसी
बहुउद्देशिय सेवाभावी शिक्षण संस्था, संचलित...

श्रीमती नाथीबाई दामोदर ठाकरसी



**SUMAN MADHAV MAHILA MAHAVIDYALAYA
ZARI NANDED**

**SCIENCE DAY
ANTIBODIES MANAV**

What are antibodies made of?

Antibodies are proteins. Each antibody has four polypeptides (peptides that consist of two or more amino acids), including two heavy chains and two light chains.

Where are antibodies produced?

Antibodies are produced by B cells (specialized white blood cells). When an antigen comes into contact with a B cell, it causes the B cell to divide and clone. These cloned B cells – or plasma cells – release millions of antibodies into your bloodstream and lymph system.

What do antibodies look like?

Each antibody structure consists of two heavy chains and two light chains, which join to form a Y-shaped molecule. Each type of antibody has a different amino acid sequence at the tip of the "Y", which is why each antibody is shaped differently.

How do antibodies fight off antigens?

The molecules on the surface of all cells that differ from those of your own cells in your body are called antigens. When an antigen enters your body, your immune system produces B cells that are able to attack this antigen. Once your immune system calls out for antibody production...

4. How Antibodies Work

1. Germ (antigen) enters body
2. Body recognizes it as foreign
3. B-cells produce antibodies
4. Antibodies attach to antigen
5. Germ gets destroyed

Conditions and Disorders

Each type of monoclonal antibody targets a specific antigen. As a result, monoclonal antibodies can treat a number of health conditions, including:

- Cancer
- Rheumatoid arthritis
- Heart disease
- Multiple sclerosis (MS)
- Ulcerative colitis
- Lupus
- Crohn's disease
- Psoriasis
- Organ transplant rejection

TYPES OF ANTIBODIES
(Immunoglobulins - Ig)

Antibody	Structure	Location	Function
IgA	Two heavy chains, two light chains	Mucous secretions	Neutralization, opsonization
IgG	Two heavy chains, two light chains	Blood, lymph	Neutralization, opsonization, complement activation
IgM	Five heavy chains, five light chains	Blood, lymph	Agglutination, complement activation
IgE	Two heavy chains, two light chains	Allergic reactions	Attract eosinophils, mast cells

Structure of antibody:

All immunoglobulin molecules have basic structure (roughly Y-shaped molecules) composed of four polypeptide chains connected to each other by disulfide bonds. The two longer chains are called heavy chains and the two shorter chains are called light chains.

Presented by : **Pranjal Karale, Ananya Sawatkar**
(BSc, CLS.) 2025-26



SUNDER NAGRAJ MAHILA MAHAVIDYALAYA
JAMJI NANDED

SCIENCE DAY COVID-19

About the Virus

COVID-19 is a contagious disease caused by Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It mainly affects the respiratory system and spreads quickly from person to person.



Coronavirus Structure

Global Outbreak

First identified in 2019 in Wuhan, China. It was declared a pandemic in 2020 by the World Health Organization (WHO).



THE STRUCTURE OF CORONAVIRUS

- Spike (S) protein
- Envelope (Lipid bilayer outer shell)
- Spike (S) proteins cover the apex of the surface glycoprotein appearance
- Membrane (M) protein
- Envelope (E) protein
- Nucleocapsid (N) protein
- Genetic material (RNA)



Prevention

- Wear a mask
- Wash hands regularly
- Maintain social distancing
- Take vaccination

Common Symptoms

- Fever
- Dry cough
- Fatigue
- Loss of taste or smell
- Breathing difficulty

Vaccines in India

- Covaxin
- Covishield

Presented by:
Shravani Deshmane, Shravani Kadam
(BSc. CLS.) 2025-26

सहाद्री बहुउद्देशिय सेवाभावी शिक्षण संस्था, सं

श्रीमती नाथीबाई दामोदर ठाकरे
महिला विद्यापीठ, मुंबई

संलग्नित...

माधव

विद्यालय

जि.नांदेड.



