

भारतीय अंतरिक्ष विज्ञान एवं प्रौद्योगिकी संस्थान की अर्धवार्षिक पत्रिका

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# SURABHI

### Journal of Arts and Literature

The Bi-annual Journal of Indian Institute of Space Science and Technology

Vol.17 No. 2 (December 2022)



भारतीय अंतरिक्ष विज्ञान एवं प्रौद्योगिकी संस्थान Indian Institute of Space Science and Technology विलयमला, तिरुवनंतपुरम Valiamala, Thiruvananthapuram

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# From the Editor's Desk

Dear Friends,

December 2022 issue of Surabhi wishes you a happy New Year with a bouquet of blossoms spreading the joy of creativity. In this issue, we have a wide spectrum of articles ranging from topics related to psychology to culinary skills.

Dear Reader, you could explore articles on psycho-social significance of humour, experience sharing of a day with the senior research scientist Kasthuri Venkateswaran, a travelogue cum culinary adventure, and our students' happiness project within the campus. You could also read stories and poems on people, pets, and the world. This time also we have a science fiction story about a couple on Venus.

We wish all our readers a happy, healthy, and prosperous 2023.

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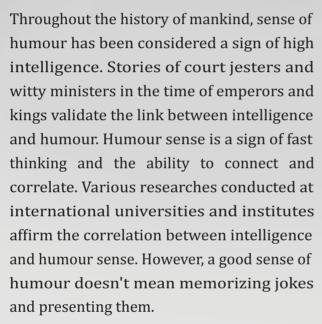
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# Sense of Humour as an Essential Social Toolset

"Sometimes we have to laugh to keep from crying!"



Humour, a significant high-level cognitive function, is vital to social interaction. Humans are the only species with the capacity to to understand and enjoy humour. It requires a series of mental activities to understand and instigate humour. Cognitive psycho logists categorized it into different stages. The context of the jokes must first be visualized, followed by the detection of irregularities in its many interpretations, and ultimately, the resolution of the inincongruity by thwarting the literal, unfunny interpretations and appreciating the humour of the hilarious one.

According to cognitive psychologists, a "schema" is a common notion for storing information. Schema can be envisioned as a loose collection of data related to a single fundamental topic.

This mental memory system arranges information about people, locations, things, and events. Schemas help us make sense of the vast amount of information we are exposed to daily. The appropriate schema is instantaneously activated when we see or think about something. Schemas aid a person perceive the humour in a situation.

#### **Humour and neurotransmitters**

When we were young, we laughed a hundred times a day, but when the hard realities of life began to take on larger forms, we became more serious. Numerous studies have shown that neurotransmitters like norepinephrine, dopamine, serotonin, and oxytocin that are released when we are joyful can control our mood. When we are laughing with the people we care about; we will feel our sorrows, challenges, difficulties, and hopelessness fading from our lives. That is the effect caused by amazing chemical reactions in our brain due to neurochemicals.

### How to find humour in everyday life?

All you need is an open mind to the amazing world around you to find humour in everyday situations. Strange and odd features make for fantastic comedy material. Being around funny people helps us develop our sense of humour. Some people are hilarious in their actions, while others are sarcastic and have a store of good jokes. Good humour does not just happen overnight. When making jokes, timing and content are crucial. Before making someone laugh, we must understand the audience.

#### Can humour be taught?

The brains of funny people are trained to pick details more than those of ordinary people. Good humour is typically spontaneous. Good humourists are skilled in finding extraordinary things and presenting it with a flavour of humour. An innate sense of humour is inbuilt in every human being. Looking at life's light and funny side is the trick to improve sense of humour. It is like the cherry on the cake. When we interact with people, try to understand them and study what concerns them. Making waves of laughter in conversations can be accomplished by examining the other person's reactions and feelings.

#### Advantages of humour sense

1. Humour is a powerful weapon that helps to start a conversation and break the ice. It helps to build emotional bonds. When humour hits the point, people naturally respond off guard.

- 2. A smiling boss with humour will change the office's atmosphere. If he can correct colleagues' mistakes with light humour, people will be happy to discuss out of box ideas and be more creative.
- 3. Trust can be made with persons who are relatable and identifiable. It has been proved in social science experiments that people trust those who are genuinely skilled to make them laugh.
- 4. It is a magnificent tool for those who give a lecture or presentation. Jokes and stories can engage and transport the audience to another level. Belly laughs make the attendees more involved.
- 5. Humour will help settle complex issues that would otherwise be taken to a higher level and become unmanageable. It aids in maintaining and fostering relationships at work.

#### Dangers of inappropriate jokes

- 1. Human connections are strengthened when we laugh without inhibition, yet dumb jokes can also lead to misunderstandings and the emergence of in-and-out social cliques.
- 2. Negative humour can make others feel inferior and draw attention to a hierarchy hidden inside a group. Inappropriate humour can permanently harm interpersonal relationships.
- 3. Insensitive jokes that go against culture might cause issues and even lead to discrimination. Always be considerate of the feelings of others.
- 4. Refraining from jokes about sex, gender, religion, stereotypes, and politics will create a pleasant workplace environment.
- 5. Being light-hearted and trying to be funny while others are in crisis mode is to be avoided. The skill to read the environment is essential.

The ability of the human brain to analyse information using two unique "filters" — serious and humorous — is widely recognised. When someone is in a funny mode, which is characterised by the pleasant emotion of delight and the desire to laugh, rationality is suspended for fun. What we perceive as amusing, another group of individuals may view as serious. Humour attracts attention and admiration, and delineates social boundaries.

Humour should respect, acknowledge and validate differences among people. Political correctness is becoming more and more significant in society across all spheres of life, including humour. If the control line is crossed, humour violates self-esteem and disrespects people's differences. It should be kept in mind that there is plenty of laughter in the world without discriminatory stuff and respecting human values.





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# വുൻ വാസു

63ാരോ ദേശത്തിലും അതിന്റെ ചുറ്റുപാടുകൾ അനുസരിച്ച് കുറെ ഭ്രാന്തന്മാർ ഉണ്ടായിരിക്കും, അ വരെ ചുറ്റിപ്പറ്റിയുള്ള കഥകളും. ഞങ്ങളുടെ ഗ്രാമ ത്തിലും ഉണ്ടായിരുന്നു ഇത്തരം കുറച്ചുപേർ. എല്ലാവരും അവരെ ഭ്രാന്തന്മാർ എന്ന് വിളിച്ചു കളിയാക്കിയപ്പോൾ അവരാകട്ടെ മനസിന്റെ വാതായന ങ്ങളൊക്കെ തുറന്നിട്ട് , സന്തോഷത്തോടെയും, സമാധാനത്തോടെയും ജീവിച്ചുകൊണ്ടിരുന്നു. ഭ്രാന്തില്ലാത്തവർ ഭ്രാന്തുപിടിച്ച് ജീവിതത്തോട് മ ല്ലിട്ടുകൊണ്ടിരുന്നപ്പോൾ ഭ്രാന്തന്മാർ എന്ന് മുദ്രകുത്തിയവരാകട്ടെ യാഥാർഥ്യങ്ങളുമായി സന്ധിചെയ്ത് ജീവിതം മുന്തിരിച്ചാറുപോലെ ആസ്വദിച്ചുകൊണ്ടിരുന്നു.

