

VOL-19

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Over the past few years apathy regarding CAMPASTIMES has increased as fast as its quality has declined. Interest in and enthusiasm for its continuance has touched rock bottom - indeed it cannot go down any further. When we went around soliciting articles, we were always faced by the reply, "Campastimes! Is it still alive?" It is very nearly true. Campastimes is in its death throes. We are hoping to improve this dismal conception and possibly resurrect the magazine. As we have found out, it has not been an easy task this far.

We assumed our posts extremely late, uncomfortably close to the end of the semester. The extreme academic pressure at the end of the semester has attempted to preclude our total involvement in our work and has in fact succeeded in doing so to some extent. In this connection we owe our full gratitude to Dr.V.Radhaxrishnan, our publisher. Without his encouragement and support this issue could not have existed even on paper.

For the first time a new process of production has been tried out. The scope for elegance in presentation has been definitely limited. However, we felt that the quality of the reading matter was more important and this we have done our best to improve. We will not voice the familiar complaint that the articles were too few. After the initial static friction, contributions started arriving until we were able to select and publish from them. This is a healthy trend. We hope that more and varied contributions will be forthcoming for the future issues. Nevertheless there is no need for complacency. We may have made a beginning, we do not know. If we have, it is upto all of us to see that this small enthusiasm is not frittered away.

We welcome suggestions and criticisms from all of you about the nature of CAMPASTIMES and its other details.

- EDITORS





(CAMPASTIMES is glad to announce a new serial by natural historian Mr.Hairy Pillar.

Mr.Hairy Pillar needs no introduction to the readers of Hindian Express).

Long back in the periolithic age, when the great dirosaurus ruled over this land, there were large number of species thriving in the dense tropical jungles of IITM. With the cutting of a large number of trees & bushes for parking lots etc. the number of species in IITM jungles is slowly decreasing. Many of them are on the verge of extinction.

"CAMPUSTIMUS" is a very rarely seen species now. Even the older ones of this species are sighted very rarely on windows. The gymkhana too does not have this species any more, it seems this particular variety does not breed in captivity.

EVOLUTION OF CAMPUSTIMUS

One of the earliest varieties of Dirosaurus was Profu. Cynicus Gupto. This Diro. ordered one of its clan members Nicolaus Kleinica (generally known as Nirmalica Kleinica) to evolve by adaptation, mutation or otherwise a new species belonging to the genus 'Campus papyrus' on or before 15th Aug. 1962 A.P. (After Periolithic age).

Nicolaus Klein's properties of quick adaptability are well-known (If you don't know, read footnotes). N.Klein's excellent mutation & adaptation characteristics helped a great deal in evolving the new species. The procedure followed was simple. N.Kleinica subjected the latent potential in the general population to a heavy dose of inspirays in his Germanotron.

The new species was evolved quicker than expected. This left the Institute taxonomists at a loss for a specific name. Once again N.Kleinica subjected the general population to a heavy dose of inspirays (300 Kuries) and the name 'CAMPUSTIMUS' was officially chosen. Campustimus seems to have been a domesticated species, occasionally it did escape to the wilderness.

SYMBIOTIC RELATIONSHIP: 'Campustimus' developed a symbiotic relationship with another species called 'Publisherica IITCa' (common name: 'Publisher'). There were different varieties of 'Publisherica IITCa', some helped 'Campustimus', others were indifferent.

The path to extinction: It is an inexplicable fact that the fertile jungles of IITM made 'Campustimus' sterile. Every year Publisher & Editoricus had to get together and coerce the local population to bring forth new issues of 'Campustimus' and this was a laborious process. As days passed by the local population grew immune to all appeals and 'Campustimus' appeared very rarely; it retreated into the jungles. If you sight any 'Campustimus' please telephone me,GOD(327)

Save your wildlife Save 'Campustimus'

Editors' note: Feed 'Campustimus'. Give your contributions to Hairy Pillar who has the largest collection of 'Campustimus'.

HIGGLEDY PIGGLEDY Dr. M.ANTHONY REDDY

Hearken to this official proclamation:
No special day is today for our nation,
And so, to honour this, have we this day
Declared henceforth No-Special-Feastday Holiday!

Not a particularly good translation, but at least it captures something of the flavour of the original by Christian Morgenstern, a humorist and minor poet, whom the unending procession of holidays in the Germany of his time annoyed as much as it does me in the India of mine. A day or two off every ten years or so is a very good thing, and in fact even a must for everybody, but what we have here is quite unreasonable. How, one wonders, is a subject to be properly taught, when hour after precious hour of lecture-time is lost because every second day is a holiday. One foams at the mouth over this, but, accepting what cannot be changed, spends these days-off getting to know such worthies as Morgenstern, to discover whom one would otherwise never have found the time. The holidays one hates afford one the leisure to stumble on obscure verse poking fun at endless holidays!

Another holiday-discovery I'd recommend is the Devil's Dictionary of Ambrose Bierce. Specimen definitions: Saint - a dead sinner, edited and revised; Air - a gaseous substance abundantly created by Providence for the sustenance of the poor. Nor can I pass on without mentioning H.L.Mencken. "When the Pilgrim Fathers landed in America, they fell first on their knees and then on the natives!" Such is the man in good form.

I am very serious about humour, but that's not all I read. Smiley, I notice, has finally triumphed, Karla of Moscow Centre is at last tumbled, forced to cross over to the West and give himself up to British Intelligence. Smiley's lever is Karla's love for the troubled daughter he has had secretly admitted to an institution in Switzerland for the

mentally afflicted. This is the substance of 'Smiley's People', John Le Carre's recent book, which leaves George Smiley with nothing more to achieve. One hopes nevertheless that this is not the last we shall hear of him. Le Carre is very readable, and George Smiley appealing because of all the things he is not. He is not young and handsome, he is not a firm believer in the absolute rightness of his own side, he is not a winner in personal life.

Not by reading satire and humour and spy-stories alone, however, does one become worthy of admission to the Kingdom of Heaven. For this one needs to have made the acquaintance of a few major poets, persons who sing of things that are not of the passing hour. A favourite, as far as I am concerned, is Yeats. Approaching forty, I have not received advice from any living friend, so gloriously worded as this from a man several decades dead:

No longer in Lethean foliage caught
Begin the preparation for your death
And from the fortieth winter by that thought
Test every work of intellect or faith,
And everything that your own hands have wrought,
And call those works extravagance of breath
That are not suited for such men as come
Proud, open-eyed and laughing to the tomb.

I recall speaking in an earlier issue of Campastimes of fishkeeping as an easy and very beautiful way of bringing a touch of nature into our homes. Taking up this thread again I'd like to talk now of a particular species of fish: Paracheirodon Innesi as the ichthyologists call it, or, if one prefers the popular name, the neontetra. Among fresh water fish the characin family, distributed over South America and Africa, contains some of the most colourful species and of these the neon-tetra is undoubtedly one of the most beautiful. This is an inch-long fish found in Peru and Brazil in tributaries of the Amazon, slender and pleasingly shaped, with an intensely iridescent blue stripe from eye to tail set off by a very bright red on the body below the stripe. The effect produced is not easily described, and has to be seen to be believed. To me this is not merely a fish. It is a lesson. With a spare body because it eats very little, it has such an intense glow as to be almost not of this world. Which is what we are expected to become, at the highest level of development: simple in our wants, with no superfluous flesh, and with the life of the spirit shining in us. There is a sermon in everything, if we keep our eyes open.

