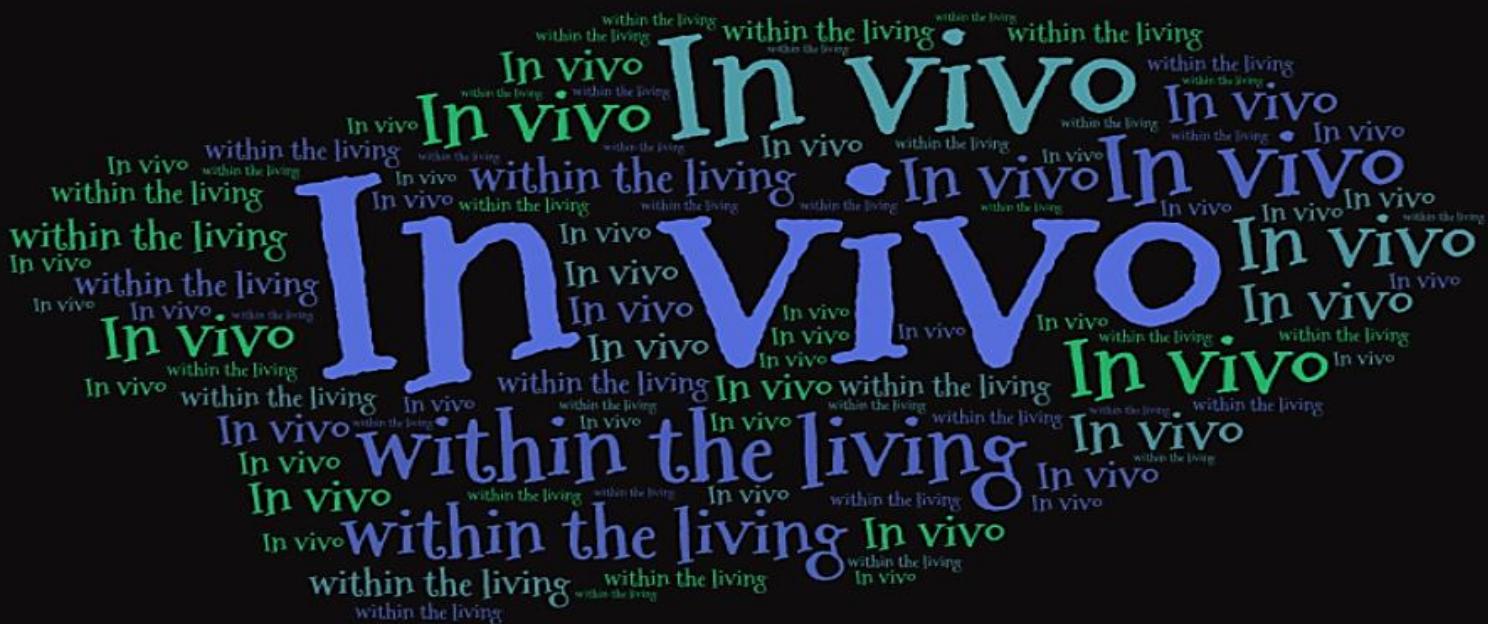


Department of Biotechnology & Biochemical
Engineering

Sree Buddha College of Engineering, Pattoor,
Alappuzha

Presents

The Biotechnology Annual Student's Magazine



November 2021



Prof. K. Sasikumar

Chairman

Sree Buddha Group of Institutions

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MESSAGE

I am indeed delighted to note that the Department of Biotechnology and Biochemical Engineering of Sree Buddha College of Engineering, Pattoor has come out with a department magazine to showcase the artistic talents of the budding biotechnology students. Over the years, biotechnology has proved to be extremely productive and innovative. In fact, biotechnology is a golden tool to solve some of the key global problems like global epidemic, fatal diseases, global warming, rising petroleum fuel crisis and above all poverty. To become a socially responsible biotechnologist, it is also important that the creative skills of the students be nurtured. I am sure that the efforts of the Department of Biotechnology and Biochemical Engineering will augment this concept. I appreciate the coordinators for their effort and hope that this marks a good beginning for more creative ventures in future.

Prof. K. Sasikumar

Chairman

MESSAGE FROM THE PRINCIPAL

“Creativity is the mother of all inventions”- Biotechnology is an emerging scientific discipline and the scope of Biotechnology has expanded to diverse sciences like immunology, virology and other subjects like health, agriculture, cell biology, plant physiology, seed technology, etc. I hope that In vivo 2021 is a beginning to foster the creative skills in our youngsters to further encourage them to integrate the same with critical researching skills to address socially relevant future problems.

I appreciate the valuable effort of the editorial team and I am glad to present this volume to the public domain.

**Dr. Krishna Kumar K
Principal**

MESSAGE FROM THE HOD

I am delighted to note that the students and faculty members of the Department of BT & BCE and Food Technology have come up with the exciting idea of an arts magazine. The magazine showcases the artistic and literary talents of our students and scholars. I congratulate the editors and student team who worked behind making this magazine a reality. I hope that more such activities can be initiated by the department in coming years.

**Prof. Meera Bai S
HOD**

MESSAGE FROM EDITORS

Dear Readers,

On behalf of the Editorial Team of the department Arts Magazine, we would like to wish all authors and readers a wonderful and prosperous year ahead.

When a thought that has been enduring in mind becomes real, it is truly an interesting and exciting experience. This new assignment of ours is one such cherished work which we would fulfill to the best of our abilities.

2021 has been a year of mixed emotions; with Covid numbers progressing steadily during the initial days to situations getting lot better towards the end of the year. As for biotechnology, the year has seen the field being discussed more often among common man. As biotechnology aspirants, it gave all of us a sense of excitement and responsibility to use our skills to serve mankind.

Creativity nourished higher order thinking and this is exactly the motive behind bringing out this magazine. Our youngsters were urged to add an extra shine to their journey in biotechnology with their artistic skills and to reassure that they are lot more than what they think they ought to be. We very much look forward to strengthening the student contributions to the magazines in coming years. I hope our readers share a similar vision, and we look forward to a productive, challenging and successful 2022 ahead. In the spirit of continuous improvement, any constructive input on streamlining our processes is very welcome.

