



Late Shri Govindrao Wanjari College of Education

156, Borkhedi (Gate), Butibori, Tah. Dist.: Nagpur - 441108 (MS). ☎: 8657326699, Fax: 0712-2747853

Email: gwcebed@gmail.com, Website: www.gwanjariedu.org

Ref: NAAC 2023/MLD/Cr-2.3.3

Date-10/07/2023

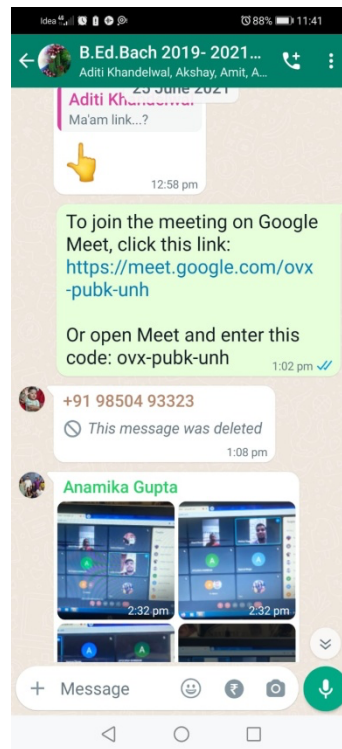
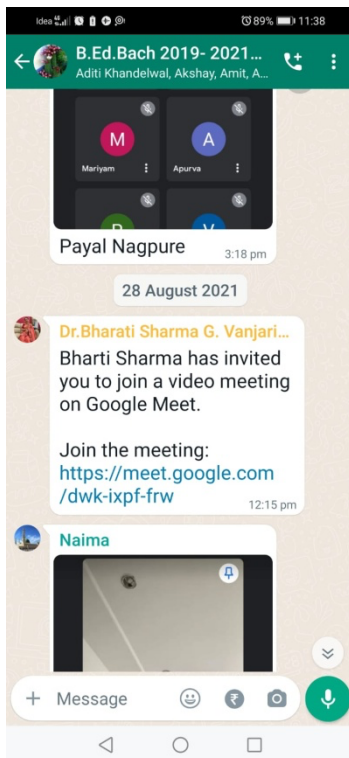
Criteria: 2.3.3	Students are encouraged to use ICT support (mobile-based learning, online material, podcast, virtual laboratories, learning apps etc.) for their learning including on field practice.. 2.3.3.1. Number of students using ICT support (mobile-based learning, online material, podcast, virtual laboratories, learning apps etc.) for their learning, for the last completed academic year
Findings of DVV	HEI needs to provide the programmed wise list of students using ICT support, documentary evidence in support of the claim Landing page of the Gateway to the LMS used
Response/ Clarification	1. Detailed report of students using ICT support facilities like online material, podcast, virtual labs, learning labs etc. is attached (Appendix I)



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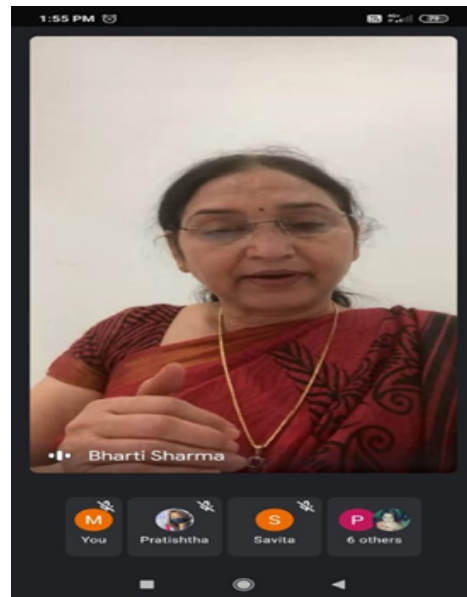
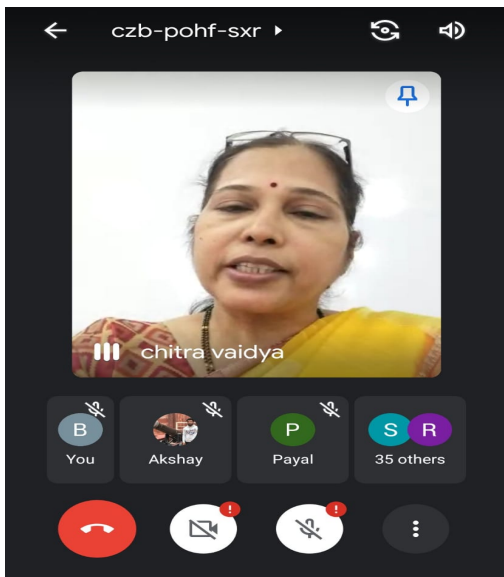
Appendix I

Teacher used Google Meet/Zoom for online teaching.