മനസിലേക്കാദ്യം കടന്നുവരുന്നത് വട്ടൻ വാസുവിനെ ചുറ്റിപ്പറ്റിയുള്ള ഓർമ്മകളാണ്. ഒരു വടിപോലെ കൃശഗാത്രൻ. നല്ല ഉയരം, ഈർക്കിലി പോലെ ശോഷിച്ച നീണ്ട ബാഹുക്കൾ, അത് വിളിച്ചു പറയാ നാവണം ഒരു ഈർക്കിൽ വാസുവിന്റെ ഇത്തെ ചെവിയിൽ വെച്ചിരിക്കും. വലത്തെ ചെവി വെറുതെ ഇടേണ്ട എന്നുകരുതി ഒരു ബീഡിക്കുറ്റി തിരുകിയി രിക്കും. ക്രൂശിതനായ യേശുക്രിസ്തുവിനെപ്പോലെ മാത്രം അൽപം വസ്ത്രം. നെയ്ത്തുശാലയിൽ നിന്നും പുറത്തുവന്നതിനുശേഷം നാളിതുവരെ ജലാംശം കണ്ടിട്ടില്ലാത്ത ഒരു വസ്ത്രത്തിന്റെ കഷണം. ആ തുണിയുടെ യഥാർത്ഥ നിറം എന്താണെന്ന കാരൃത്തെക്കുറിച്ച് ഗ്രാമവാസികൾ ക്കിടയിൽ തർക്കമുണ്ടാകാറുണ്ട്. കാവി, പച്ച, വെള്ള എന്നിങ്ങനെ നിരവധി നിറങ്ങൾ കൽപ്പിച്ചു നല്കി യിരുന്നു ജനങ്ങൾ. ഏതായാലും മുഷിഞ്ഞ്, നിരവധി സുഷിരങ്ങൾ വീണ്, സുഗമമായ വായൂസഞ്ചാര

സ്വാതന്ത്രുമുള്ള ഒരു വസ്ത്രമായി അത്. ഇപ്പോഴത്തെ ന്യൂജെൻ ചെറുപ്പക്കാരെപ്പോലെ മുന്തിയ ഇനം കൃതിമ ജല്ലുകളും മറ്റും ഉപയോ ഗിച്ച് തലമുടി കൂർപ്പിച്ച് നിർത്തുന്നതിനും



എത്രയോ വർഷങ്ങൾക്ക് മുമ്പ് തന്നെ വാസു തന്റെ മുടി മുള്ളൻപന്നിയുടെ മുള്ളു കണക്കെ വടിപോലെ നിർത്തിയിരുന്നു. ഒരു മിതഭാഷിയാ യിരുന്നു അയാൾ. ആരോടും കുശലം പറഞ്ഞ് സമയം കളയാറില്ല. അൽപ്പം കൊഞ്ഞയുള്ളതുകൊണ്ട്, ആവാ എന്തെങ്കിലും പറഞ്ഞാലും ആളെ അടുത്ത പരിചയമുള്ളവർക്ക് മാത്രമേ എന്താണ് പറഞ്ഞതെന്ന് മനസ്സിലാകുകയുള്ളൂ. വാസു ഇരിക്കുന്നതും, കിടക്കുന്നതും വളരെ വിരളമായിട്ടായിരുന്നു.

മിക്കവാറും നടന്നുകൊണ്ടേയിരിക്കും. ആ നടപ്പു തന്നെ നിശ്ശബ്ദതയുടെ ഒരു പര്യായമായിട്ടെടുക്കാം. അത്രയ്ക്ക് ശബ്ദരഹിതമായിരുന്നു പദചലനങ്ങൾ. ആരെങ്കിലും തമ്മിൽ സംസാരിച്ചുകൊണ്ടിരിക്കുന്നു എന്നിരിക്കട്ടെ, ഒരു ജീവിപോലും അറിയാതെ അവരുടെ പിന്നിൽ വന്നുനില്ക്കും വാസു. കുറച്ചു നേരം അങ്ങനെ അനങ്ങാതെ നില്ക്കും. പിന്നെ വാസുവിന്റെ വദനം അതിൽ ഒരാളുടെ ചെവിയുടെ അത്രെക്ക് നീങ്ങും. എന്നിട്ട്, പെട്ടെന്നൊരു ചോദ്യം, കൊഞ്ഞനിറഞ്ഞ, ഭാഷയിൽ, ഒരു ചായക്കുള്ള കാശ് തരുവോ? അപ്രതീക്ഷിതമായി, ചെവിയുടെ അടുത്തെ ത്തിയ ശബ്ദത്തിന്റെ പ്രഭവകേന്ദ്രം ഏതെന്നറിയാൻ വേണ്ടി അവർ ഞെട്ടിത്തിരിഞ്ഞ് നോക്കും. അപ്പോൾ കാണാം, മുഖത്തിന് ചേർന്ന്, യാതൊരു ഭാവഭേ ദവുമില്ലാത്ത വാസുവിന്റെ മെലിഞ്ഞ വദനം. ആരും ഒന്ന് ഞെട്ടിപ്പോകും. ഞെട്ടലിൽ നിന്ന് മുക്തരായാൽ രണ്ട് വഴികൾ ഉണ്ട്. ഒന്ന്, സുസ്മേരവദനനായി ഒരു എട്ടണയുടെ തുട്ടെടുത്ത് വാസുവിന് കൊടുക്കുക. കയ്യിൽ കാശില്ലായെന്ന് പറയുന്നതാണ് രണ്ടാമത്തെ മാർഗ്ഗം. ആ്യത്തെവഴിയാണ് തിരഞ്ഞെടുത്തതെങ്കിൽ, നീട്ടിയ തുട്ടു വാങ്ങി ചെവിയുടെ ഉള്ളിൽ പ്രത്യേകരീതിയിൽ പിടിപ്പിച്ചിട്ട് അടുത്ത ഇരയെ തേടി അയാൾ നടന്നു നീങ്ങുകയും ചെയ്യും. കാശില്ലായെന്ന് പറയുന്നവർ അയാളുടെ അപ്രീതിക്ക് പാത്രമാവുകയും അവൃക്തമായി, കൊഞ്ഞയിൽ മുങ്ങിയ ഭാഷയിൽ തെറിയഭിഷേകം നടത്തിയിട്ട് നടന്നുനീങ്ങും. രണ്ടായാലും വാസുവിന്റെ മുഖത്ത് എന്തെങ്കിലും ഭാവമാറ്റം പ്രതീക്ഷിച്ചാൽ തെറ്റി. നന്ദിയോ, നന്ദികേടോ കാണിക്കാതെ, നിശ്ശബ്ഢനായി നടന്നകലും. അന്നത്തെ അന്നത്തിന് വേണ്ടി മാത്രം അദ്ധാനിച്ചിരുന്ന വാസു ഒരു തികഞ്ഞ സോഷ്യലിസ്റ്റ് ആയിരുന്നു എന്നു വേണമെങ്കിൽ പറയാം. ഒരിക്കലും ആ മടിശ്ശീലയിൽ സമ്പാദ്യം കുമിഞ്ഞ് കൂടുകയോ, നാളേയ്ക്ക് വേണ്ടി കരുതിവയ്ക്കുകയോ ചെയ്തില്ല. പകലന്തിയോളം കവലയിലെ ആൾക്കൂട്ടത്തിലൂടെ ആരെയും മുട്ടാതെയും തട്ടാതെയും അയാൾ നീങ്ങിക്കൊണ്ടേ യിരിക്കും. ചായക്കുള്ള കാശും ചോദിച്ച്, സന്ധ്യകഴിഞ്ഞാൽ

അയാൾ അപ്രതൃക്ഷനാകും. ആർക്കും അറിയില്ല അയാൾ എവിടെപ്പോകുന്നു, എവിടെ അന്തിയുറങ്ങുന്നു എന്ന്. ആരും ഒട്ടും അന്വേഷിച്ചിട്ടുമില്ല.

വളരെ വിരളമായിട്ടേ വാസു കവല വിട്ട് വീടുകളിൽ പോയി ആളുകളെ ബുദ്ധിമുട്ടിക്കാറുള്ളു. എന്റെ വല്യച്ചനെ, അതായത് അമ്മയുടെ അച്ചനെ, അയാൾ ക്ക് വളരെ ഇഷ്ടമായിരുന്നു എന്ന് തോന്നിയിട്ടുണ്ട്. വല്യച്ഛനെ കാണുമ്പോൾ അയാൾ ഭവ്യതയോടെ വഴിമാറിക്കൊടുക്കും. ചുരുക്കം ചില അവസരങ്ങളിൽ അയാൾ വീട്ടിൽ വന്ന് വല്യച്ഛനെ കാണാറുണ്ടായിരുന്നു. മിക്കവാറും രാത്രിയായിരിക്കും ഈ സന്ദർശനം, കവലയിലെ തന്റെ "ഔദ്യോഗിക" കാര്യങ്ങൾക്ക് ശേഷം. വൈദ്യുതിവിളക്കുകൾ നാട്ടിൻപുറങ്ങളിലേക്ക് രംഗപ്രവേശം ചെയ്തുകൊണ്ടിരിക്കുന്ന കാലമാ യിരുന്നു അത്. അത്താഴം കഴിഞ്ഞ്, പുറത്തിറങ്ങി കൈ കഴുകുക എന്നത് കൂട്ടികൾക്ക് ഒരു പേടിസ്വ പ്നമായിരുന്നു. കുറ്റാക്കുരിരുട്ട്. ഇടതൂർന്ന് നില്ക്കുന്ന മരങ്ങൾ രാത്രിയുടെ സാന്ദ്രത കൂട്ടിയിരുന്നു. വൈദ്യുതിവിളക്കുകൾക്കാണെങ്കിൽ മെഴുകുതിരി കത്തിച്ചപോലെയുള്ള പ്രകാശവും. ഇരുട്ടിൽ മുറ്റത്ത് ആരെങ്കിലും നിൽക്കുന്നുണ്ടോ എന്നറിയാൻ പോലും പറ്റിയിരുന്നില്ല. ഇരുട്ടിന്റെ ഭാഗമായി എവിടെയെങ്കിലും വാസു നിൽക്കുന്നു ണ്ടാവും എന്ന ഭയത്തോടെയാണ് കുട്ടികൾ കൈ ഞൊടിയിടയിൽ കഴുകി അകത്തേക്ക് പാഞ്ഞിരു ന്നത്. മുറ്റത്ത് എന്തെങ്കിലും അനക്കമോ ശബ്ദമോ കേട്ടാൽ വല്യച്ഛൻ തന്റെ നീളൻ ടോർച്ചെടുത്ത് അടിച്ചു നോക്കും. അഞ്ച് വലിയ സെല്ലുകൾ ഇടാ– വുന്ന ടോർച്ച്, ഒരിക്കലും അഞ്ച് സെല്ലുകളും മാറ്റി ഒരുമിച്ച് പുതിയ സെല്ലുകൾ ഇടാറില്ലായിരുന്നു. ഒന്നോ രണ്ടോ എണ്ണം പുതിയതായിരിക്കും. ബാക്കിയെല്ലാം പഴയവ. അതുകൊണ്ട് ടോർച്ചിനും നല്ല പ്രകാശം ഇല്ലായിരുന്നു. ചില സന്ദർഭങ്ങളിൽ ടോർച്ചിന്റെ പ്രകാശവീഥിയിൽ കൃശഗാത്രനായ മനുഷ്യന്റെ രൂപത്തിൽ ഇരുട്ട് പ്രകാശത്തിന് വഴി