Dr. Jaya Jacob

Ms. Shamnamol GK

THE CONCEPT OF READING TODAY

**Ms. Arathy S Nair
Sem-3, FT**

In the interstices of history, books-primarily novels have been the main source of entertainment. Since the dawn of human civilization the information has been transferred from one generation to the next initially it was in the form of manuscripts and stone tablets. Since the invention of paper the medium became books .Time passed on ,as the brain size of the humans grow, so did the number of pages in the book .The human race have been blessed with many inspirational authors and books that changed the course of history .The current generation became more informative and social with the invent of world wide web and then came the replacement for real page-filed books ,e-books. Answering their question of whether they can really be a replacement for real books does not necessarily mean backing one among them. Instead it would be more enigmatic to bring forth the pros and cons of both. The E-books, a successful and profit generating idea of modern internet loving reader genre is quite sample in its basic idea. The concept is to flourish the availability of contents of most known books, novels quiz etc. In the World Wide Web, theory increasing the accessibility and efficient of book reading through

the proposed medium. It is a boon for those group of new generation readers who find it difficult to find books from dusty old or well kept ,new libraries around the world. But no good deed goes unpunished. The adverse effect of using E-books is also quite deep rooted. Instigaling more, we find the importance of following a few things in life, the gold old fashioned way. Comparing real books with E-books, the accessibility is bit less, "time is just an illusion"- says the world's most renowned scientist Albert Einstein. So in busy life that we humans share, don't forget to savour the nectar that each page of book gives you and don't forget to learn something from each book that you read.

"A reader lives a thousand lives before he dies, said Joren. The man who never reads lives only one."

— George R.R. Martin, A Dance with Dragons

FROM ASH TO FLAME

Ms. Ahlam

Sem-5, BT & BCE

I ran like a horse

But I moved only a step

I roar like a thunder

Fierce and strong

With hopes shattered

In tons of pieces

What I hear was

Blank and dark

To cry aloud or hurt silent

All I could was hibernate

But the dark dreams

Knocked my door

With fear and hate

I banged my door

To rise again from ashes

To fly high like a phoenix



DAD

**Ms. Mary Cisily
Sem 5, BT & BCE**

A word that has a lot of meaning but still remains unnoticed

Unnoticed because his sacrifices are not always loud but are quiet

He knows exactly what you need

He flower who's your seed

He's the sunlight, without whom you can never shine so bright

He stays as a shade

Who never let's your dreams to fade

He's the water that lets you grow and the day

He see's you on your feet he lets you go

He's like nature which only knows to give away

He never experts anything in return as that's his way

He would give you wings to fly like a kite

But would always want you to be by his side

He's a best friend to his son

And a superhero to his daughter

Life can change time would pass

The love for her superstar would never pass

She's always his little angel

And he's always her guardian angel whom

She know she can always rely on

He's the best thing she could have had

And it's none other than her dad



Your smile is their breath...

Dr. Jaya Jacob

Faculty, BT & BCE

I have mostly seen her working hard, day and night, and I realized that she was suffering a bad health- a not so serious, but annoying; that's what I can describe her non stop cough as...sometimes when we didn't see her, her husband told us that she was bed ridden, but again...the next day, we could see her waiting for the local bus early in the morning...the rush, the stampede, the heat...nothing stopped her from earning a living for her family...and back home by late evening, she was awaited with the kitchen chores....hmmmm...slowly, my mom and her..started sharing their burdens....she found a good friend in my mom, to ask when in need, to cry out when hurt...they stood separated by two walls...but, they could easily reach one another...the moments they shared, did make her feel better... They had a half built house, but, they were too busy settling the accounts that they barely had savings to bring their home to completion... the kids grew...they studied well....on loans...she and and husband..never let them feel the burden..but taught them... they somehow found some jobs..just to repay the loans...

This was the picture of my neighborhood...until a week back... Her elder son`s wedding was fixed....that was news for my mom...but a half built house, tonnes of relatives, the first wedding at home- she had her worries to be shared soon wid my mom... today, when I visit their house, its a magnificent one...fully furnished, curtains

decorating every window...unlimited yummy food for all the guests...the whole house set to welcome a bride tomorrow...filled with surprise, I felt happy for her, who was seen running around treating her guests, with a warm smile...I return home...happy for them...to see that..alas..they somehow settled it all...the house is ready, the kids settled...may be she can rest few days..

I see her the next day morning...I went near the wall...I say " i am so happy for you and your family aunty!, take some rest after all the functions...be happy always..."

She sighed...said " Yea, I am happy indeed...but...the debts...its for a lifetime...and I have to run double the pace from next week on"- her eyes were damp....but she smiled...with lots and lots of sparkle" but all for my son....I have been living for him and his smile makes my day, its my duty ...it is indeed my duty!!"

Yea...we are all precious for our parents...our smile is their breath...our achievements are their joy, our presence is their rhythm....



ELLE

-Geethika Rose Benny

Hardly had she survived the womb
Ears of hers had filled with curse
Yet obliged to do the chores
Clutching on still the adapted broom

Every night to her a fight
To thrive another day as to pray
Dreams of hers for once to sway
Have been thrown out with the stray

And much before being a woman
Bound tight to the perpetual broom
She is led to an everlasting gloom
Then her marriage, will shutter her dreams to floorage

Then Old age will knock her much before the age
She'll stay on her bed chanting rosary
With hands destroyed from grocery
Before winter, the last leaf of her withered tree will fall.

Years have fled, decades have died
Mother Earth, Mother Nation, all are women
Yet laws for her are still inhibitions
Yet before the tree falls, she'll establish her roots overall.



UNREQUITED LOVE

Alma Tariq
S2, FT

The dark lake reflects the soul beneath;
The gullible and naïve one;
longing and waiting for the rays;
the rays of eternal peace.