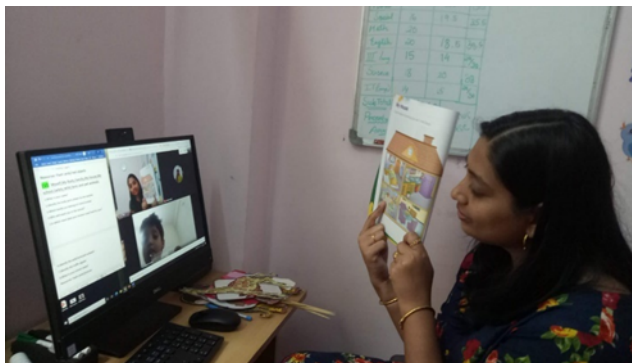


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Online Classes conducted through Zoom App/Google meet By Faculty members



Student using ICT support



Online teaching by student teacher Online Activity by Student Teacher



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नाव :

Name: Pranjul Awadhiya

शाळा :

School: Rajiv Gandhi Primary School

पाठसाहित्य :

Material Aids: Colorful Chalks, Charts

तासिकाअवधी :

Length of Period :30 Min.

विषय :

Subject: Biology

विषयांश :

Topic: Useful & Harmful Microbes

पूर्वज्ञान :

Previous Knowledge: Student know that germs, Cell, Disease etc.

दिनांक :

Date:

वर्ग:

Class: IX

अध्यायनानुभव Learning Experience

पाठाच्यापायऱ्या Steps of Lesson	अध्यापनमुद्दे Teaching Points	उद्दिष्टे व विशिष्टके Sub Skill	अध्यापक कृती Teacher's Activities	छात्र कृती Student's Activities
A. INTRODUCAITON		To Check Previous Knowledge To check their Attention	Q. During this pandemic everyone know about germs What do we called germs Dietetically? Q. How do you define Micro Organisms?	Ans : Micro Organisms are called as germs. Ans: Micro Organisms are very very small living organisms made up of either single cell or by multi cells and they can't be seen by our naked eyes.



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INTRODUCTION		Effectiveness Arising Curiosity	Q. Why do we called them Micro Organisms? Q. By which thing we can see them? Q. What is Microscope? Q. In what way Micro Organism play important role in our daily life?	Ans: Because they have very tiny size of cells by which they called as Micro Organisms. Ans: We can see them only by Microscope. Ans: An Instrument which enlarge the size of the cell enough to see them properly. Ans: Problematic Question.
B. ANNOUNCEMENT OF AIM		Today we will learn about "Useful and Harmful Micro Organisms."		
C PRESENTATION	<p style="text-align: center;">Microorganisms</p> <pre> graph TD A[Microorganisms] --> B[Micro] A --> C[Organisms] B --> D["(Very Very Small)"] C --> E[Living beings] </pre> <p style="text-align: center;">Habitat of Microorganisms</p>	<p><u>Knowledge</u> : Student recalls the definition of Micro Organism</p> <p><u>Comprehending</u>: Student explains the habitat of Microorganisms.</p> <p><u>Skill</u>: Student draw the diagram</p>	<p>Teacher explains he content and asks Questions during Explanation</p> <p>Q. How many types of Microorganisms found in nature</p>	<p>Student understands the lesson and note down the content and tries to give rely of the questions.</p> <p>Ans: There are 5 classes of Microorganisms are found which are Bacteria, Virus, Fungi, Algae, Protozoa.</p>



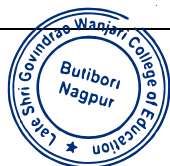
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PRESENTATION	<p>Classes of Microorganisms</p> <ul style="list-style-type: none"> - Bacteria - Fungai - Aleae - Protozoa - Virus <p><u>Role of Microorganisms:</u> According to role Microorganisms are two types 1) useful Microorganisms 2) Harmful Microorganisms</p> <p>Useful Microorganisms are called Friends.</p> <p>Harmful Microorganisms are called Foe.</p>	<p><u>Knowledge:</u> Student defines the classes of Microbes.</p> <p><u>Comprehensing:</u> Student explains the types of Microbes and their features.</p> <p><u>Skill:</u> Student draws he diagram of Microbes.</p> <p><u>Knowledge:</u> Student tells the useful and Harmful Microorganism names and their respective roles.</p> <p><u>Comprehensing:</u> Student describes the role of Microbes and their side effects as well.</p>	<p>Teacher shows charts and draw the picture about Microorganisms Habitat and explains the Habitat of Microorganisms.</p> <p>Q. Where does Microorganisms are found in nature?</p> <p>Teacher explains the types of M.O. Based on their role with the charts.</p> <p>Q. What do we called the useful Microorganism?</p> <p>Q. Which bacteria is called N₂ fixing Bacteria? Why?</p>	<p>Students listen carefully and understands.</p> <p>Ans : M.O. are found in ranging from ice cold to hot climate in soil, air, water, animal, plants etc.</p> <p>Student draws chart and understands the M.O. species which have different role.</p> <p>Ans: Useful M. O. are called as beneficial M. O. which are used in various ways in our daily life.</p> <p>Ans: Rhizobium Bacteria is called N₂ fixing Bacteria because it fixed atmospheric N₂.</p>