മാറിക്കൊടുക്കാതെ നില്ക്കുന്നത് കണ്ടിരുന്നു. "പോടാ വാസു്" എന്ന വല്യച്ഛന്റെ ശാസനാരൂപ ത്തിലുള്ള ശബ്ദം കേൾക്കുമ്പോൾ ആൾരൂപത്തിലു ള്ള ഇരുട്ട് പരിസരവുമായി അലിഞ്ഞ് ഇല്ലാതാകും. പലപ്പോഴായിട്ട് അയാൾക്ക് കിട്ടിയിരുന്ന നാണയ ത്തുട്ടുകൾ, പലഹാര പൊതികൾ തുടങ്ങിയവയാ ണ് വല്യച്ഛനോടുള്ള ബഹുമാനത്തിന്റെ ഹേതു. കുട്ടികളായ ഞങ്ങളിൽ വാസു ഭീതി ജനിപ്പിക്കുന്ന ഒരുതരം വികാരമാണ് ഉണ്ടാക്കിയിരുന്നത്. ഞങ്ങൾ ആഹാരം കഴിച്ചില്ലെങ്കിൽ, പറഞ്ഞാൽ അനുസരി ച്ചില്ലെങ്കിൽ, ഉറങ്ങാൻ കൂട്ടാക്കിയില്ലെങ്കിൽ പഠി ച്ചില്ലെങ്കിൽ എന്നുവേണ്ട സർവ്വ അനുസര ണക്കേടുകൾക്കുമുള്ള ഒറ്റമൂലിപ്രയോഗമായിരുന്നു "പിടിച്ച് വട്ടൻ വാസുവിന് കൊടുക്കും"എന്നത്. കുട്ടികളെല്ലാം ആ ഭീഷണിക്ക് വഴങ്ങിയിരുന്നുതാനും. ചുറ്റും പരതി നോക്കുന്ന ഞങ്ങളുടെ കണ്ണുകളിൽ ഭീതി വന്ന് നിറഞ്ഞ് അനുസരണശീലരായി മാറുമായിരുന്നു. പിന്നീട് കൗമാര യൗവനകാലങ്ങളിൽക്കൂടി കട ന്നുപോയപ്പോൾ വാസുവിന്റെ ചെയ്തികളെല്ലാം കൗതുകമുണർത്തുന്ന കാഴ്ചകളായി മാറി. കവല യിലൂടെ കടന്നുപോകുമ്പോഴെല്ലാം എന്റെ കണ്ണു കൾ ആ കൃശശരീരത്തിനെ തിരഞ്ഞു കൊണ്ടിരു ന്നു, ചിലപ്പോൾ കാണാൻ പറ്റാറില്ല, ഏതെങ്കിലും ചായക്കടയിൽ കയറി വിശപ്പകറ്റുകയായിരുന്നിരി ക്കാം. അല്ലെങ്കിൽ തന്റെ ജോലിയിൽ ഏകാഗ്രനായി നടന്നുകൊണ്ടേയിരിക്കുന്ന വാസുവിനെ കണ്ടിട്ടുണ്ട്. അടുത്ത ഇര ആരാണെന്നറിയാനുള്ള ആകാംക്ഷയിൽ, ചിരി ഉള്ളിലൊതുക്കി, എന്റെ കണ്ണുകൾ അയാളെ പിന്തുടരുമായിരുന്നു. കാലം വാസുവിൽ പറയത്തക്ക മാറ്റങ്ങൾ ഒന്നും വരുത്തിയിട്ടില്ലായെന്ന് തോന്നി. ട്ടില്ലായെന്ന് തോന്നി. സമയസങ്കൽപ്പങ്ങളെയെല്ലാം മറികടന്ന് വാസൂ കാലത്തിന് സാക്ഷിയായി നിലകൊണ്ടപോലെ.

ജീവിതം പോലെതന്നെ ഒരു തമാശയായിരുന്നു മരണവും വാസുവിന്. പലതവണ ജീവിതം അവസാനിപ്പിക്കാൻ അയാൾ ശ്രമങ്ങൾ നടത്തിയിട്ടുണ്ട്. ഒരു വെളുപ്പാൻകാലത്ത് ഞങ്ങളുടെ പുരയിടത്തിലുള്ള ഒരു വമ്പൻ പുളിമരത്തിന്റെ താഴെയുള്ള കൊമ്പിൽ വാസു തൂങ്ങിക്കിടക്കുന്നു. ഒരു തുണ്ട് കയറിൽ. ശരീരത്തിന്റെ ഭാരക്കുറവും,പ്രഭാതത്തിൽ കൃഷി നോക്കാൻ പാടത്തേക്ക് പോവുകയായിരുന്ന എന്റെ കൊച്ചഛന്റെ സമയോചിതമായ ഇടപെടലും കാരണം മരണം വാസുവിനെ ഉപേക്ഷിച്ച് കടന്നുകളഞ്ഞു. യാതൊരു ഭാവഭേദവുമില്ലാതെ അയാൾ തന്റെ നിത്യവൃത്തികളിലേക്ക് ചുരുങ്ങിയ ദിവസങ്ങൾ കൊണ്ട് തിരിച്ചുപോയി.

മറ്റൊരിക്കൽ ട്രെയിൻ വരുന്ന സമയം നോക്കി, റെയിൽവേ കട്ടിംഗിന്റെ( ട്രെയിൻ കടന്നുപോകാൻ മലകൾ ഛേദിച്ച് ഉണ്ടാക്കുന്ന വഴി) മുകളിൽ നിന്ന് വാസു പാളത്തിലേക്ക് എടുത്തു ചാടി. കട്ടിംഗിന്റെ പാതി ഉയരത്തിൽ, സമൃദ്ധമായി വളർന്ന്, പൂവിട്ട നിന്നിരുന്ന കദളിച്ചെടികളെ തലോടിക്കൊണ്ട് അയാളുടെ ശരീരം താഴോട്ട് പതിച്ചു. വീഴ്ചയുടെ ആഘാതത്തിൽ ശരീരം ഒരു പന്തുപോലെ തെറിച്ച് പാളങ്ങൾക്ക് വളിയിലേക്ക് വീണു. ട്രെയിൻ കടന്നുപോയപ്പോൾ മരിക്കാത്ത തന്റെ ശരീരവു മെടുത്ത് വാസു വീണ്ടും ജീവിതത്തിലേക്ക് മടങ്ങി. മരണം എന്നത് ഒരു നിശ്ചിത സമയത്ത് മാത്രമേ നടക്കുകയുള്ളു എന്നതിന് ഉദാഹരണമായി നാട്ടുകാർ വാസുവിന്റെ മരണശ്രമങ്ങളെപ്പറ്റി പറഞ്ഞുനടന്നു. അതിനായികാലം പിന്നെയും ഒത്തിരി കാത്തിരി ക്കേണ്ടിവന്നു.