Yearns to the blooming and dancing flowers;
prefers for the first kiss from the winged creature;
the virgin soul awaits to know;
the gentleness of the first touch.

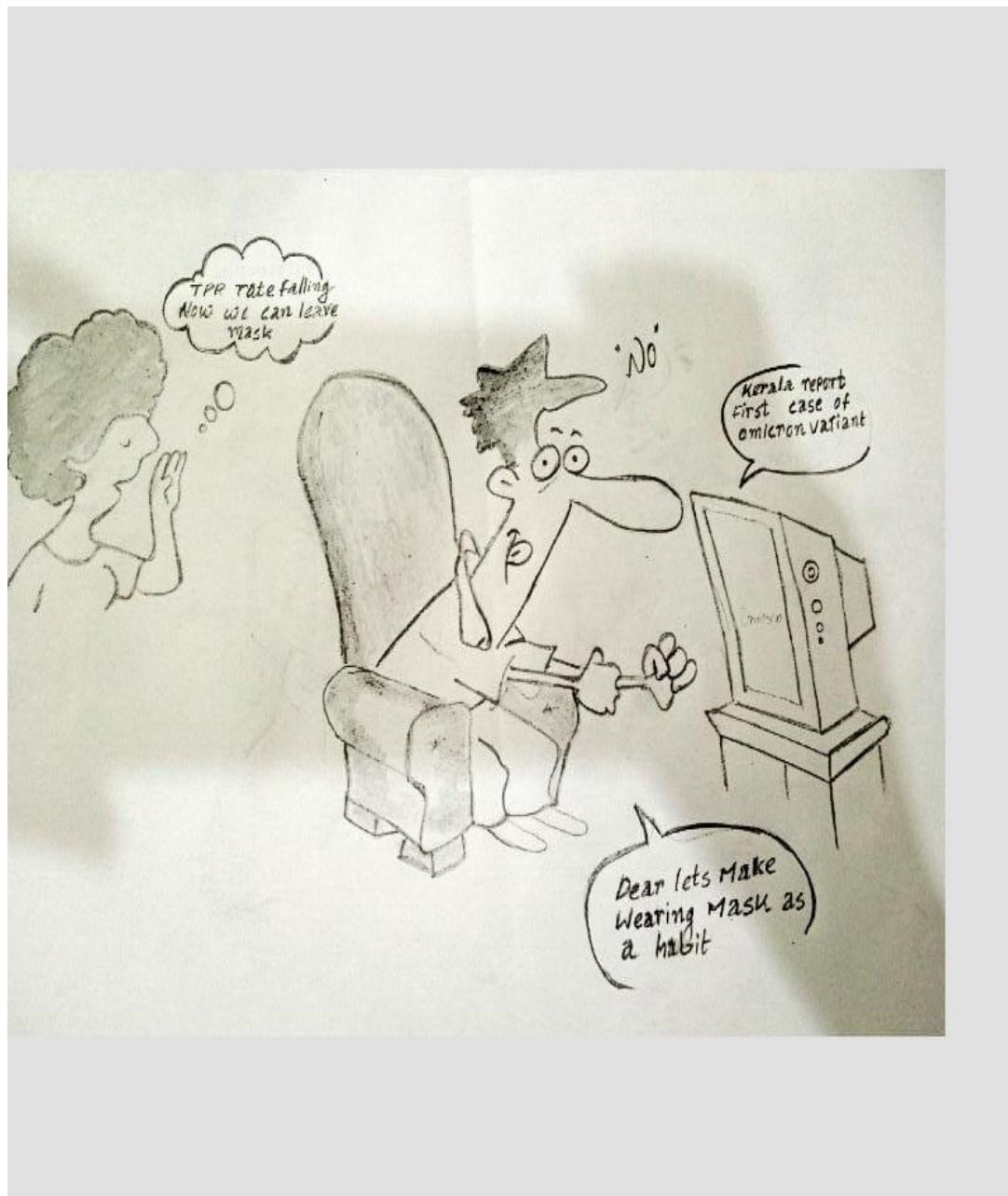
The warm carries from the brightest light;
is where the earth rests;
the shadow of the beloved;
is where the yearning soul shelters in.

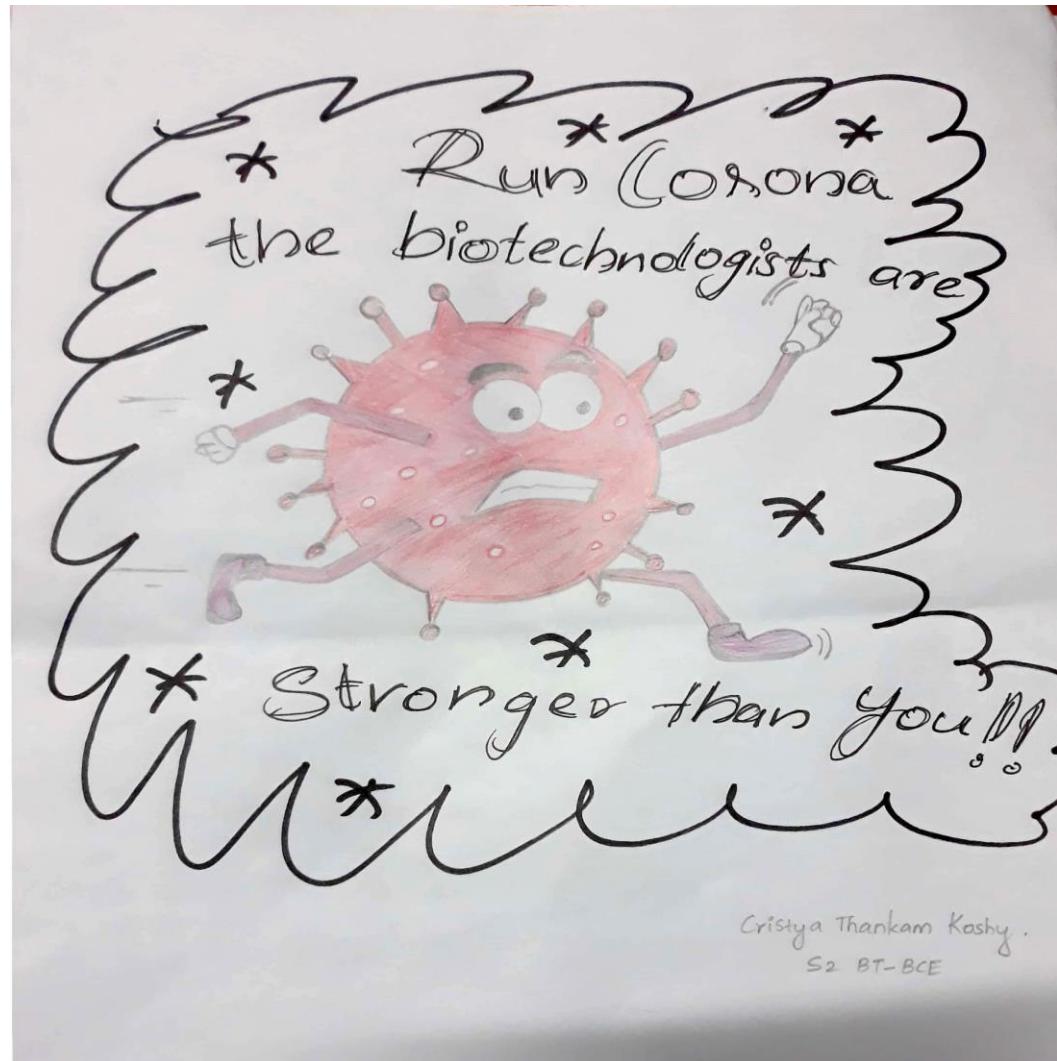
As the white pearl on the blade of grass;
amplifies the beauty of the morning
the modest soul adorns the beauty.
reflected from the soul of the adorned.