I have a large school of these little jewels: around a hundred of them in a big tank with attractive water-plants painstakingly arranged so that the fish are displayed as they should be. A group of this size in an environment so lovely is not an everyday sight. Anyone who is drawn to the glory of living things is welcome to visit me any evening. He will see something memorable.

Keeping creatures of such great beauty alive and healthy requires not merely the willingness to do the associated work but also a certain amount of gadgetry: filter-systems, aerator-pumps, special lights to stimulate water-plants to luxuriant growth. All these I owe to former students now in the United States. I'd like to acknowledge here their helpfulness and generosity. Trying to do one's job as a teacher conscientiously sometimes brings rewards more tangible than just the awareness of having done one's duty.

Year after year a large number of our best students leave the country for higher study in the United States. This is as it should be, because a stay abroad of a few years, at a university of a quality not found in India, is beneficial not merely from the narrow viewpoint of acquiring a finish in a particular branch of technology or science. What is not as it should be is that few of these students seem to return. Of late the subjected has cropped up frequently in private discussion. It may not be out of place to talk of it publicly here.

It is not hard to understand why, after finishing the necessary stint of graduate-study there, many of our best brains choose to stay on in faculty-positions at universities in the United States rather than come back to India. Conditions for advanced study and research are better there, and one has a much greater chance of doing creative, ego-satisfying work in one's field. Life in general is more comfortable there, and, which must be an important factor to quite a few, the pay is better and a life-style can be maintained which would be impossible in India. The decision to stay on is comprehensible. As to whether it is ethical is another question.

Our universities are in bad shape. It is up to the most gifted among us to return, after the necessary advanced education abroad, and make a beginning with the job of improving standards in our particular subjects. If the best choose to stay out of the country, this important task will be left to the mediocre remaining, there will be no improvement in the quality of education, and the youngsters of tomorrow will get no better

a deal at our universities and institutes of technology than those of today. Returning and taking on the difficult problem of introducing quality into education and training at the higher levels, is in fact a debt of gratitude owed the country.

In the IIT's, India has for its part given, in spite of its poverty, the best it could, asking very low fees from the students themselves and generously shouldering the huge costs of running these places. Having paid virtually nothing for the privilege, students finishing from these IIT's have doors open to them, which are firmly closed to the average Indian. These institutes and their cost to the country can be justified only if the most intelligent students they turn out are not forgetful of what they owe, and in turn give of themselves and their gifts for the general toning up of higher education in the country. If they do no such thing, and, instead, remain on in the United States, what it amounts to is that this poor land has given them virtually free a huge headstart it cannot give to most others, and the ultimate beneficiaries are the United States, which has only provided the finishing touches, and the individuals themselves, who have used the generous headstart and the preferential treatment given them in the formative stages for purely self-serving ends. Such a state of affairs should not be.

I do realize however that one cannot generalize. A person staying on abroad after finishing his formal higher study at the university of his choice, is not necessarily an ungrateful, unethical individual. It sometimes happens that following an intense personal interest, a person winds up a specialist in a branch of technology which has no relevance to India. He would find no job-openings here. Sometimes an individual returning can find no place in any institute or university because all faculty-positions happen at the time to be filled. Sometimes, having returned and joined up in one place or the other, he is virtually forced to resign and go back abroad by the downright persecution unleashed on him by envious, petty-minded superiors. Even a man in such a situation has however the duty to ask himself what his education, up to the point to which this country took him, would have cost it, and, treating the sum as a bank-loan, add on to it suitable interest and repay the amount to the land by using it to help some underprivileged people here improve their lot in life. Action of this sort would go a long way in reconciling one also to those who, without compelling reasons of the sort I've just mentioned, stay on in the United States. If they did this much at least, they would have repaid what the country spent on them.

Let me end this session where I began it, talking of reading. Every time I enter a large library I am filled with a sense of unease: so many books, and I've read, and can read in the time left to me, no more than a vanishingly small fraction of them. One could go into a state of panic over this, but glory be to Allah for the balance and perspective provided by comic verse! To face the flood of print more or less unshaken I've found an excellent stabilizer,

For years a secret shame disturbed my peace: I'd not read Eliot, Auden, and Macniece; But now another thought fills me with hope: Neither had Shakespeare, Milton, and Pope.

LOKUS FOKUS

It was an Anti-Disaster (cyclone, floods etc.) management day at IIT. The institutionalised Jeremiahs of India were sitting, with 'doom' in their lips and a smile on their faces while their eyes had none of that awed expectancy that could be termed ante-diluvian. It was indeed an elite society; the poised IAS community, the exquisitely erect IPSes, a sprinkling of environmental scientists and management experts and an omniscient foreigner whose words safely rolled off into the note book that the other man carried with him. One was dying to see a quiver of apprehension but there was none. It was just a convocation of the different birds of paradise that chose to perch on the earth for a little while.

Squalor at a distance certainly has its charms; poverty in particular is a delightful topic for cerebration and theorization. It was not surprising that an eminent Economics expert arrived at the scene of lecture in a perfectly smooth car and chose to expatiate on his pet theories while an equally leisurely audience listened to him with rapt attention. One was led to think that it was not poverty but an appreciation of the divergent theories of poverty that was of consequence.

Society at any time consists of a number of confusing ingredients. For instance, a single movement called 'Antidisestablishmentarianism' would have created unprecedented heterogeneity in the European society of those times. There were, of course, the proponents and exponents of the two movements, viz., 'Antidisestablishmentarianism' (A.D.E) and 'Disestablishmentarianism' (D.E) and this already accounts for four classes. One should also reckon with the existence of the opponents of each movement; while this takes care of the more radical type,

it is not difficult to imagine that not all the remnant 'establishmentarian' malcontents would have spilled over to 'A.D.E' when the latter was resurgent and this would have led to a further division of classes.Of course,no mode of existence would have been possible if one did not jump on to one bandwagon or another.

One could, without sounding presumptuous, rename U.S.A. as 'Uncle Sam's Avenues'. Uncle Sam is a modern and somewhat inverted version of the hoary, frost-bitten and benign Santa Claus. Santa Claus, one remembers, sneaks into a house thro' the chimney top and leaves a'Jack-inthe-box' surprise for the sleeping children. But poor (?) Uncle Sam is indeed intruded upon; one barges into his bedroom in an undignified fashion, wakes him up and proceeds to wheedle him out of his gifts, This is especially true of Indian students and the genre commands a good population in III's. It is said that a man who simply' bums' around here; slogs out his private parts' and 'works like a bull' when he goes to U.S.A. The point is that if Ivor Brown were to compile a book called 'Gobbledygook-IITian style', he would certainly prefer a 'bullock' in the place of a 'bull', since this would be more consistent with the import of the other statements.