ജോലി സംബന്ധമായി, മറുനാട്ടിലെത്തി, പലവിധ തിരക്കുകളിൽ മുങ്ങിപ്പൊങ്ങുമ്പോഴും ഇടക്കിടെ വാസു എന്റെ മനസ്സിലേക്ക് കടന്നു വന്നിരുന്നു. പ്രായം നല്കിയ വിവേകത്തിന്റെ കണ്ണാടിയിലൂടെ നോക്കിയപ്പോൾ മനസ്സിൽ ഒരു ചോദ്യം ഉയർന്നു വന്നു. വാസു ശരിക്കും ഒരു വട്ടനായിരുന്നോ? ക്ലേശങ്ങളുടെ ഒരു ചുമടുപോലും എടുക്കാതെ, ഏകനായി, തനിക്ക് ഇഷ്ടമുള്ള കാര്യങ്ങൾ മാത്രം ചെയ്ത് അയാൾ ജീവിച്ചു. പഠിത്തമെന്ന് പറഞ്ഞ് വിദ്യാലയങ്ങളിൽ കയറിയിറങ്ങി ബാല്യ കൗമാര കാലങ്ങൾ "വൃഥാ "കളഞ്ഞില്ല. ജീവിതം പച്ച പിടി പ്പിക്കുന്നതിനുവേണ്ടി ജോലി അന്വേഷിക്കാനോ, പണം സമ്പാദിക്കാനോ മെനക്കെട്ടില്ല. വിവാഹം കഴിക്കാനോ, കുടുംബം ഉണ്ടാക്കാനോ തുനിഞ്ഞി ല്ല. സാധാരണക്കാരുടെ പാതവിട്ട് ആരും സഞ്ചരി ക്കാത്ത, സ്വയം വെട്ടിത്തെളിച്ച വേറിട്ട വഴിയിലൂടെ വാസു അനുസ്യൂതം നടന്നുകൊണ്ടിരുന്നു. കാലം കടന്നുപോയപ്പോൾ, മറ്റ് പലതിനോടൊപ്പം വാസുവും സ്മൃതിമണ്ഡലത്തിൽ നിന്ന് മായാൻ തുടങ്ങി. അങ്ങനെയിരിക്കെ. ഒരു ദിവസം നാട്ടിൽ അനുജന്റെ ഫോൺ വന്നു. വാസുവിനെ ഓർക്കുന്നോ? വട്ടൻവാസു, അയാൾ മരിച്ചു. പെട്ടെന്ന് വാസുവിനെ ക്കുറിച്ചുള്ള ഓർമ്മകൾ മനസ്സിലേക്ക് തള്ളിക്കയറി വന്നു. പഴയകാല ബ്ലാക് ആൻഡ് വൈറ്റ് സിനിമയി ലേതുപോലെ.

എങ്ങനെ, എങ്ങനെ മരിച്ചു? അവൻ പറഞ്ഞു, കുറച്ചുനാളായി കവലയിൽ കാണാറില്ലായിരുന്നു. ആരും ഒട്ട് അനോഷിച്ചതുമില്ല. മരിച്ച് കുറച്ച് ദിവസങ്ങൾക്ക് ശേഷമാണ് നാട്ടുകാർ വിവരമറിഞ്ഞത്. മൃതശരീരം പ്രകൃതിയിലേക്ക് ലയിക്കുന്നതിന്റ ദുർഗന്ധമാ ണ് മരണവാർത്തയായി നാട്ടുകാരിൽ എത്തിയത്. അങ്ങനെ ഞങ്ങളുടെ ബാല്യ കൗമാരങ്ങളുടെ ഭാ ഗമായിരുന്ന വാസു പഞ്ചഭൂതങ്ങളിലേക്ക് മടങ്ങി, വിശ്വപ്രപഞ്ചത്തിൽ ലയിച്ചുചേർന്നു. ബന്ധു ക്കളെയോ ശത്രുക്കളെയോ അവശേഷിപ്പിക്കാതെ തന്റെ പാരമ്പര്യം എന്നന്നേക്കുമായി അറുത്തുമു റിച്ച് അയാൾ നിതൃതയിൽ വിലയം പ്രാപിച്ചു. കാ കാലം കരുതിവെച്ച മരണം ഇതായിരുന്നു.

വാസുവിനെക്കുറിച്ചുള്ള ഓർമ്മകൾ ചിന്തേരു കണക്കെ മനസ്സിനെ തട്ടിയുണർത്തുമ്പോൾ ചില ചോദ്യങ്ങൾ മനസ്സിൽ അങ്കൂരിക്കുന്നു. യഥാർത്ഥ ത്തിൽ ആർക്കാണ് വട്ട്. വാസുവിനോ, അതോ നമുക്കോ? അല്ലെങ്കിലും ഭ്രാന്ത് എന്നത് സമൂഹ ത്തിലെ ഒരു അനുപാത പ്രശ്നമാണല്ലോ? ഭ്രാന്തന്മാരുടെ അംഗബലം കുടിക്കുടി ഒരു പ്രത്യേക അനുപാതം കടക്കുമ്പോൾ അവർ ഭൂരിപ ക്ഷമാകുകയും അവരുടെ പ്രവൃത്തികൾ സാമാന്യ വൽക്കരിക്കപ്പെടുകയും ചെയ്യും. അപ്പോൾ ഭ്രാന്തി ല്ലാത്തവർ ഭ്രാന്തന്മാരായി മുദ്രകുത്തപ്പെടും. അവർ കൂകിവിളിക്കപ്പെടുകയും കളിയാക്കപ്പെടുകയും ചെയ്യും. വട്ടൻവാസു ചിന്തിപ്പിക്കുന്നു. മനുഷ്യനെ ക്കുറിച്ച്, മനസ്സിന്റെ തുലനാവസ്ഥയെക്കുറിച്ച്, സമാധാനത്തെക്കുറിച്ച്, സന്തോഷത്തെക്കുറിച്ച്. വാസു, താങ്കളുടെ ആത്മാവിന് സ്വസ്തി.

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### **Immortal Star**

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The clock was ticking midnight and the moon looked radiant as ever. If it weren't for the musical lullabies of the chirping birds, the premises of Pristine Woods, a gated community in the city would have been filled with drop-dead silence. However in the silence, there was one window with deafening light.

The lights from the window of Tara, a meticulous scientist who is quirky in her own ways. The view from Tara's window looked more beautiful than usual, perhaps because she was able to spot her lifeline – Akshit, sitting quietly on the park bench accompanied by his pair of earphones. She puts on her jacket and walks up to the park. "What's keeping my devil awake tonight?" she asked Akshit, nudging him from behind.

Akshit, an unambitious, nocturnal spoilt rich brat who is figuring out his passion among his billion passions, was almost startled to death by her unexpected voice.

"Areeeee youuu insaneeeee? You'll kill me someday and do your space experiments and shit on me!!!"

While the world never took her work-life seriously, Tara loves how Akshit is always curious about her work despite having zero knowledge.

While the world mocked him for not having figured out his passion even at the age of 32, Akshit loves how Tara respects his NEED to



figure out his passion and purpose in life however long it takes.

Even though the two neighbours haven't defined their relationship, they have found solace in each other in this judgemental world.

"So... why aren't you in your bed Aksh? What's bothering you?"

"Why should everybody sleep in the night? What's wrong with working at night and sleeping during the day? You know what... I'm a genius... I'm gonna create an app which..."

"Gosh not again Akshit! Don't tell me one more boring startup idea of yours and please STOP calling yourself a genius. That word actually means something at my workplace and you're not even close..."

"But listen Tara, the app would set an..."

"Sssshh...!!!" an annoyed Tara silenced his lips with her fingers, "So, what's my cute owl listening to?" "My favourite 1960s song by Frankie Avalon" replied Akshit with excitement, sharing an earbud with her. Grabbing it, she lay on his shoulders. She could feel the words slowing down and his heartbeat increasing.

"Venus, if you will
Please send a little girl for me to thrill
A girl who wants my kisses and my arms
A girl with all the charms of you

Venus, make her fair
A lovely girl with sunlight in her hair
And take the brightest stars up in the skies
And place them in her eyes for me

Venus, goddess of love that you are
Surely the things I ask
Can't be too great a task

Venus, if you do
I promise that I always will be true
I'll give her all the love I have to give
As long as we both shall live..."

They looked at each other with comforting eyes and then continued to glare at the glowing moon which is now more radiant than ever.