The dreaming soul awaits the unreciprocated
the expression it desires for affection;
the learned soul knows deep within
the longing will be long gone by.



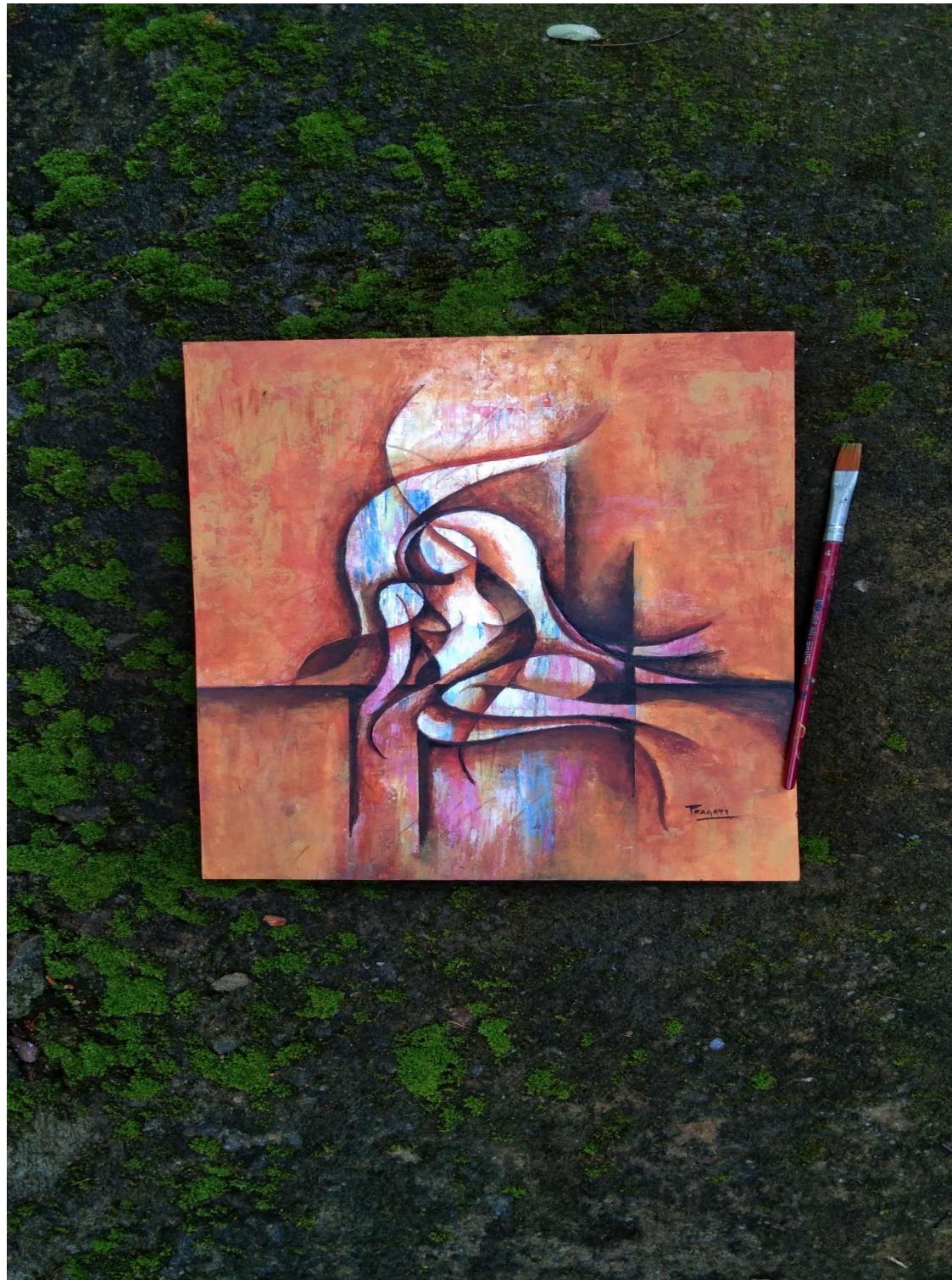
Cartoon Corner....