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			<p>Q. A Fungi is used for Medicinal purpose which is it?</p> <p>Teacher further explains Harmful Micro organisms by using chart.</p>	<p>Ans: Penicillium fungi is used in production of Antibiotics called penicillin.</p> <p>Student listen carefully and understands it.</p>
PRESENTATION		<p><u>Application</u> : Student correlates the concept and applied knowledge to the real world.</p>	<p>Q. What are the harmful effects of harmful Microorganism?</p> <p>Q. Microorganisms which causes disease are called?</p> <p>Teacher shows char and describes various diseases which are caused by various Microorganisms</p> <p>Q. Name the disease which are caused by Bacteria.</p>	<p>Ans: Harmful Microorganisms causes many harmful effects like causing diseases, spoilage of food, clothes and Leather.</p> <p>Ans: Microorganisms which causes disease are called pathogens.</p> <p>Student observes the char and understands the content.</p> <p>Ans: Cholera, Tuberculosis, Typhoid, Tetanus, Food poisoning.</p>



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D RECAPTULATION		<p>To strengthen the acquired knowledge</p> <p>To test the taught topic</p> <p>To revise the knowledge gained by student</p> <p>To have the feedback</p>	<p>After explanation teacher recapitulates the lesson with asking few question.</p> <p>Q. Which Microbe turns milk into curd?</p> <p>Q. Which Microorganism responsible for alcohol production?</p> <p>Q. AIDS is an immune disease caused by?</p> <p>Q. Microbes which are used to increase soil fertility are called as?</p>	<p>Student tries to give answer these questions.</p> <p>Ans: Lactobacillus Bacteria forms curd from milk.</p> <p>Ans: Yeast is responsible for Alcohol production.</p> <p>Ans: AIDS is caused by Virus.</p> <p>Ans: Microbes are used to increase soil fertility are called as biofertilizers</p>
E HOME WORK		<p>To develop the self study habit</p> <p>To enhance the learning, reading skill</p>	<p>Teacher writes the Home Work on black board.</p> <p>Q. Match the pair i) Curd formation – Penicillium ii) Antibiotic production – E- coli iii) Digestion of food – Yeast iv) Alcohol Production - Lactobasillus</p>	<p>Student note down the home work from black board.</p>

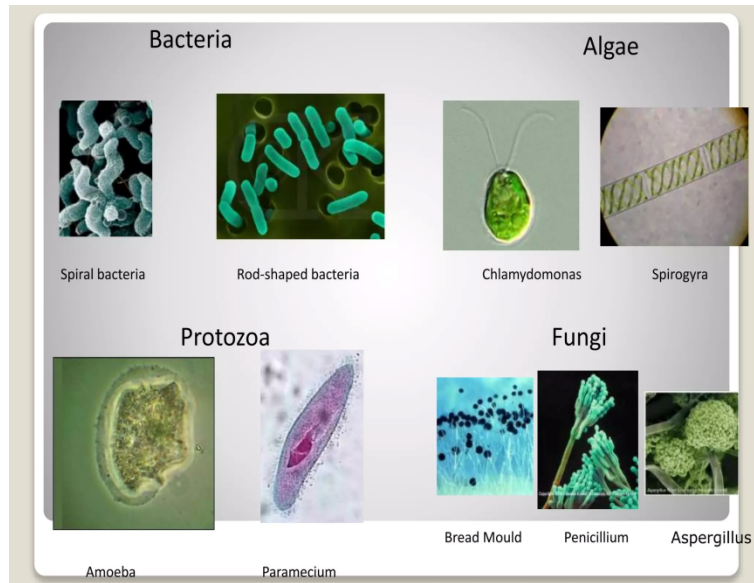


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Sample Of Student Presentation

Various Types of Microorganisms



FRIEND AND FOE?

Microorganisms play an important role in our lives. Some of them are beneficial in many ways whereas some others are harmful and cause diseases.

Microorganisms are used for making curd from milk, for making cheese, pickles, bread, cakes, pastries, alcohol, wine, vinegar (acetic acid) etc.

a) **Making curd from milk** :- The bacterium called **Lactobacillus** reproduces in milk and helps to convert milk into curd.

b) **Making bread** :- The fungus called **yeast** reproduces in flour dough and produces carbon dioxide during respiration which makes the dough soft and helps in making bread, cakes, biscuits, pastries etc.

The bottom of the slide features three photographs: a golden-brown loaf of bread, a blue plate with several dumplings, and a green bowl filled with white curd.



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