By the way, one feels that John Bull is still something of a martinet. He is more jealous of gifts than Uncle Sam can ever hope to be.

It is always convenient to dismiss a certain threat as the proverbial 'paper tiger' But there is nothing more terrible than when a rhyme or just the lack of it becomes a piercing reality. Ben Johnson and John Sylvester were quipping at each other through poetry John Sylvester wrote to Ben Johnson the following couplet.

'I , John Sylvester Lay with your sister'

Johnson wrote back.

'I, Ben Johnson

Lay with your wife'

John Sylvester thought that he had got the better of Ben Johnson and triumphantly beamed at him when they met after some time.

'Johnson, what you have written is no rhyme'.

A calm Johnson told him,

'Dear friend, I agree it is no rhyme, but it is true.

Perhaps simplicity is man's most exaggerated posture. To keep it up, requires that man compromises his elastic limits. The bearded convenor Manu , convenor of the constitution committee should have provided certain 'ceremonial' clauses in the constitution. At least a flowing robe, deeply hued, would be in order for a councillor to wear as an official vestment. It is a sense of personal importance that makes a man look sombre and dignified. Such members of the SAC who presently belong to the noble school of 'Absenteeism'would attend more meetings as they would have something nobler to do.— discussing something of public importance in a frilly apparel rubbing against their sides. It is good to remember that love takes on its romantic colours only when a 'snipped taffeta' man kisses the delicate, perfumed hand of an exquisitely brocaded woman. In their case one would certainly prefer 'their eyes were bejwelledwith tears' to a more plebian 'they cried'.

TOPPER TALKS...



Everybody has heard of the number 1729, popularly known as the Ramanujam number. The property of the above number is that it is the smallest number that can be expressed as the sum of two cubes in two different ways i.e. $1729 = 1^{\circ} + 12^{\circ} = 1^{\circ} + 10^{\circ}$. The gecond Ramanujam number is 4104. $4104 = 2^{\circ} + 16^{\circ} = 9^{\circ} + 15^{\circ}$. The question is are there any numbers that can be expressed as the sum of four cubes in four different ways. The answer is YES. Can you find at least one?

Solution:

A possible answer was contained in the article iteself. Multiply the two Ramanujam numbers 1729 and 4104 to yield 7095816₃ i.g. $1729 \times 4104 = 7095816$. (13+123) (23+163) = 7095816 (13+123) (23+113) = 7095816 (93+103) (23+163) = 7095816 (93+103) (93+163) = 7095816 (93+103) (93+163) = 7095816 Removing the brackets we get $2^3+16^3\pm 24^3+192^3=9^3+15^3+108^3\pm 180^3=18^3+144^3+20^3+160^3=81^3+135^3+90^3+150^3=7095816$ I wonder if 7095816 is the smallest such number. One could use the computer to find that, any way.

Classified Ad

DEPARTMENT OF PHYSICS

Writes to us reporting the discovery and identification of a Quark. The coordinates of this particle are given as 13.2225 N, 83 E.

Exclusive AN INTERVIEW WITH Dr. P.M. BHARGAVA

Dr. P.M. Bhargava, Director of the Regional Research Laboratory at Hyderabad ... had come to our institute to give a talk on 'Recent Excitement in Biology'. It was one of the most brilliant and popular lectures in an extramural series.Dr. Bharqava is one of the top scientists working in our country today and is the most cited Indian Scientist after Bhaba.On behalf of CAMPASTIMES we mot him later that evening. He was very forthcoming and talked with us cheerfully for two and a half hours. We give below, extracts from our chat.

CAMPASTIMES - When did you first develop your interest in Science ? Dr. Bhargava - Oh, I developed my interest since I was very small, a child because I was simply interested in knowing things. And I think all children are born scientists because theywant to know things, ask questions, hear answers -and science is nothing but questions asked and questions answered. C- How did you get your education in science?

B - I did my high school in pure science. I was 12 when I passed my high school exam. -3 years younger than everyone else in my class. I did my Bsc. in science - Maths, Physics and Chemistry. My family wanted me to do my Msc. in Mathematics and become an actuary.But the teaching of mathematics is so dull, or was so dull in my Bsc.as to make it utterly uninteresting to me. In fact my understanding of Mathematics came only twenty years later, when I started reading set theory all by myself. Ithen joined Msc. in Physics- Iliked Physics because it was so concept oriented. But the teaching of Physics was even worse at the University. If I had to memorise every thing, I thought to myself, I might as well do Chemistry.So I changed to Chemistry and ended up doing my Msc. in

C - And then?

B- I did reasonably well. I invented a Chemical reaction that was named after me. I was 21 when I did my PhD. But I found Chemistry very dull-it just wasn't interesting and I decided that I must go back either to physics or biology, which are two areas I've really liked.So I looked for an opportunity and it first came my way in Biology.

C- How did you switch over? B - It was clear that I could not do it here. So I applied for a post-doctoral fellowship outside our country. I was very excited when I got an offer from John Hardleberger. However I decided to be honest and wrote to him saying that I'd never done Biology in my life He replied that it was not important whether I knew anything but what was important waswhether I had the ability

to learn and the desire to learn.

After that I have never looked back I grew up with the whole Biological revolution. Mordern Biology was just beginning. I was exposed to just about the most famous men in the world. So I had the opportunity of getting my doubts sorted out by some of the most brilliant men of this century.

C- Isn't our system of science teaching, rather rigid ?

B- I think it is absolutely rigid. What we don't understand, is that knowledge cannot be compartmentalised. If we do so, it should be for convenience, but that should not be the objective. You see, mo. dern science is all problem ,question oriented and if you are really interested in Science then what you wan't to do is to learn everything that is nece -ssary to answer the question. And today it turns out that all interesting questions that are intellectually exciting

to answer them you must have a multiple background. - at least multiple understanding. It is unimportant wether you have a degreein them , what is important is that you should understand them. C- You've been associated with many biological discoveries - which one of them do you feel is the most important? B- Well, I was associated with the discovery of fluorourosia, which is one of the most important cancer drugs . but that really wasn't my idea. - the idea was somebody else's. There are a lot of exciting things going on in my laboratory right now. As you may remember, last year we discovered the sources of new protiens in seminal fluid. which

was written about in all papers. The whole work on primary cell suspensions statted in my lab and we have already published the first 20 papers on it. C- Do you find any difference in the way research is handled in India and other countries, say the US ? B - There are many differences. If I were to pick out the most important difference, it is that in the US, research is done by competent scientists and in India it is done by incompetent scientists. Of course, there are exceptions. C - What is the reason for this ?

B - Oh, the reason is very simple.