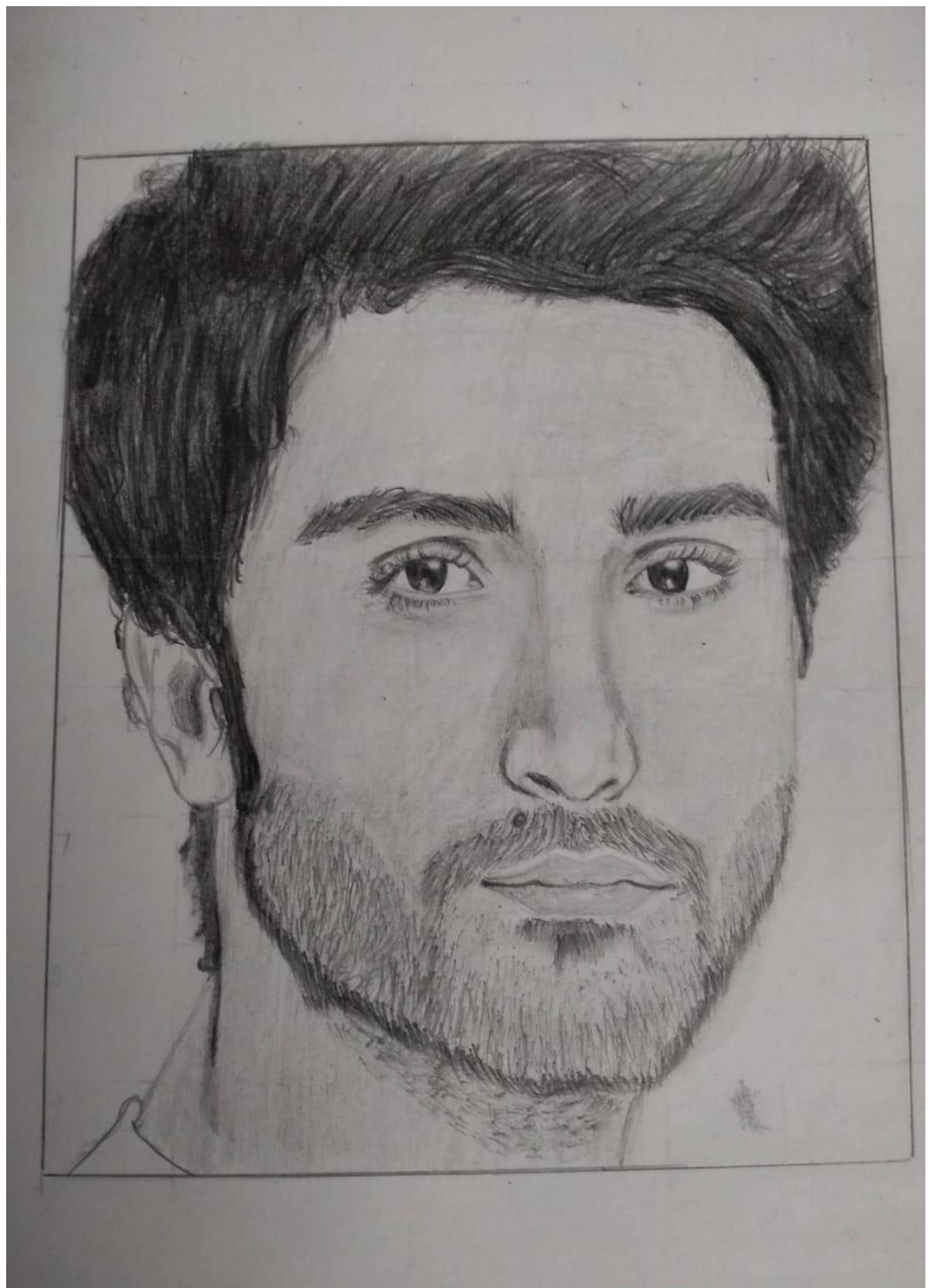




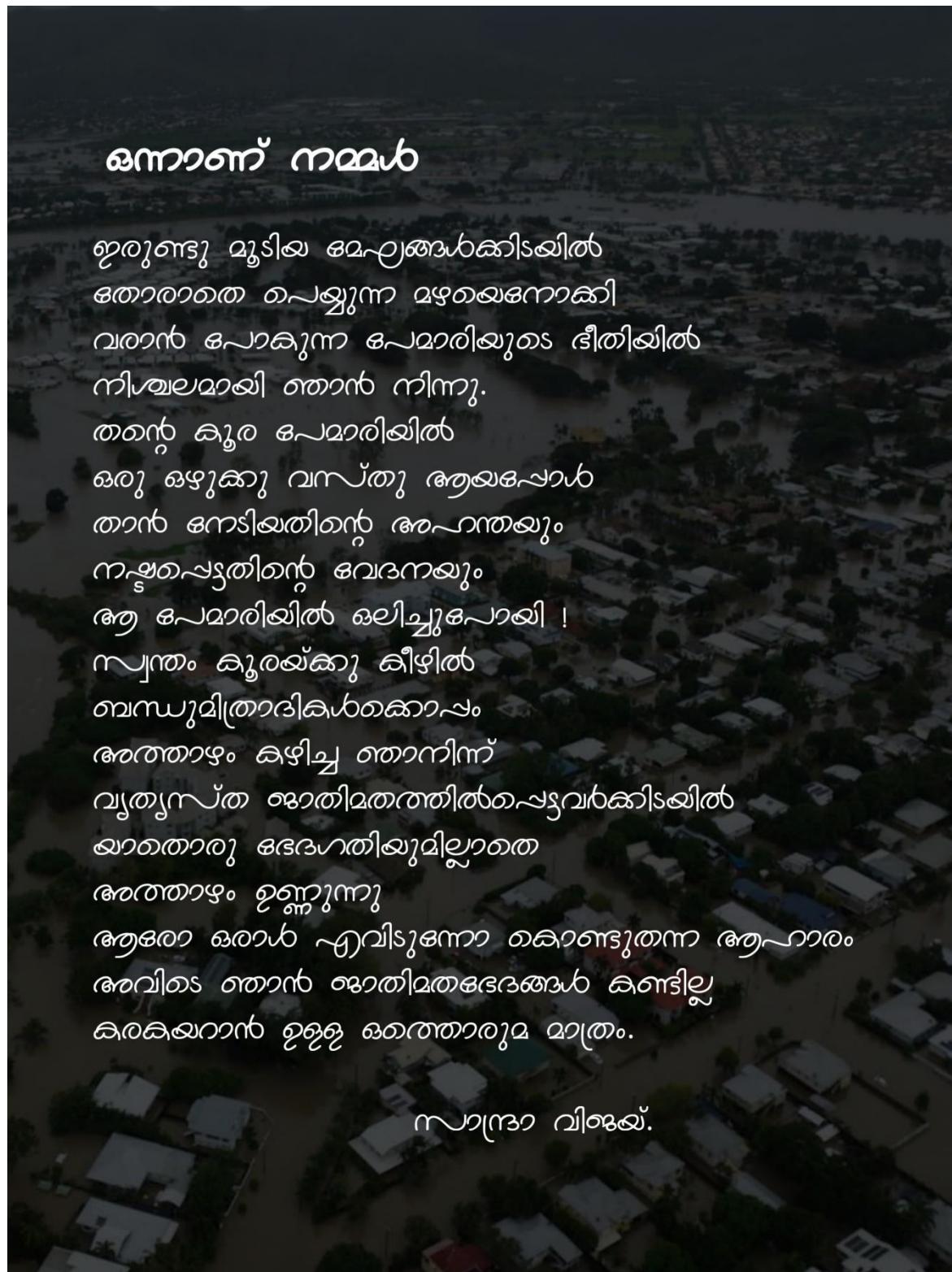
The Artist's Paint brush.....