"Isn't it beautiful? You know... I always wish it to be this way forever" Asked Tara while locking his hand in hers.

"Are you serious? Man... that's what I want toooo... I'm so in love with you, especially

when you're busy doing your science space thingy and when you..."

"...I was talking about the Moon, Aksh!...LOOK! It's gorgeous."

Tara immediately giggled looking at the petrified and embarrassed look on the face of Akshit.

"Oh... I'm... never mind... yeah it's gorgeous, whatever. It's fine" said Akshit trying to unlock their hands.

Tara held him tighter than before... "But wouldn't it be sad though?"

"What?"

"Wouldn't it be sad when our kids know their parents had such a boring proposal story?"

"So what do you want me to do? Bring the moon to you? Take you to the moon? Have our wedding in space? Kiss you on Mars???"

Tara wasn't giggling. Instead, she looked at Akshit with hopeful eyes.



"What? Don't tell me... I can't .... Don't even think of it... No way!"

"Think about it, Akshit. You love adventures, I love my work. We love each other and thus began the adventurous journey of the madly in love couple. Akshit's resourcefulness helped Tara's expertise to form multiple teams aiding their goal. Though the entire project was supposed to be carried out by a hired team, Tara nevertheless kept supervising them from time to time, sharing her design plans, knowledge and experience.

"Whoaa! Are these categorically arranged files describing the plan and design structure of our future home?" asked Akshit in disbelief gliding through various pages of the file. Giggling and blushing at the same time, Tara replied "I know I'm quick and smart, Mr, now listen..." and started reading

Page 1: Venus as a planet

- Venus is the hottest planet in our solar system with surface temperatures hot enough to melt metals like lead.
- Venus is unusual because it spins in the opposite direction of Earth. (The Sun rises in the west and sets in the east.)
- It also has a very slow rotation making its day longer than its year. (1 Venus day = 243 Earth days and 1 Venus year = 225 Earth days).

"Whaaaaaatt?? But why are you telling me all this, lady? I don't..." Akshit tried to interrupt.

"Shush!!!" silencing his lips with her finger, Tara replied, "At least when reading out such things to you, I can consider myself more intelligent!" Romantically bonking, Akshit kept calm and moved close to Tara because he loved playing with her curly hair while listening to her.

Tara continued reading the page 2 further...

Page 2: The Spacecraft design
Due to the atmospheric constraints of Venus,
the spaceship has design constraints:

- It should be narrow throughout the body to minimize drag due to sulphuric clouds
- Should have a surface area as large as possible to radiate out heat and keep it cool.

Solution: Choose a structure inspired by the path of travel of skew rays.

Emergency Details: It has two SOS capsules which can be used to return to Earth in case of any emergency like a spaceship failure. Time Taken: It takes 2 months to travel to Venus with the propulsion system available with us at this point of time. Our planned stay is for 4 earth days.

"So, did you understand, Dumbo?" asked Tara flipping the paper and moving on to the next task.

Akshit - "Uh!!! No mam, not a word! Now stop doing this and tell me something I would practically understand."

Tara- "The most exciting thing is that Venus has an optical phenomenon called a 'glory' which – like a rainbow – forms when sunlight falls on cloud droplets. Unlike the broad arc of a rainbow, a glory is typically seen as a series of coloured concentric rings."

Akshit- "Well...All I understood was that it's the perfect place for us to be! Now you understand that I won't let you talk any further".

He gently pulls Tara into has lap, cuddling her as she giggles and put the files aside. He holds her by the waist, gives a soft kiss on her neck, and they enjoy some quality time together before their voyage.

Akshit and Tara reach Venus after a two-month-long journey. They hadn't even realized how fast the time flew by because of each others company. For them, it felt like only two days had passed. Tara was on top of the world because her experiment seems to be sailing well so far and Akshit was the happiest being in her arms.

It's now all set for landing on Venus. Time for Venus's atmospheric entry. Since they wanted to experience both days and nights of Venus. They chose a landing spot on the edge of the day-to-night transition since this means, during their stay, they experience daytime for three Earth days and night-time for the next one day.

On the first day, they roam around wearing their special, fully protected spacesuits enjoying the scenic beauties of Venus and its sky. They experience some peculiar forces, but nothing harms them, so they just ignore it

On the second day, they plan to get married and then to Akshit's horror and Tara's joy, they witness the acid rain. They treat it as a sign of approval and blessing from the goddess of Venus. With the rain, they experience the formation of glories in the clouds. They get married in the most beautiful way, just the two of them, just how they imagined.

"So, may I call you my wife, finally? Asks Akshit pulling her closer as they are now officially each other's forever.

On the third day, when Akshit is far asleep, Tara comes out to enjoy the nature of Venus. It is then she starts closely observing the forces she has been experiencing. Pulling out her energy-detection goggles, she tries to look around if there's anything strange. She can see some strange lines of different energies and sizes interacting with her movement and bending away from her wherever she moves. They were invisible to her naked eyes. Also, she observes that those transparent-to-naked-eye lines were bending away from their spaceship, the rocks, mountains, and whatever is a "matter." She immediately wakes Akshit to tell about this, but he doesn't care as has always been the case. Instead, he pulls her back to the bed. Driven by emotions, she forgets about this and they go to sleep excitedly because it is going to be a night for them when they wake up the next day. On the final day, they experience the beauty of Venus's night sky. They also see tiny and bright snowflake-like shining particles all around them. Those particles are just hanging there in the air. When a playful Akshit tries to touch them, they deflect far away. The particles are deflecting far away from Tara too. Tara being clever enough, takes out her energy detection goggles again only to observe almost similar energy patterns in these particles as the lines she saw during the daytime. She realises that both are the same and that what she just discovered is 'negative matter'.

She explains about the negative matter to him. "We can reach speeds greater than the light speed with negative mass. It is the most wanted discovery for the future of deep

space travel." Being a physicist, she has been waiting for such an opportunity to do research on it all her lifetime.

"So, what if we stay back and you research on negative matter and succeed in harnessing its energy?" asks Akshit finally trying to make an effort for his wife's work.

Since they had to leave that day, failing which they'll miss the Hohmann transfer orbit and will have to wait for 1.5 years before which they wouldn't stand a chance to reach back Earth with the fuel they have. But their supplies would only last for 3 months. Tara is extremely nervous and excited at the same time at this point.

Tara looks shocked and happy at his effort. She hugs him tightly and says, "It would then just be a matter of less than 2 minutes to return to Earth. I don't want you to risk it, you have done enough to keep me happy," says Tara.

"Don't say a word. We are staying and it's my decision" and they stare at each other in silence. For the first time, Tara feels proud of herself not because of her all her achievements in life, but for getting Akshit as her husband.

After days of analysis and research on the particles, she finds out that when this negative matter gets excited with light of certain wavelengths based on the size of the particle, the particle starts to move with a velocity having speeds minimum of the speed of light. On continuous exposure, the speed keeps only increasing and reaches infinity. Its features are just opposite to the conventional so called 'positive' matter. As we know the upper limit for speed of any positive mass is the speed of light; similarly, the lower limit for speed of any negative mass is speed of light. It is now she

understood that, as the sun emits lights of all wavelengths, these particles are excited and travelling at enormous speeds, thus invisible to the naked eye and visible as 'lines of energy in her special googles. At night, their motion ceased due to absence of light. Now the problem is that they must wait untill the next sunrise to excite the particles and use them as fuel. But sunrise happens once in 2 months in Venus.

Meanwhile, she continues her research and successfully finds ways to handle this negative matter.

She builds a small transparent fuel tank to fill the negative matter. Since it repulses with positive matter, it would push the ship forward with the same speed once it gets excited from the sunlight. She inscribes all her findings in a book and packs some possible amounts of the negative matter in dark containers to continue research on Earth.

Sunrises. She undocks one of the two available SOS capsules for testing her negative matter propulsion mechanism. It's a success. Then they decide to start on their journey, dreaming of how this would change not just their lives back on earth but the fate of entire humanity. After travelling at light speed for a minute, she ceases the negative mass motion by covering up the transparent tank.

But then, the ignition system for liquid propulsion system of their spacecraft gets failed. This means they have no way to decelerate from that enormous speed. Only other option is to use the emergency capsule. But one was already used for testing which now means only one of them has a chance to make it back to 'home'. They have only one minute time left to decide. Out

of agape love, they force each other.

Akshit steps up and says, "Look, Tara, I'm ready to sacrifice myself. You are the scientist who has done a lot of research, and if you are back home alive along with the containers of negative matter, you can discover a lot many things for the greater good of the humanity. I cannot let you die, PLEASE!"