The reason is that university education in India s confined to a very small number of people. Education is the hereditary confine of, in my estimate, only 12 to 20 million people who go upto university while out of the remaining 640 million only about 10,000 are added to this group. So the result is that a lot ofthose who should be in a university are not there, and a lot of those who are there would never be there to compete with those 640 million people. Now you and I have competed with only 20 million people and not with the remaining 640 million, who in the first place don't go to school, and if they do, drop out at class three and then at class five. The result is that a scientific and technological manpower of about 1.5 milliom is derived from a takeoff population of about 12 to 20 million and this rate is the higest in the world. It is roughly 10 -12 times as high as in the USA or the USSR. therefore, you have this tremendous mediocrity. In my estimate, out of every scientists only three should be there.

When we interview students for

Ph. D , we are unable to take more than 2 out of every hundred. But all those people we meject, go elsewhere and get their Ph.D and are now available in the market. Then what happens is what I call the dilution law. If you have 10 good people by themselves and they do 'x' amount of work, in quality and quantity, then if you take 10 good people and 90 bad ones, their total output becomes 'x/10' because the ninety people not only do nothing but prevent the excellence of the 10 people from being used. C- Don't you find that there is a ruthlessness in the way scientists work, especially abroad? B - In a sense what you say is true. Science has also become very professional, in that there is a lot of money in it. Scientists are now one of the most prestigious groups. They travel a lot, do what they like. There are enormous jealousies, intrigues. But all said and done, Science is still the most objective today. C - As a scientist, you critically analyse every aspect of nature. Domin't it lead to a loss of appreciation of some basic human sentiments ? B - Oh no, it is just the opposite. If you look at the Scientists of today, they have a great regard for human values. There is a correlation between a man's excellence as a scientist and his social concern. Everyone of the great Scientists of today, has exhibited his social commitment. It is a genuineconcern, not

that of a politician or businessman, which is pseudo. A good Scientist has a penchant for truth and objectivity. C - Could you tell us something about the great Scientists whom you know well ? B - Well, The two Scientists who have affected me the most are Francis Crick and Jacques Monod. I know them very well, and they have in their way influenced me more than anyone else.Crick was qualified as a Physicist and Monod in The dicine and both won the Nobel Prize in Physiology, separately of course. They are two of the most brilliant men this century has produced and this everyone accepts. I found talking to them extremely stimulating. They are both extremely difficult men to get along with. C- As you go deeper into Science, do you feel the existence of a Supernatural being controlling all existence ? B - Absolutely not. In fact as I go deeper into Science I am more convinued of the opposite. C- But how is it that you perceive order everywhere ? B - I don't. I see lot of disorder. As I mentioned, living systems follow the second law of thermodynamics. We are going into further disorder. C - But as you yourself had said, nature's processes are almost impossible to duplicate. They are done so beautifully. There must be some sort of life force in them. Isn't there something supernatural about this. ? B - Absolutely not. It is true that there are some questions to which Science has not yet given an answer. As of today, the only question to which Scientists have no answer is what happened in the first few seconds of the origin of the Universe, what was before that. Beyond that we have reasonably good answers, to every other question. If you believe in God, then all that you have to say, is that the only time God was active was in those first few seconds. After that he died. After that he had no control as everything happened according to natural laws. C - Is it possible to reconcile a belief in God with the Scientific mind. ? B - Absolutely not. Absolutely impossible. C - So one cannot be a good Scientist and à believer ? B - It is just not possible and is borne out by the fact that over 98% of the worlds top scientists including Nobel Prize winners after 1950, because this confrontation has become direct only since then, are either agnostics er atheists. A hundred years ago, a man could be a true Scientist and a believer, because then Science did not have the answers to many questions. But not now. C - In India, isn't there a high proportion of Scientists who are believers ? B - Therefore the question you should ask is are they really Scientists . My amswer is 'NO'. They merely have a science degree. And having a Science degree doesn't make you a Scientist. Their contributions to Science are also very trivial. Occasionally you find one or two persons who have done very good work in

you know, are merely exceptions to the rule.

Science and who are believers. But those,

- C- What do you think happens after death ? Do organisms disintegrate ?
- B That's it. When I die, I die. Therefore I would like to do whatever I can in this life. I would like to leave things back by which I shall be remembered, be a good manso that people will remember me with affection. That's life and that's the way I would like to live. C - The most competent technological manpower is collected in the IIT's and other sister
- Institutions. From the point of view of our country, it is sad that a large part of them go abroad and do not return. Do you feel that this is due to certain wrong policies of our government, some weaknesses ?
- B I think it is simply because for 95% of those who get out of our universities, their commitment to Science and Technology is very little; they are only interested in making money. This is be ne out by the fact that out of Indian scientists and technologists who go abroad, a very small number ever reach the top. They all simply work as glorified technicians. Their value system is so warped, that I'm frankly not sorry to lose them. The only thing that I'm sorry about is that the government has spent money on them and deprived somebody else. If they would pay back all the money that was spent on them with interest at official interest rates, I would have no regrets excepting for that small number who are really outstanding and that number you can on your fingertips. Out o f 30,000 Indian scientists in the United States, there would be 30 who are really occupying top positions. Those 30, I would like to get back.
- C Would you say this of those who are selected to get into the IIT's that their commitment to Science and Technology is very little ?
- B- I'm afraid so.
- C You did your postdoctoral research abroad. Why did you come back. ?
- B I came back because I just knew that there was no other place that I would like to work in.
- C What do you feel about your visit to IIT . ?
- B Well, I came here because I've never been here before.

One of the great strengths of Institutions outside India is that they have a large number of people who come from outsideto give lectures and they are available to the staff and students for discussions. In fact I was a bit dis.appointed today because, having agreed to come here,

- I feel that , as IIT is paying all my expenses very well, you should make fullest possible use of me. Now I came here at 10. 30 am, in the morning; I made no other commitments as I felt I should be committed to spend all my time at IIT. I was brought here very formally and left here till 3'o clock.
- C And no one came here?
- B No. I would have to talk to you, talk to your colleagues, talk to the staff members at feast to educate myseld if not anything else. This never happens in my lab. It is unimaginable.
- C Incidentally there is a very well equipped Biomedical labotatory here.
- B Look now, dear, but they never said that I should ever go and have a look at it.
- Fortunately I always carry some work with me.
- C Lastly, how would you rate yourself ? Do you feel that you have madea a success of your life?
- B I've enjoyed it. I don't know whether I've made a success of it. It is not for me to say....
- C You should feel whether you've been successful by your standards.
- B I....I.... don't . think it is fair to ask that question. That must be judged by o'ther people depending on what their criteria is .
- C Thank you vey much, Dr. Bhargava. We've really enjoyed this chat.

CLASSIFIED DIVERTISEMENTS

1. Constitutions - All colours available. white, yellow, light blue, red, green. Left and Right also.

GOING 'CHEAP'!!!Special discount for sane senators.

Contact SAD SAC.

2. Department of Chemistry - Wanted research assistants to do further work on the newly discovered reaction :-

> Quick lime + Silver = Quicksilver + lime. _6. <u>SAC</u> - A few positions still available. $CaO + Ag = Hg + Ca(OH)_2$

Contact PJ.

<u>Library</u> - Global tenders invited from interior decorators to redecorate library. Minimum time to do the job - 2 semesters.