Malayalam literary works....



മനാശ് നാല്പ്

ഉരുണ്ടു മുടിയ ഒമ്പതുപദ്ധക്കീടവിൽ
അതാരാത്ര സെള്ളുന്ന ഘഴനവെന്നാക്കി
വരാൻ സൊക്കുന്ന പെമ്പരിവുടു ഭീതിവിൽ
നിശ്ചലമാവി തൊൻ നീനു.
തത്രു കൂര പെമ്പരിവിൽ
ങ്ങു ഒഴുക്കു വസ്തു ആവശ്യം
താൻ അടിവതിത്രു അസാന്തവും
നൃത്യത്വത്രു അവദനവും
ആ പെമ്പരിവിൽ ലിഞ്ചുപൊംവി !
സ്വന്തം കൂരവ്ക്കു കീഴിൽ
മുന്യമിത്രാദിക്ഷാതകാശം
അത്താഴം കഴിച്ച തൊനിന്
വ്യത്യസ്ത ശാതിമതത്തിൽത്തഖ്യവർക്കീടവിൽ
വാതതാരു അദ്ദാതിവുമില്ലാത്ത
അത്താഴം ഉള്ളുന്നു
ആരാ ഒരാൾ ആവിടുമൊ തകാണ്ടുതന്ന ആസാരം
അവിടാ തൊൻ ശാതിമതദേദങ്കും ദണ്ഡില്ല
കരകവറാൻ ഉള്ള ആത്താരുട മാത്രം.

സാന്ദ്രാ വിജവ്.

കാർമ്മോധാന്തരകാണ്ട് ആകാശം തിങ്ങിതിരയവെ ആർത്തത്തുപെ
യുന്ന ഉച്ചയുടെ കാഖാചുകൾക്കിടയിൽ എൻ്റെ കണ്ണുകൾ അവളുടെ
അടുത്തത്തെത്തി. എല്ലാ ആദ്യക്കളെയും തന്റെതാക്കിമാറ്റിയെന്നും ദേഹി
യിബാരുവസന്നം തിർത്തിട്ടും പ്രണയത്തിന്റെ നേർമ്മദേഹായി
കാണേണ്ട സ്ഥാനത്ത് ഭ്രാന്തിയ്ക്കു നിരകുമായിക്കണ്ട അവളിലേക്ക്...!

അവളുടെ പേരുകേട്ടാൽ പരിഹാസിച്ചുതളളുന്നവർക്കിടയിലും
അവൾ വസന്നം തിർത്തതും ഇത്തയേരെ സംന്ദഹം കവിതയും നബ്ദകിട്ടും
അവളുടെ വസന്നത്തെത്തയിന്നും ഭ്രാന്തിയ്ക്കു വജ്രവയായികാണുന്നു.
ആരും ചുട്ടില്ലെല്ലും അവൾ പുതത്തുവിടർന്നു നിന്നുവെക്കിൽ

അർത്ഥമൊന്നുമാത്രം!

ഭ്രാന്തിയ്ക്കു നശ്ചപ്രണയമല്ല
വർ, മരിച്ച് പ്രണയസാക്ഷാ
തക്കാരത്തിന്റെ നേർമ്മദേഹാ
ഞാൻ ചെന്നരത്തി! പ്രണ
യിക്കണം. ചെന്നരത്തിയെ
പോബെ അവനുള്ളഡൈല്ലാ വ
സന്തതിലും പുതത്തുവി
ടർന്നു നില്ക്കുന്ന പോബെ
എല്ലാ ജീവാന്തരങ്ങളിലും
ചെന്നരത്തിയായി പുതർജ്ജ
നിക്കണം.

സാന്നി വിജവ്



99.