However, taking the blame for failure, an emotional Tara wants to sacrifice herself by saying, "There are many scientists on the planet other than me. And you being rich, has the capability to hire a lot of them and continue the research, thereby taking forward my dreams into the future though I'll be dead."

Both have their point. They love each other so much that even the thought of one leaving the other was already killing them emotionally. But it's time to think practically. 30 seconds left. They finally decide.

The SOS capsule undocks, decelerates, and lands successfully at their substation. The eagerly waiting employees open the door but to their surprise, they neither see Akshit nor Tara inside. They only find a book, some containers, and a note. The book in which Tara has inscribed all her research and the containers consisted of negative matter.

The note read-

\*\*\*A few months back my husband,
Akshit Malhotra, and I started on
this mad journey which we were extremely
proud to be a part of. While in unforeseen
circumstances, our love for each other
was NOT enough to bring us back to the

Earth, it was greater enough to send back our research and findings through this experiment, sincerely hoping the future generations and the present team can find these useful and hope the world sees the magic beyond Earth. Convey our apologies and love to our family, we love them and each other to eternity, Love-Tara Sinha Malhotra\*\*\*

Their team and family members end up sobbing in pain but end up being proud of Tara and Akshit. The space agencies are working to expand on the findings of Tara and have named several stars after this magical couple.

In the end, they both are seen sitting in the spaceship, their heads lying on each other's shoulders, eyes gazing at the glorious bubble of space, hearts enjoying the silence of each other's company, no words spoken.

Akshit interrupts the silence asking, "I heard that we could do time travel and that time stops around us if we reach light speed. Is it True?

Tara - " Hmm"

Akshit - "So, are we travelling to the future now?

Tara -"At the speed of light, time stops. But we are travelling multiple times the speed of light, which means the time around us is running backwards. So yeah, we are time travelling. Not to the future but to the PAST."

For the first time in several days, Akshit moves an inch farther from Tara, looking at her with pride and unconditional love.

"Ms Tara, you are a packet full of surprises, you know that?" giggles Akshit and kisses her forehead.

"We are perfect that way! Tara, meaning a Star and Akshit, meaning Immortal! Our love is forever immortal in the universe, Akshit! I love you, and you are mine forever!" says Tara with teary eyes and they end up smiling at each other in each other's tightest hugs.



#### **Zeel Gabani** SC22B043\Btech Aerospace

## MAKE A DIFFERENCE

Happiness is the goal of everyone's life. In search of self-discovery and deriving happiness from each moment in life my friends, and I joined the Yes!+ program. The journey started on November 8th. 2022, with a one-o ffsession as IIST Happy Campus '22 with Anand Narayan Sir, who is also a well-known singer and TV anchor. It continued further from November 15th, 2022, to November 20th, 2022. None of us had any idea how productive that week would be.

On the first day, we were divided into eight groups with six to seven students in each one. Our group, consisting of Ankit (s), Nupur, Pankaj (s), Parth (vc, s), Shiva Krishna, Vibhum, and me, Zeel (c) was named "Chasing Daggers." On 18th November 2022 we were asked to give something back to society as a part of the 'Make a Difference activity' (or MAD activity) of the Yes! +Program. For this activity, we joined hands with the team named "Baburao Ganpatrao Apte", which consisted of Aditya, Dhairya, Shivani (vc), Shriram (s), Sivaveerakrishnan, Sumati (c) and Suryaprakash. We decided to show our gratitude towards the canteen staff by telling them how much they mean to us.





Hence, we wanted to make gratitude cards in Malayalam that had a special message. But none of us knew Malayalam. So, we asked our Malayali friends. Lisha and Sandra, to help us with these cards. Also, we had to race against time to make 30 to 40 cards in a couple of hours. Therefore, we asked some more friends, Nehal, Lohita, and Shreya, to help us with the decoration. The message that was written in the cards meant. "The hands that feed us are more powerful than idols."

After a few hours of untiring effort, we made 36 cards and gathered in the mess. We distributed cards and chocolates to everyone.



The reactions and responses we witnessed on everyone's faces were something to be remembered for a lifetime. The canteen chettans and chechis were so happy to receive feedback for the hard work they put in for us each day. They said they have been serving food at IIST since the first batch, but we were the first ones to express our gratitude.



As a gift from the staff, we received watermelon cuts too. We also decided to thank them every time we received food from them. All in all, we had a memorable experience and understood what gratitude means and how it could change our feelings. Their smiles are something that will remain etched in our hearts forever.

Codes:

s-Senior

c - Captain

vc-vice-captain





चार अक्षरों से बना शब्द ये, अर्थ महत्व जानते हो क्या? लाख कष्ट दर्द सहे जिसने, उसे अंदर से पहचानते हो ना।

कितनी पीड़ा सही पिता ने, रात दिन एक किया जिस किसी ने, खुद खाया- पिया भले हो ना हो, पर परिवार,बच्चों के पेट भरे उसने।

माना कि मां ने जन्म दिया, अपार प्रसव पीड़ा का बोझ सहा। किन्तु पिता का योगदान ना भूलना तुम, जिसने तुम्हें खुद का रक्त दिया। स्वयं कंटीले पथ पर चला, खून पसीने का योगदान दिया, ना आने दिए चेहरे पर शिकन, भले ही उसका लहू रिसता रहा।

क्या तारीफ करूं इस योद्धा की, शब्द भी तो कम पड़ जाते हैं। लोग गाते गुण कलाकारों के, हमारे तो ये ही सितारे हैं।

क्या हुआ अगर एक छोटी सी बात हुई तो, बात तो बात, डांट की अपवाद हुई जो, याद रखना बुरा नहीं सोचेंगे, हर डांट में छुपी आशीर्वाद है वो।

खुशनसीब हैं वो जिनके पिता साथ हैं, सेना के जवान, चिकित्सक या फिर किसान हैं, हिम्मत देना, ढाढस बांधना बच्चों का, यही तो किया उन्होंने जीवन भर हर साल है।

चलो मिल कर धन्यवाद करें, भले आज हो ना हो कोई खास वजह, दिखाई उन की राह पर चलें, पुण्यफल आत्मा के भागी हम बनें।



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# Water colour





# Water colour







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Jeje and Kalyani

My two pets -Jojo and Kalyani are of the French Bull Dog breed, and they always give me unconditional love and kept me in a pleasant mode all through everyday activities. Jojo is a one-year-old naughty and playful puppy and Kalyani is an eight-year-old female dog. Before Jojo's arrival, Kalyani was playing alone and guarding us with her smart look and unconditional loving tactics. This is a small incident that testimonies the intrinsic healing power of emotional happiness, it shows how the internal happiness of an individual will cure one'sillness automatically.

I used to take Kalyani for an evening walk, twice or thrice a week. She used to wait for this moment everyday evening and will enjoy it a lot by observing and interacting with others and capturing new smells other than from our own house.

One day she got dog bites, on two prominently noticeable areas, from another street dog during the walk. Immediately, she got treatment from Pet Life Veterinary Clinic, run by my husband- Dr. Sunil, by shaving those areas, cleansing them with a solution, and applying certain creams. This treatment process was done for three days and the wounds were cured perfectly.

After that treatment, I was curious about the hair growth in those areas, because those spots on her body gave her a weird look and somewhat it reduced her smartness. Not a single hair was grown on those spots even after so many days and months. For almost nine months those spots looked like scars on her body and were a topic of conversation to every guest who was visiting us on those days. Dr. Sunil had no answer to my repeated complaints and questions regarding this as he didn't have this kind of experience with other patients earlier.



JOJO



**KALYANI** 

In between Kalyani had surgery to remove her uterus due to tumor growth. We felt very sad that Kalyanidid not have any kids till then and had no chance of having them in the future. To alleviate her pain and agony, we thought of gifting her a puppy. That was how we introduced the two-month male puppy lojo to her.

From that moment we saw a new Kalyani with extra energy, enthusiasm, and love playing with him. And most importantly she took care of him as a mother. After one week, I noticed that those dog bite spots became undetected slowly by growing hairs. Within two weeks, surprisingly lots of new hairs had grown in those spots and had covered the entire area beautifully. Kalyani's maternal instincts made her happy and it gave the stimulus to cure her prolonged issue. Finally, this was well accepted by Dr. Sunil and now it has become yet another golden reference to his line of treatments for his patients.

So, "Be happy with our sweet responsibilities and enjoy life as it is."

Now, Kalyani turned into a bold and beautiful responsible mother for Jojo. Also, she is enjoying her parenthood by managing the naughty Jojo.