Reply within 2 semesters. ****

- 4. Campus News Wanted cheap plastic lens (convex) . Telephone Campus News office before Tuesday next week. ****
- 5. CLT Attention!! Dummy manufacturess. Wanted about 150 realistic dummies(life size), for CLT, to fill back benches every Wednesday.
 - Minimum qualifications
 - a. Voice 60dB.
 - b. Cerebral pressure 0 Torr.
 - c. Max. desirable attendance -25%. ****

A new serial by our aports correspondent SNEAKER

CAMPUS GAMES SNEAKER



Played on the IVth level

PART I - RED TAPE

Recently a secret meeting of all the officials involved with this game was held to modify the rules of the game. The meeting started exactly at 9.00 A.M. All the fourth levellers were present at 8.55 A.M. (This business of coming exactly at 9.00 A.M. was to ensure secrecy).

The agenda of this top secret meeting is reproduced photographically here.

- 1. To discuss & change the rules of the game.
- To consider disciplinary action against a few members found secretly helping our rivals.
- 3. To formulate a new computerised strategy taking into consideration the new rules.

As a result of this meeting an instruction manual was produced for the fourth levellers under the expert guidance of an intellectual bureaucrat.

Selected material is reproduced from the instruction manual.

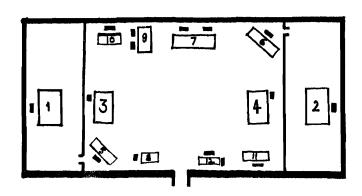
INTRODUCTION:

- 1. You are a part of a team called the IV levellers (fourth levellers)
- 2. The game is played by your team and students on all working days.
- 3. Hours of play:

mours	01	proj.		
9.30	-	11.30	A.M.	Play
11.30	-	11.45	A.M.	Coffee break
11.45	-	12.50		Play
12.50	_	2.10	P.M.	Lunch
2.15	_	3.15	P.M.	Play
3.15	_	3.30	P.M.	Tea
3.40	-	4.45	P.M.	Play
4.45	-	5.00	P.M.	Close Down

The Field:

You as a team member will be required to stay on the field at least for the first 2 hours.



THE POSITIONS:

- 1 & 2: Full Boss (By definition these are very kind and efficient, will help all)
- 3 & 4: Half-Boss:will bark, bite kick, reposition sides strategically around himself for maximum insulation.
- 5 & 6: Right and left sides ~ will prevent all opponents from entering full boss's office.
- 7: Hyper sidee- Strategic position. placed directly opposite to the enemy attack.
- 8: Star sidee apparently helpful to students

Beware! 'all that smiles and grins is not generous'

- 9, 10, 11 & 12: Right and left sides will follow this manual religiously, no special skills, easy to handle.
- HOW TO PLAY: (a) The aim is to kick the opponent out of sight as early as possible. (note: opponent generally enters through the front door, Hyper sidee: be alert, you are our early warning system).
 - (b) No team member, playing or non-playing shall get up from his seat.
 - (c) All team members shall reply not earlier than 5 minutes after students' query.
 - (d) The standard replies shall be (1) 'NO' (2) 'I DON'T KNOW' (3)'GET OUT'(4)'GO TO HIM'
 - (e) The last reply shall be used only after all other tactics fail to kick out an opponent.

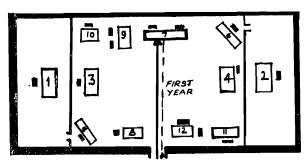
(f) If your opponent comes to you once again classify him as 'dangerous' and signal to others to do following: (1) stop talking (2) wear your protective field outfit.

OUTFIT & MODE of USE: A large number of extra thick files have been specially provided. Bury your head in the nearest extra thick file and (1) stop talking (2) don't look up. Note: If tea is supplied when you are in your battle outfit, it will be kept hot at no extra cost. So don't give up, send your student out first, tea next!

(g) <u>PENALTY CLAUSE</u>: If any team member does not follow any of these instructions, he/she shall be dropped from the windows of the fourth level.

SOME STANDARD TACTICS

The desired path of our opponents are given in the diagram.



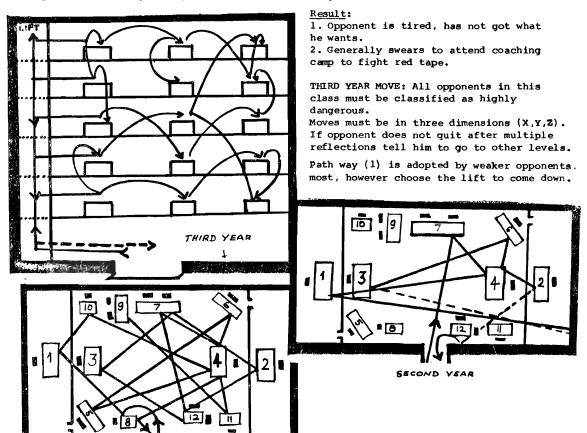
FIRST YEAR: If your opponent is a freshie, his moves are generally these: The half opened front doors send away quite a few. The enterprising ones come in.

Hyper sidee! When you sight a fresher, look up and smile, this is a sure bait, he will come to you. (Angle of incidence = 90°) You can easily kick him out. Send him out atonce (angle of reflection = 90°). Reflection can be achieved by deception (go to II level, sir etc etc.)

SECOND YEAR: Two dimensions only (X,Y) opponent has gained more experience, handle with care, generally Hyper's bait does not work.

Second year chap initially attracted by Hyper's bait but avoids it and goes to others.

Best way to handle is by multiple reflections. Pathway shown below.



FOURTH YEAR MOVE: If your opponent has managed to survive in spite of AD'blocks and bottlenecks, you are not efficient.

Now you better play the game in four dimensions (X,Y,Z,t). You can and should always reply "Not today, come on next Monday".

FINAL YEAR MOVE: The final years we hear, are outwitting us. It is rumoured that they have even converted some team members. They, we are told, have made some of us sympathetic to their cause.

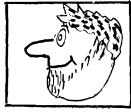
AUTHOR'S NOTE: The final year move was censored in the ADD block to keep up the morale of the team.

All these extracts are from the instruction manual.

Four of the 'fourth levellers' were brought to trial recently for co-operating with the students. The 'gang of four' was sentenced by a people's court to serve a term of three years in the third level.









A [MAMMOTH] FLY IN THE OINTMENT

Since ages, elephants, like library tickets have been put to much misuse. In ancient times, they were drafted into the army and served as armoured carriers while in the present times they are recruited in the lumber trade. Apart from lugging timber around, elephants have also been pressed into service in circuses to give children their money's worth.

But an analysis of man's relationship with this hulk of an animal has been neglected for long. Perhaps one does not find the relationship either inspiring or fascinating. However, a closer look at this situation reveals a very interesting case study for the amateur psychologist.

Considering the success of these creatures in the afore-mentioned professions some people have come up with the question'why not mastadons for modelling?' All those who have seen the imitation elephants at G.C. tend to sympathise with such people. This is a sympathy born out of a sense of horripilation.

