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CERTIFICATE

This is to certify that the dissertation entitled "**Isolation and pathogenecity study of Agrobacterium tumifaciens from thuja plant**". is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Ms. Nikita Madhukarrao Sune** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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CERTIFICATE

This is to certify that the dissertation entitled "Production and optimization of crude enzyme amylase from aspergillus niger by using banana peels" is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Mr. Mayur.B.Ingle** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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CERTIFICATE

This is to certify that the dissertation entitled **Utilization of Vegetable Wastes for Production of Protease by Solid State Fermentation using *Aspergillus niger*** is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Mr. Mangesh M. Sapkal** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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This is to certify that the dissertation entitled **Production of Indol Acetic Acid From Azotobacter And Bacillus Species** is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Ms. Preeti Shekhar Pohekar** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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This is to certify that the dissertation entitled "**Production of vinegar using semi-continuous fermentation of onion juice**" is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Ms. Rakshanda D. Nagrale** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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This is to certify that the dissertation entitled "**Production of bioenzyme from fruit waste**" is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by Miss. Ravina Diliprao Jaulkar under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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This is to certify that the dissertation entitled "**Production of Tofu and study of its Microbiology and it's shelf life**" is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Ms. Roshni Vijayrao Lokhande** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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This is to certify that the dissertation entitled "**Biogas production from kitchen waste**" is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Mr. Sagar R. Sawai** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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This is to certify that the dissertation entitled To produce baker's yeast from molasses is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by Miss. Nikita Mate under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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This is to certify that the dissertation entitled **Study of plant growth characteristics of brady Ryzobium Japonicum** is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by Miss. Vaishnavi M. Hingmire under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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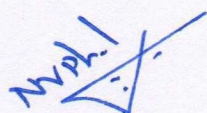
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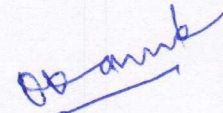
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CERTIFICATE

This is to certify that the dissertation entitled **Identification of natural products from *Ailanthus excelsa* responsible for reverse transcriptase inhibition** is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Ms. Priyanka Gajanan Bondse** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.


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This is to certify that the dissertation entitled **To synthesis Titanium oxide nanoparticle by using *Physalis minima* and its effect on RTase enzyme** is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Miss. Vaishali M. Dhande** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.


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This is to certify that the dissertation entitled **Evolution of PDZ Domain in Prokaryotes and Eukaryotes by using MAFFT and BADASP Program** is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by Miss. Monika Dilip Gothe under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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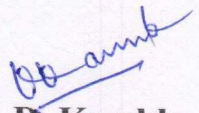
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This is to certify that the dissertation entitled **Green synthesis of Iron nanoparticle for blocking RTase enzymes** is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Ms. Aachal Naresh Vedi** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.


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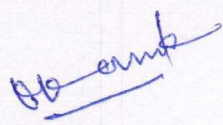
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This is to certify that the dissertation entitled "**Conjugative study of Cadmium sulphide nanoparticles on action of reverse transcriptase enzyme**" is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Ms. Pragati Sanjay Dalu** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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This is to certify that the dissertation entitled **To study the inhibitory effect of physalins on reverse transcriptase activity and determination of minimum inhibitory concentrations** is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Mr. Pratik Mohankumar Dhanuka** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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This is to certify that the dissertation entitled *Effect of antibiotics on blood borne bacterial pathogens in absence and presence of blood components* is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Miss. Poonam kishorrrao Dakhare** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.


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This is to certify that the dissertation entitled "**Early detection blood borne pathogens and its antibiotic susceptibility**" is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Mr. Uday R. Titare** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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CERTIFICATE

This is to certify that the dissertation entitled "*Effect of Mupirocin on biofilm forming MRSA isolated from infected wounds*" is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Miss. Sharda G. Akhade** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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This is to certify that the dissertation entitled "**Rapid detection of MRSA by using Chromogenic substrate**" is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Mr. Vedprakash O. Nandalwar** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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This is to certify that the dissertation entitled **Rapid detection of Vancomycin resistance among *Staphylococcus aureus* and *Enterococcus faecalis* by using chromogenic substrate** is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by Miss. Shamli Rajendra Jamane under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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This is to certify that the dissertation entitled "*Microbial analysis and role of bacterial biofilm in wounds*" is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Miss. Nikita Dinesh Nawgaje** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.


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CERTIFICATE

This is to certify that the dissertation entitled "*Comparision of Different CLSI Methods for Antimicrobial Susceptibility Testing of Cefexime against E.coli and Klebsiella isolated from Urine*" is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Miss. Mrudul U. Tiwaskar** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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This is to certify that the dissertation entitled *Study of multispecies biofilm formation in Urinary Catheter* is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Miss. Minal P. Butley** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.

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NVPh.

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This is to certify that the dissertation entitled "*Antimicrobial effect of Various Topical Agents on Wound infecting microorganisms and to study Antibiofilm effect of Microdacyn*" is being submitted in the partial fulfillment for the award of degree of Master of Science in Microbiology, S. G. B. A. U., Amravati has been prepared by **Miss. Krutika P. Deshmukh** under my guidance and supervision. This work has not been submitted for any other degree of any other university in India or abroad.


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