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# <u>മുഖംമൂടി</u>കൾ

മുഖങ്ങൾ തൂങ്ങിയാടുന്ന ചിലന്തിവലകൾ മുൻപരിചയങ്ങൾ തിരയുന്ന ഞാൻ മുഖമറിയാതെ, മുഖമില്ലാതെ വരിഞ്ഞുകെട്ടാനടുക്കുന്ന ചിലന്തികൾ പരിചയം നടിക്കുന്ന ഭാവങ്ങൾ ചുറ്റിലും അഹന്തയും പുച്ഛവും വരിഞ്ഞു മുറുകുന്നു ഒളിച്ചു കളിക്കുന്ന മാളത്തിലിപ്പോഴും മുഖം നഷ്ടപ്പെട്ട ഓർമ്മകൾ തിരയുന്ന ഞാന് മുഖങ്ങളിൽ തട്ടിത്തടഞ്ഞ്, മുഖമില്ലാതെ ഞാൻ



### സ്മൃതിപയം

പിശകുപറ്റിയ ഓർമ്മകൾ ഒഴിഞ്ഞ ക്ലാസ്മുറി ഉത്തരമില്ലാത്ത ചോദ്യമായി ബെഞ്ചിന്റെ മുകളിൽ ഞാൻ അകത്ത്: ലജ്ജ; അമർഷം; ഗദ്ഗദം മങ്ങിയ കണ്ണുകൾ; ചോക്കിന്റെ ഗന്ധം കറുത്ത ബോർഡും, കോറിയ വരകളും വാക്കുകൾ മറന്ന മനസ് തറയിൽ ചിതറിയ ഓർമ്മകൾ പുറത്ത്: പോക്കുവെയിൽ; പൊടിക്കാറ്റ്



### <u> വേൾപാട്</u>

ഇന്നലെകളിലെ മൗനം ഇറുക്കിക്കെട്ടിയ മടിക്കുത്തഴിച്ച് നെടുവീർഷോടെ കടന്നുപോയി നഷ്ടപ്പെടലിന്റെ തുലാവർഷം മടിക്കനമില്ലാത്ത കരിയില പറന്നുയർന്നപ്പോൾ പരതിയോ കഥകളിലെ മൺകട്ടയെ. തുലാവർഷം പിടിമുറുക്കുമ്പോൾ ഘനമില്ലാതെ, ദിശയറിയാതെ; ഞാൻ





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# An intriguing conversation with Dr. K. Venkateswaran



A senior scientist at NASA visited IIST and had a resourceful session with the students on 23rd November 2022.

Dr. K. Venkateswaran is an eminent scientist from India who pursues research in NASA, and the session was truly an inspiration for the students. Besides being a notable astrobiologist Dr. Kasthuri Venkateswaran is a man who observes and holds strong opinions about the socio-political and cultural scenario in India. His ambition was to pursue the medical profession however, the corruption and political turmoil during the early 1970s became a hindrance to getting admission in a medical college though he had secured good marks. Then, he chose Biology for his higher studies and got fascinated with Marine biology, and did his doctoral research in the same.

Dr.Venkateswaran notes that microbes are a very fascinating subject since we cannot see them with our naked eyes but when we put a drop of water under a microscope, we see a lot of things moving around. The fact that

what we are drinking is not pure, there are plenty of tiny organisms both good and bad kindled an interest to research them. It was from this point he started working on microbial detection and did his doctoral research on how microbes cycle the phosphorus in the environment. The next research project was food pathogen detection which fetched him another Ph. D. in food microbiology. As he comments, working on microbial detection is like Sherlock Holm's story, identifying the microbes and understanding their functions. Later he started studying the role of microbes in oil degradation and also worked on food processing, identifying pathogens in food. He later continued his work on microbial detection in harsh environments like the deep sea. He also pursued research in life on other planets, and astrobiology.

NASA's research projects always rewrite textbooks. On talking about the research that has the potential to change the text

books of the children tomorrow, Dr. Venkateswaran remarks that in the taxonomy of life that we still teach today, we classify organisms into kingdoms and the research has shown that it is wrong. Instead what we have is the domain - Bacteria, Archaea and Eukarva. Before the formation of nucleus it is called the prokaryotes and after the formation of nucleus, Eukaryotes. In the 1960s, the domain called Archaea was found and still it is not widely taught in textbooks. Kingdom is the term to differentiate between things that we can see, Domain denotes the range of organisms which cannot be seen with our naked eye. This is one of the major findings that literally rewrite the textbooks.

Considering Indian science, we might think that in the pre-independence era, India had a lot of scientists who even the common public knew by name, like C. V. Raman, J. C. Bose, Meghnad Saha, and so on, but in a post-independence scenario we do not see many noticeable names in the list. Talking about this topic, Dr. Venkateswaran remarked that during the pre-

independence era, the people did not have access to education as we see today. In those days, many people were illiterate and people like C. V. Raman were few. Now the situation has changed, we have plenty of educated bright minds in our country. A lot of people are pursuing research in various fields. However, there is a brain- drain happening. Our country is losing a lot of people who are supposed to be working here. While considering this fact, India is not equipped enough to bring out the bright minds in our country. He also commented

that politicians should have a basic academic qualification to be eligible to rule the country and the president or the prime minister should not run for more than two terms. What we lack is visionary statesmen like Dr. APJ Abdul Kalam. In the current political context, today's thug is tomorrow's politician. This situation has to change.

His advice to the students and young researchers was to try to learn from the competitors instead of considering them as enemies. Listen to people and accept what is good in them. To improve the academic and scientific terrain of our country, we have to learn from other's mistakes, since India is a 75 years young country, things might take time to achieve but to get things done quickly, we have to act intelligently learning from the drawbacks.



Dr. Kasthuri Venkateswaran is the Senior Research Scientist at NASA-Jet Propulsion Laboratory and supports Biotechnology and Planetary Protection Group. His 42+ years of research encompass marine, food, and environmental microbiology. He is also leading ISS "Microbial Observatory" projects to measure microorganisms associated with the U.S. nodes, as well as Kibo Japanese Experiment Modules.



# Memorable

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## **Delicacies**

Having traveled extensively across India and savored local cuisines that have made a lasting impact and the memory of delicacies would arouse the taste buds again; I found it prudent to reminisce and reflect on those great moments.

Indian food has a wide variety of regional and traditional cuisines because of the diversity in culture, climate, soil, and ethnic groups and the local availability of spices, herbs, vegetables, and fruits. Today, if you scan YouTube you will find a number of food connoisseurs who have uploaded their experiences and a lot of mouth-watering new recipes that show how much importance they have attached to the delicious food that pampers our taste buds.

This incident dates back more than three decades; I had traveled to Delhi by train and joined a wedding party of my colleague. All of us together traveled by bus to Dehradun. It was about 1'o clock noon and we were somewhere midway to Dehradun, desperately looking for a good lunch. Our bus stopped at a dhaba on the outskirts of Muzaffarnagar. I was amazed at the service and hospitality as we were given warm water to wash our hands and were offered Roti and Dal makhani, the taste made us feel it was heavenly food. Today I am not very precise as to what made us feel that way,

the ambiance and of course the preparation of food. The butter was slowly melting in the bowl of Dal that was spiced adequately and the crisp rotis simply took us to another world.



One evening we boarded a bus from Nathdwara a temple town in Rajasthan famous for Shrinathji mandir to Agra and happened to stop over at Bhilwara for some time. We noticed a guy selling fruit beer and ordered for three of us. The thick milk was lavishly filled with dry fruits like Cashews, almonds, raisins, dates, cherries, and walnut. We were pleasantly surprised to find such a nutritional drink at the most affordable price.

While holidaying in Himachal Pradesh, in the early morning we started from Mcleodgunj to Khajjiar, a place known as the Switzerland of India. We were traveling along the course of River Ravi and there was place, where a number of tourist vehicles had stopped. We got out of the car to have very spicy and hot Samosas right from the frying pan along with mint chutney. I am not sure if it was the water of the place or the wheat flour and vegetable stuffing inside the samosa that made the taste indescribably superb.



Down south Tamil Nadu is known for strong flavors and highly spicy food that is very particular to the region. I have traveled several times to Pondicherry on official visits and I am particularly fond of three different types of Chutneys served along with Idli and vada. I am also impressed by the Bonda-soup combination with chopped coriander leaves and onion topping. In Kanchipuram, rice is served with many accompaniments, each one of them tasting different because of the mix of spices and herbs. Kozhombu is one of the spicy sambhars served with rice.