Anybody who has had one book at these twin structures has a first-hand experience of what disgust means. It is a cold reminder to us that life is not always a bed of roses. Even from the point of view of elephants, I imagine, they would be feeling what in human terms is referred to as 'righteous indignation'.

Exploiting the animal for physical labour, forcing it to perform undignified antics, and parading it around the streets with a sadistic uncouth lout riding on its back and a throng of urchins shricking and crowding around is, in itself deplorable, but placing grotesque imitations of these creatures at the intersections of roads is the ultimate insult.

The first question that arises in the mind is 'why an elephant'? In fact, why two elephants? why not a brontosaur? a duck-billed platypus? a lizard? or an orange goldfish?

Let us imagine that the man who built these creatures has had a bad deal in life. His resentment is turned against life. What does he do next? He makes a couple of horrendous creatures with their hindquarters turned towards one another and sits back with a smug feeling of just vengeance. What effect does this product on the innocent spectator? Anything ranging from mild distaste to paranoid psychosis.

The more lucky among those who have the misfortune of viewing this abomination suffer nothing worse than a spell of blues for a day or so. Other people of a more sensitive nature may turn hysterical or suffer a nervous breakdown on being assailed by the sight of these grey monsters.

It would not be improper to speculate whether there is some connection between the occurance of traffic accidents at this centre and the presence of these monumental mammals. It is quite possible that motorists and riders of two wheelers, when surprised by the sight of these creatures for the first time may go into a state of shock and shudder all over, thereby losing control.

Diamissing the theory of sadism on the part of the architect as a little far-fetched, an alternative possibility is that the artist was sincerely attempting some sort of symbolism. Perhaps the sculptor imagined that the two elephants symbolised the spirit of I.I.T. In such a case one is far from impressed by the artist's imagination let alone his skill. The elephants would have been symbolic of I.I.T. if at least they had been painted white.

And so one can go on and on. Inevitably, one has to give up all attempts to find reasons at some juncture. Certain things in life, like God's ways, are inscrutable.

ON ETYMOLOGY

RANJIT PADMANARHAN

It is well known that English is the language which has borrowed freely from other languages in the course of its development. This parasitic feature, however, gave English the distinction of being the most interesting language etymologically. Besides, a lot of words were also coined based on historical occurrences. To illustrate these points, a few common words and some not-so-common phrases are enumerated below, with their derivations.

We begin with the word BILLINGSGATE which can be traced back to the site of an old passage through that part of the city wall that protected London on the river side. Billingsgate has been the site of a fish market for many centuries and itsporters and vendors were famous for their foul and abusive language at least three hundred years ago. As a result, the word billingsgate has come to mean coarse, vulgar language laced liberally with obscenities.

Our next word takes us back to the old days of constant travel between England and India by steamship. Passengers travelling by the P. & O. (Peninsula and oriental) liner would, at some cost, book their return passage with the arrangement "Port outward Starboard Homeward", thus avoiding the south facing or sunny side of the vessel when crossing the Indian Ocean. Passages were booked P.O.S.H. accordingly, and POSH soom came to be applied to first class passengers who could afford this luxury, and more recently to mean grand or "swell".

A HAM ACTOR refers to an actor who overacts. The term ultimately derives probably from the fact that in the 19th century, theatrical make-up was removed with the fat of ham chops and came into use through a combination of facts in theatrical history. Hamish McCulloqh (1835 - 85) used to tour Illinois with his own troupe, himself being familiarly known as Ham and his troupe as Ham's actors. In the most popular period of American minstelsy, there was a song "The Hamfat Man", about an inept actor. Such facts, together with the similarity of the word amateur and the tradition that down-at-heel actors had acted Hamlet in better days, apparently accounted for the expression. Hamlet himself, in the speech to the players, describes the essence of ham acting - "to saw the air too much with your hand", to "tear a passion to tatters", and to "strut and bellow". Hamlet, therefore, may be the source of the expression, which may then have an even longer history.

The Augean Stables were the stables of Augeas, the mythological king of Elis, in Greece. In these stables he had kept three thousand oxen and they had not been cleansed for thirty years. One of the labours of Hercules was to cleanse them and he did so in style by causing two rivers to run through them. Hence the phrase to CLEAN THE AUGEAN STABLES refers to the cleaning away of an accumulated mass of corruption, be it moral, religious, physical or legal.

Procrustes, again in Greek legend, was a robber of Attica, who placed all who fell into his hands upon an iron bed. If they were longer than the bed, he cut off the redundant part, if shorter, he stretched them till they fitted it. Fortunately, he was slain by the Greek hero Theseus. Consequently, any attempt to reduce men to one standard, one way of thinking, or one way of acting, is called placing them on PROCRUSTES' BED.

Once again a word of Greek extract, ESOTERIC refers to those within as opposed to exoteric, those without. The term originated with Pythagoras, who stood behind a curtain when he gave his lectures. Those who were allowed to attend his lectures, but not to see his face, he called his exoteric disciples, but those who were allowed to enter his veil, his esoterics. Aristotle adopted the same terms; those who attended his evening lectures, which were of a popular character, he called his exoterics; and those who attended his more abstruse morning lectures his esoterics.

We move on to ancient Rome for the next word, CONTEMPLATE, which means to meditate or reflect upon; to consider attentively. The word takes us back to the ancient Roman Augurs, for the templum (whence our temple) was that part of the heavens which he wished to consult. Baving mentally divided it into two parts from top to bottom, he watched to see what would occur; and this watching of the templum was called contemplating.

Our final phrase is PISO'S JUSTICE which refers to something verbally right but morally wrong. Seneca tells us that Piso condemned a man to death on circumstantial evidence for murder; but when the suspect was at the place of execution, the man supposed to have been murdered appeared. The centurion sent the prisoner to Piso, and explained the case to him; whereupon Piso condemned all three to death. The condemned man was executed because sentence of death had been passed upon him, the senturion because he had disobeyed orders, and the man supposed to have been murdered because he had been the cause of death to two innocent men.