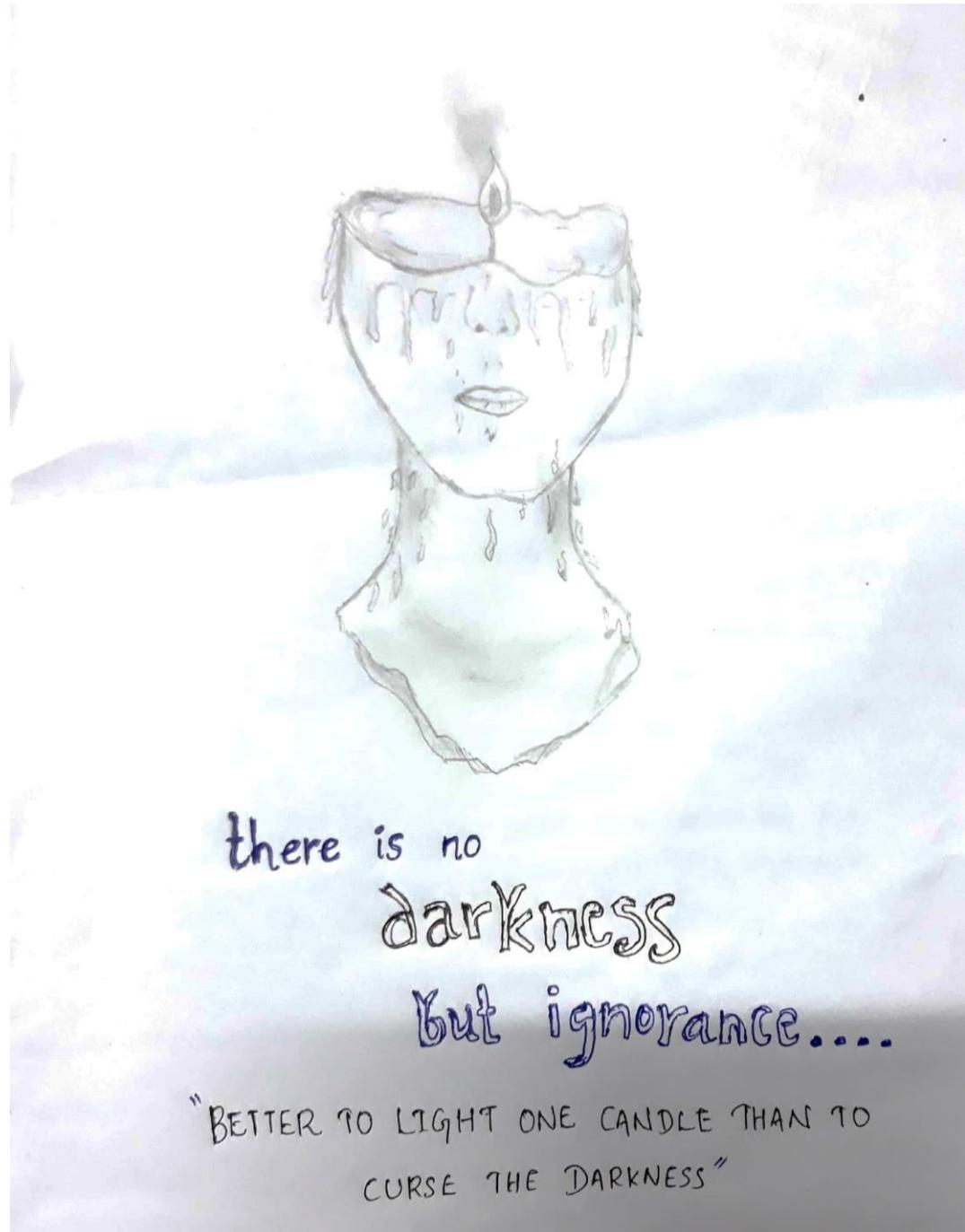
നിന്നു മന്ത്രമുഹൂര്ത്തിലെത്തിരുപ്പ് നി ഏറ്റവും
മനസ്സാം, അനുഭവങ്ങളിൽ ഒപ്പുവരുത്ത്...
നിന്നിൽ നാലുവർഷം മാറിമാറ്റിയെങ്കിൽ നിന്നു
ബാക്കായ വിന്ദുകൾക്കുന്നതും
എന്നിട്ടും നി അനുഭവം... മൊത്തിൽ മാറിമാറ്റം
ഉംപ്പോൾ...
നിന്നു പരിശുദ്ധിപാത മാറ്റുമ്പോൾ ചുണ്ടുമാറ്റിമ്പോൾ
നി പാഠം...
നിന്നു അപ്പു മാറ്റുമ്പോൾ ചുണ്ടുമാറ്റിമ്പോൾ
അലു മുട്ടിക്കൊല്ലും എന്നിലൂഡിജോവിലും
നിന്നു പ്രാഥമ്യ സഖിനു മാറിമാറ്റുമ്പോൾ
ഒരു നിന്നു വാനുവിനിമയം...
എന്നിട്ടും വിക്രാന്തക്കാരുടെ മാറ്റ
മാറ്റുമ്പോൾ നിന്നിന്നു മാറ്റുമ്പോൾക്കും...
ഇന്തു നിന്നു മാറ്റുമ്പോൾ...
നിന്നിന്നു പ്രാഥമ്യിനിനി... മാറ്റുമ്പോൾ...
ഒന്നും മാറ്റുമ്പോൾ.

sheelakthmi.narayanan@kuttu
BT & BCE (S1)

കാട്ടുവ്

പിനി തെരിക്കുന്ന പിതകളിൽ എംബ്രേസ്
നിന്നു വി..... ചുമ്പിരി ദൗദയതു.....
മുവില്ല് ടോപ്പ് വി..... മനസിൽ തെളിഞ്ഞേണ്ട
നിഖുന്ന എനിലെ ധോനങ്കളും.....
കൂച്ചിന്നുള്ളി കാതിന്നന്നുവു ധോവിക്കും
നിന്നുവി.... വാക്കുവി ചുരുളിലെന്നാൻ
ചുജ്ജക്കട്ടക്കാനെ ചുവാല എന്നു.....
ചുജ്ജക്കട്ടക്കാനെ മൊറിക്കിലെന്നാൻ
ധോവിച്ചിട്ടും നിന്ന് മാറിക്കിലെന്നാൻ
മുഖില്ല് മുഖില്ല് ചുജ്ജക്കട്ടക്കില്ല.....
താനെ വാഴ്ന്നൊരു കാട്ടുചുവണ്ണു എന്നു
വിനും ഒപ്പം..... ചെമ്പിരുന്ന ഇരുളുളി
ചുജ്ജക്കട്ടക്കാനെ കാട്ടുചുവണ്ണു എന്നു...
ഇച്ചുംഡാംബേന്നൊന്നും ചെമ്പിരുവാൻ ചെന്നേണ്ടി
നിന്നുവും നിന്നുവും ഏതുകുടിഞ്ഞേണ്ട
ചുജ്ജക്കട്ടക്കാനെ ചുവാലുവും.....
ധോവിച്ചിട്ടും നിന്ന് മാറിക്കിലെന്നാൻ.....
ഇച്ചുംഡാംബേന്നു വാക്കുന്നീ ചെമ്പിരുവാൻ.....
സ്വർഗ്ഗരാഖിപ്പാക്കുവെന്ന ജീവിതം.....
നിന്നുക്കും വച്ചിരുവാൻ എന്നു.....
കണ്ണാൻ പിരിക്കാതെ ചേംകരുതേ.....
നിന്നു വി ചുമ്പിരിയാതു..... ഉതിഉന്നിക്കിനില്ലെല്ലാം
കാലം കാത്തിരിക്കാനു.