In Kerala vegetarian food mainly consists of rice and an assortment of stir-fried vegetable curries dominated by coconut grating. Onam sadhya is a feast for food lovers. Payasam in any part of Kerala is distinct with the aroma, and the very special jaggery and tastes superb. There are some varieties like pal payasam, vermicelli payasam, pradhaman, jack fruit payasam, etc.





Being a major region of spice cultivation, the spices like black pepper, cardamom, clove, ginger, cumin, and cinnamon find extensive use in Kerala cuisine. When you are in Kerala please enjoy appam and halwa made of banana, rice, wheat, etc.



Udupi, in coastal Karnataka, is known to have produced great cooks and has a history of more than 700 years since when Shri Madhwachayra, the proponent of Dvaitha philosophy brought the idol of Krishna from the shores of the Arabian Sea and installed in the temple.

While I was studying in Surathkal, and my wife and I happened to go to Udupi which is about 50 Kilometres from Surathkal. We were inside the temple by around 12.00 noon, had the darshan of Lord Krishna, and proceeded for lunch. This was during the Navaratri period and lunch had so many dishes apart from four sweets. Traditional south Indian lunch consists of Mango pickle, chutney, Moong dal kosumbari, beans palya, Bendi raitha, etc served on a plantain leaf. Rice is served with three to four accompaniments like sambhar essentially made of ash gourd, majjige huli, Gojju, and rasam.Gojju is a kind of syrup made with locally available black jaggery, dry chili powder, tamarind, and some unknown ingredients. I have found this to stimulate some of the glands in the body that were dormant for years!



Traditional north Karnataka meal consists of jolada (Sorghum) rotti, ennegayi (stuffed brinjal), shenga hindi (ground nut with garlic & red chili powder), and curds.

We were on a visit to Kashmir on LTC and stayed in a hotel in Srinagar. Dinner at the hotel mainly consisted of long-grain aromatic basmati rice, dal tadka, and veggies. The hotel staff told us that they welcome their guests with rice at the dining table. The boathouse on Dal lake dinner had some of the best delicacies, particularly potato curry tasted so delectable.

There is a place called Haldi chappra about 50 kilometers from Patna in Bihar where three major rivers meet, namely the Holy Ganga, Sarayu, and River Son coming from south. A nearby town is called Maner and mothi chur laddu is most popular here mainly because of the sweet water from the Son river. We happened to visit the place and relished hot Jalebi's freshly prepared on the banks of rivers. Khaja is another dish that we tasted on the way to Rajgir from Nalanda in Bihar.



Though Litti chokha is a dish from Bihar we happened to savour this in Banaras. Litti is prepared with varieties of fillings like paneer, vegetable, etc. It was gastronomically delightful to have food at Litti chokha restaurant in Banaras.

Banaras is also known for its varieties of sweets and you will find a number of sweet shops in the city. My understanding is that sugarcane is a major crop in Uttar Pradesh and Bihar and that could be one of the reasons to find lots of sweet dishes. Puri and subzi or choley are sold in the narrow

bylanes of Kashi. This is the most common breakfast dish.

Dal Bafla is a dish for the meal; we tried it in Indore consisting of steamed and grilled wheat balls dunked in ghee eaten with dal and found this to be too heavy on the stomach.

Food in Maharashtra needs a special mention because of an extensive balance of many different tastes. Mumbai is well known for the chats like pani puri, bhel puri, and being a diverse commercial capital of India, feeds people from all regions of our country suiting individual tastes.

Kanda Poha and Potato Poha are prepared for breakfast and the Poha is actually the flattened rice softened in water and mixed with spices. Many times I have relished pani puri and pav bhaji in some of the restaurants Jhal muri is a street food in Kolkata and other places in West Bengal that are made of puffed rice, an assortment of spices, and edible oil. This is an anytime snack in Bengal. Shondesh and Rashogolla are made up of sweetened, finely ground fresh cheese.

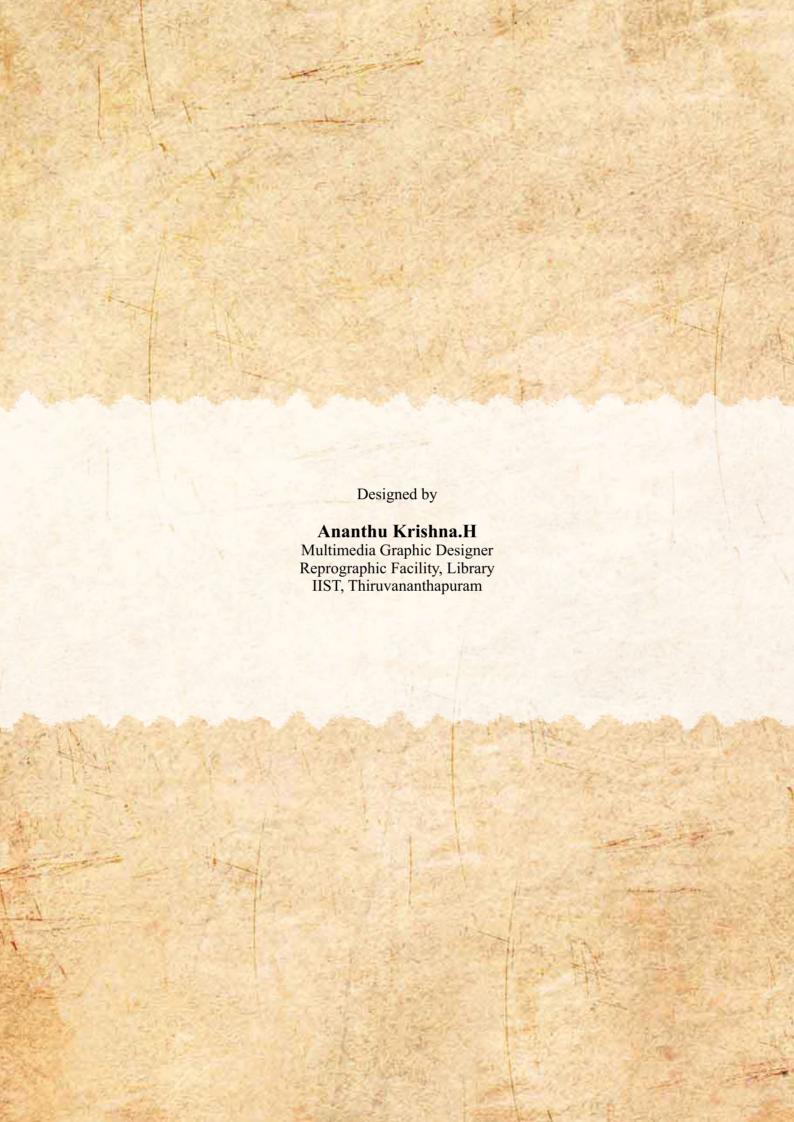
Lastly, to conclude, the list is exhaustive and overwhelming. I have been fortunate enough to have traveled across the length and breadth of the country and I would say be it Amritsari pyaz kulcha and lassi in the west or Jhal muri andshondesh in the east and Kozhulmbu in southern Tamil Nadu and delectable potato curry in the boat house of Dal lake, India with her diverse culture and vast geographical landscape is a paradise for food lovers.



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# Painting





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भारतीय अंतरिक्ष विज्ञान एवं प्रौद्योगिकी संस्थान की अर्धवार्षिक पत्रिका

सुरिभः कला साहित्य पित्रका भारतीय अंतिरक्ष विज्ञान एवं प्रौद्योगिकी संस्थान द्वारा प्रकाशित अर्धवार्षिक पित्रका है जिसमें कलाकृतियों एवं सर्गात्मक रचनाओं का प्रकाशन किया जाता है जैसे — कहानियाँ, कविताएँ, अनुस्मरण, फिल्मों एवं पुस्तकों की समीक्षाएं, यात्रा विवरण, भेंट वार्ताएँ, रिपोर्टं, आरेख, छाया चित्र, वैज्ञानिक साहित्य, पेन्सिल ड्रॉइंग, चित्ररचनाएं आदि । अंतिरक्ष विभाग के विविध केंद्रों के लोगों की सर्गात्मक प्रतिभा को प्रोत्साहन देने में यह प्रत्रिका विशेष रुचि रखती है। इस पित्रका में अंग्रेजी, हिंदी एवं भारत की किसी भाषा की रचनाएँ शामिल की जाती हैं। पित्रका में प्रकाशन के लिए उपर्युक्त प्रकार की रचनाएं आमंत्रित की जाती हैं।

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