BUCKET'S SPORTFOLIO

DID YOU KNOW THAT

- Majid Khan (the Pakistani test cricketer) make his debut in 1964 as an opening bowler.
 A suspect bowling action ended his career as an opening bowler.
- * At this year's inter-state athletics meet (beld in February at Hissar), the men's 110 m. hurdles was re-run because the distance between the 8th and the 9th hurdles was more than the stipulated 9.1 m.
- * At the 1947 all-England Badminton championships, India's Prakash Nath reached the men's singles final, but lost to Coney Jepson of Sweden. Two Indians, Devinder Mohan and Prakash Nath created a sensation by reaching the quarter-finals of the singles event. Since they were pitted against each other, they decided to spin the coin as they thought it unwise to play against each other. Prakash Nath won the toss and thus entered the semi-final. In the men's doubles (in the same year) Prakash Nath and Devinder Mohan reached the semi-finals where they lost to a Danish pair.
- * Denis Compton, the Enclish test player, figues in a double-century partnership in the Ranji Trophy tournament. Playing for Holkar against Bombay in 1944 45, he added 209 runs for the third wicket with Mushtag Ali.
- * REHANA is the muslim name of Muhammad Ali's wife, Veronica. Ali divorced his second wife Belinda (Khalila was her muslim name) in 1967.
- * The late Nawab of Pataudi (Iftikhar Ali Pataudi) was one of the sixteen players chosen for India's hockey team for the Amsterdam Olympics (1928). He could not make the trip.
- * Canada's Prime Minister Pierre Elliott Trudeau is a brown belt in judo. Trudeau goes skin-diving and skiing whenever he can get away from affairs of the state.
- * The CALCUTTA CUP is the famous international rugby trophy competed for annually by England and Scotland. The trophy, of Indian design, was made from melted down silver rupees, the accumulated funds of the Calcutta Rugby Football Club when it was disbanded in 1978 because of lack of fixtures. It was presented to the Rugby Union that year and was first competed for in 1979.
- * Britain's former conservative Prime Minister Edward Heath, captained his country's yachting team in defence of the Admiral's Cup, in August 1979. A total of nineteen nations challenged the cup.

CONVOCATION '80 G.SHARATH CHANDRA

The rains had been battering the city for several weeks before the Convocation. As the day approached, they showed no signs of abating and it was apprehended that rain would mar the occasion. Alternative arrangements were made to have the Convocation at CLT if this inclemency persisted on 22nd August as well. The day dawned and the sun burst out in full brilliance. As the afternoon wore on, it became relievingly apparent that the XVII Convocation would be held at the CAT after all.

The Convocation is one of our most singular events. Here is fulfilment, solemnity, hope, gaiety and above all a resurrection of faith in achievement. The occasion is managed with all these sentiments mingling harmoniously that one comes away with a sense of satisfaction, a fulfilment similar to that after having witnessed a true work of beauty.

Curiously we have a knock of doing only those things very well to which outsiders are witness.

The sun, partly eclipsed by light clouds, cast a mild golden light on OAT. The faculty in their gowns having assumed their seats on the stage and the graduands to their left, the occasion began reasonbly on time. The seats to the right of the stage were labelled 'GRADUATES', the graduands having to pass through the stage to get there. It was heartwarming to see this loyalty to tradition in a place where sensible sentiments have been discomfited in the name of informality.

As the graduands strode up to receive their degrees, I wondered if most of us were cognisant of the process to which they had consigned themselves and which had tortuously borne them towards their objective. The periodicals and exams they must have faced with palpitating tension, the agonising preparation with the inability to think beyond the morrow, the racking frustrations, fleeting moments of triumph and joy and always a gnawing fear of doing nothing. Is the objective worth all this? I did not ask myself this as the sight of achievement was edifying and awe inspiring enough to snuff out any perversity.

Despite their developed cynicism, the graduands seemed to be fully aware of the honour (no doubt their due) of which they were partaking. Each of them walked carefully and consciously across the stage to receive their degree, measuredly executing the required bows. Several of them were extremely self-conscious-as they embarked on the left side of the stage they mentally marked off the points where they had to bow. They could be seen concentrating on the ground a little ahead of themselves apparently counting the number of steps to go before their next bow.

The Chief Guest gav e an impressive - sounding speech on the development of science and technology and its attendant complications. How the social structure and concern for humanity must be preserved in the wake of scientific growth. But then we hear so many people calkingthe same thing and yet doing nothing about it that we have to suspect ! the sincerity of all of them.

There was high tea on the Guest House lawns for the fresh graduates, faculty and invitees but a number of gatecrashers finished off grub meant for others. The skies, which had allowed the Convocation safe passage, sent down a brief but steady downpour and pushed back Manju Bhargavi's dance at OAT by an hour. Miss Bhargavi, having achieved notoriety through 'Sankarabaranam', naturally attracted a large crowd. Never was OAT so full and never probably will it be again. Not a bit of the galleries could be seen as this human covering completely engulfed them. Uninhibited by this, Miss Bhargavi turned in a classic performance excellently supported by Smt. Varalakshmi, the vocalist.

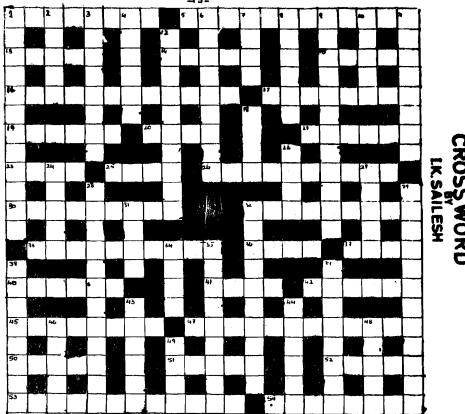
BITTE LISTENEN SIE ! N. ARUNACHALAM



"JUST A MINUTE. BUCKET!"

Here in the campus exists a golden opportunity that should be grabbed with both hands. The German Language Tape Recorder Centre (HSB 348) is open between 9 and 11 A.M. and 2 and 7 P.M. on week days and between 8.30 A.M. and 12.00 Noon on Saturdays and Sundays (other timings are also possible by appointment) for staff and students interested in listening, in a peaceful and air conditioned atmosphere, to German Language tapes, including simple Olympic athletics medal? teaching material for beginners (Familie Baumann Radio series, German taught through English - you can start from scratch) and also for advanced students. Besides the German Language material are also available a few sets of French, Russian and Advanced English 'Linguaphone' records. There are seven tape-recorders and a record-player and a supervisor to help you select the tapes and handle the tape-recorders. Also available is a mini-library, from where you can borrow elementary German books and magazines, once you have begun to understand the language. So come and help yourselves!

- 1. Where were the XII (1940) and the XIII (1944) Olympics scheduled to be held? This year, Evonne Goolagong - Cawley became the second mother to win the women's singles title at Wimbledon. Who was the first? 3. Who is the first black boxer to win the world heavy weight title? 4. What are the three positions in free rifle shooting? 5. Who became the first Ceylonese to win an
 - in the 1948 games. the 400 m hurdles silver 2. Duncan White of Ceylon, who won afanding, kneeling and prone. Jack Johnson. Chambers in 1914. Dorothes Douglas-Lambertreapectively. At Tokyo and Helainki A nawers:



ACROSS

- 1. Neither 35 dn, nor characterised by 28 dn. (8)
- 5. A seafarer on trial produces an unexpected surprise (4,2,3,3)
- 13. Comic tormentor pretending to be a royal herb (5)
- 14. Demosthenes' podium (5)
- 15. Barbecue; stir up for a barbecue (5)
- 16. Violent megalomania's less evident after I, Chappell, fostered this parasite in my posterior (12)
- 17. Assertion to prevent anthropomorphic insertion (8)
- 18. An eager desire is manifest to appease a lolling tongue (6)
- 20. Addle-pated, though headless, gets boxed about the ears (4)
- 21. Sleep lightly 36 ac., save your tail for this fire bomb (6)
- 23. Bonnie wee sweetheart (4)
- 25. The Indian elite is thoroughly confused about Dryden's depiction of the Lord Chancellor(4)
- 26. Religious coiffures, nary a wrinkle, may pass for the customery variety (6.4)
- 30. Impulsive dancing; a natural consequence of spidery company (9)
- 32. Sing on hoarse female (9)
- 33. An attempt to increase granny's indulgence in Mogul fiery is foiled (10)
- 36. Eleemosynary, minus the gobbledygook (4)
- 37. This savant is certainly not purblind (4)
- 40. Tome salvaged from an attempt to concoct avocado pears synthetically (6)
- 41. Here is an 'awning cause to lean (4)
- 42. A piece of land for the local shepherd (6)
- 45. Form of government, though generally out of vogue, is present in this Greek province (8)
- 47. Hark! are unpractical theoriticians propounding a theory in gases? (12)
- 50. Guiseppe Bertolucci! Here is thy mentor (5)
- 51. We are, so it is bruited, a clique of orientals (5)
- 52. Visual entertainments, an added attraction for the poetically inclined (5)
- 53. May be, this will be proclaimed the deca' of the derivative (12)
- 54. Zhao Zhiyang used to have a long silky coat (8)

DOWN

- 1. Take a tenament, you! Take some in the periphery and vancose (12)
- 2. Blasic chemical? (5)
- 3. This inhabitant probably holds both French and Austrian citisenship (8)
- 4. Copious outpouring of splitters (6)

- 6. Uncontestably axiomatic, yet nothing to stand on but a paroxysm (9)
- 7. Caravansarai of a noble man (4)
- 8. As is where is denizen (6)
- 9. He's had her baser instincts satisfied by Sir Christopher Coren's resuscitatory efforts(12)
- 10. Alexander Alexandrovich. You need a tail, old chap (5)
- 11. Join! Why did you mix with those forty slices of wood (8)
- 12. Equal, a mathematical operation, induces belief in such reasoning (10)
- 18. 22 dn. apparently lies in the old adage "children and chicken must always be pickin"
- 22. This impetuous ardour is vital in Bergsonian philosophy (4)
- 24. Boisterous jollification by the highest judicial authority in the country an asthenic person (5)
- 27. Manana top (5)
- 28. The direction of interest inwards leads to the collapse of an initiation into a translation (12)
- 29. Burke holds this demesne of his more important than the Commons (6,6)
- 31. Boniface dominions (4)
- 32. Saltimbancoes, Quacksalvers and - deceive the people in lower degrees Sir T. Browne (10)
- 34. A bit of the Greek alphabet please, just a bit (4)
- 35. Can he be expected to be enthusiastically unequivocal as he bares his secrets (9)
- 38. We study up and down and get a number into the system, only to get vouched at (8)
- 39. Is a continental electrical engineer desperately trying to affect continental mannerisms? (8)
- 43. Beg your pardon (6)
- 44. Machetes could, if only he would sit on his garden swing (6)
- 46. Customs have seized many coins, Norwegian, Dutch and Sweedish (5)
- 48. This village officer cannot repudiate his connection with a female fresh wat fish (5)
- 49. To be or not to be the dilemma of Pretorian potentates (4)

THE FIRST TWO CORRECT SOLUTIONS TO THE ABOVE CROSS WORD WILL RECEIVE CASH PRIZES COMPLETED CROSS WORDS TO BE HANDED IN AT 215, GODAVARI



The first rain drop
scattering on the parched earth
its tremor
is
what love is all about.
The impact destroys,
but it is the moment before
that counts.

The parting lips are what matters, the rest is perhaps incidental.

All right,

Iwill take a couple of soft female hands on my descent down the flights of inferno.

It is written,

this love,

writ large in the genes in a molecular alphabet,

deeper,

more beautiful

than any poem I could make.

And you, Moses,

you carry these unbreakable commandments on genetic strands:

"Thou shalt love,

copulate

and die

and the molecules shall remember".

- Dr.M.S.Gopinathan.

MYSTERY MAN

If you think you're going to judge him with

You should know you're wrong all the way, You can't do it.

The way he flashes everyone his grin, And hides consequences of his sin, No one can do.

The calm in his eyes, shows that he is timid, But the cunning tinge behind them goes unknown; The manner he moves, shows that he is honest, But the wicked moves he schemes
All go down.

All you get to know about him Is that he's a mystery man; The world knows nothing of him, His ways and his clan.

The way he begs around for a friend, Indicates that you have to lend, For him to own.

To fathom out all his slimy thoughts, His actions, his manners and his heart, No one can do.

- L.S. Ganesh

NEW QUARK FLAVOR

Search for the production of a new quark flavor at C.m. system energies between 3.3&35.8GeV D.P. Barber, U. Becker and 55 others. Phy. Review letters (American Institute of Physics) Vol.44 No:26 June 30, 1980.

NOT A MERE TV GAZER, PLEASE!

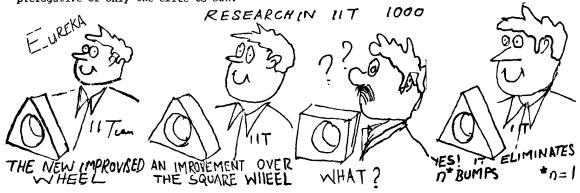
- Envy and Swamy

It sounds undemocratic that just one of the hostel inmates has the privilege of watching the 'Idiot box' in his room while others scramble their way thro' to watch the same in the TV room. This is just the case in Cauvery Hostel; we barged into room No.140 to investigate this evidence of injustice during one of those rainy, squally nights.

Mr. G. Kumar is doing his M.S. in TV Engg. and there was an enchanting simplicity in the way in which he discussed the details of his work. His M.S. project is mainly concerned with making a TV with additional sound channels so that the same programme can be transmitted to the viewer in different languages. This, Mr. Kumar points out, is quite important for a complex society beset with communication problems. Incidentally, this was one of the exhibits in the 'Open House' and though he wants to introduce a few additional facilities in the TV set, he feels that the time spent in procuring the necessary accessories will be so large that he has to be content with making just a few modifications. He is also of the opinion that the electrical lab facilities for the UGs are far from satisfactory.

Mr. Kumar is more enthusiastic about the TV he has made in his room and for him it is quite a creative habby. The cost of his TV has roughly worked up to Rs.2,500 and this does not include the external speaker meant for better sound quality. He feels that it is unfortunate that we don't have the knowhow to manufacture picture tubes in India and unless this is done, TV will certainly be beyond the common men's reach. He says that colour TV in India will be almost out of the reckoning, since the cost involved in making the colour tube is highly prohibitive and intricate quality control measures are needed. On a personal level, he is planning to have an ultrasonic remote control device for TV contrast, fine tuning etc.

Mr. Kumar, an engineering graduate from G.C.T. Coimbatore, has not looked back since he stumbled on the task of setting right a defunct transistor as a high school lad. He hopes to be able to make a mark in TV industry in the years to come and is optimistic that his innovative designs will help reduce the cost of the TV box, which presently, is the prerogative of only the elite to own.



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