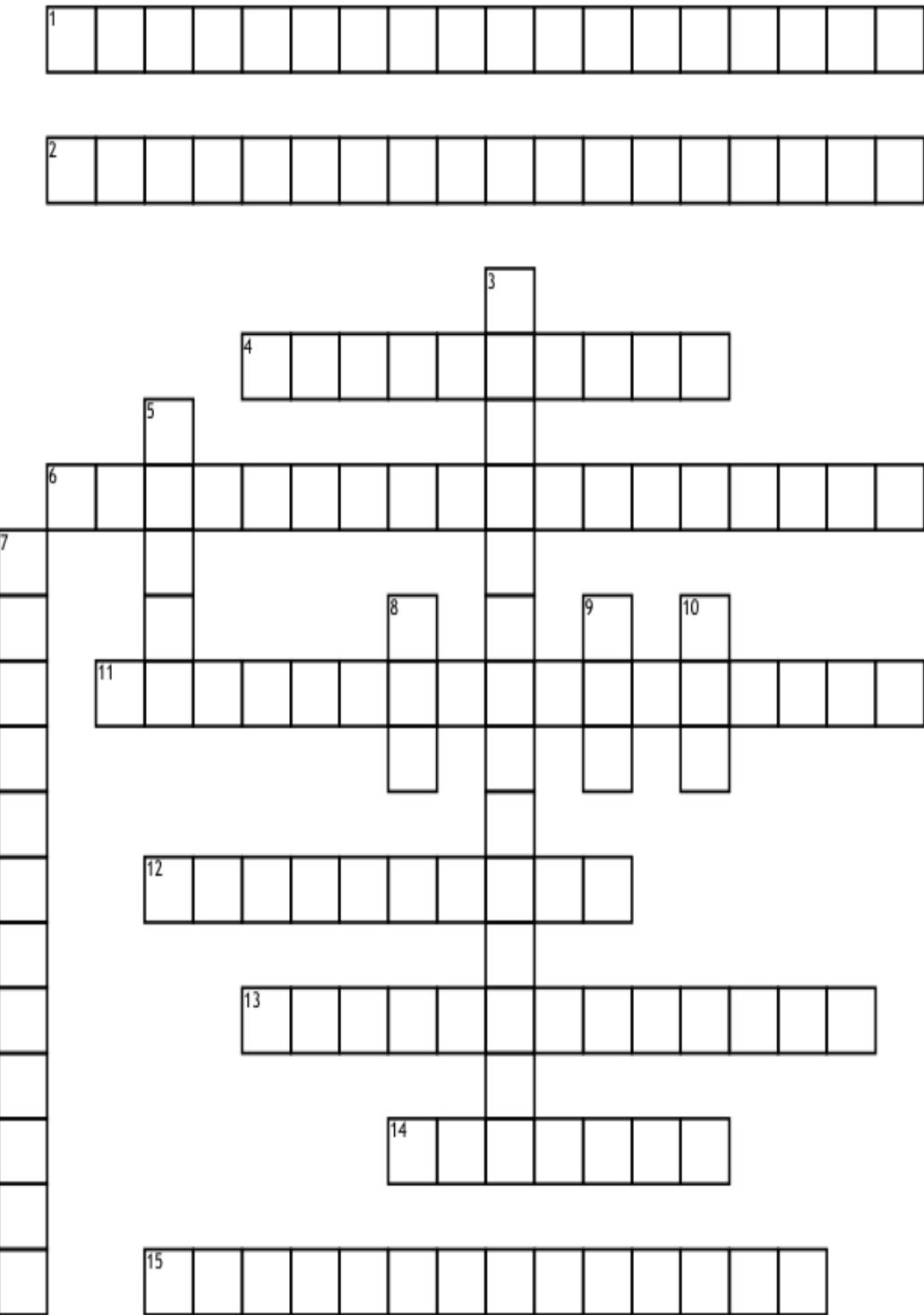
Abhinav.P
Roll no : 3
FT



By

Fathimathu Suhara, Nandana, Basila, Rinnie, Lekshmi

Crossword



Across

1. process of making changes in DNA code of living organisms
2. genetic alteration of a cell
4. continued breeding of the individuals with similar characteristics of a line of organisms
6. procedure used to spread and analyze DNA fragments by placing a mixture of DNA fragments at one end of a porous gel and applying an electrical voltage from different sources

11. enzyme that cuts DNA at a specific sequence of nucleotides
12. term used to refer an organism that contains genes from other organisms
13. breeding technique that involves crossing dissimilar individuals to bring together the best traits of both organisms
14. small circular piece of DNA
15. method of breeding that allows only those individual organisms with desired characteristics to produce the next generation

Down

3. DNA produced by combining DNA from different sources
5. member of a population of genetically identical cells
7. gene that makes it possible to distinguish bacteria that carry a plasmid with forge in DNA from those that don't
8. technique that allows molecular biologists to make many copies of a particular gene
9. stands for ribonucleic acid
10. stands for deoxyribonucleic acid