MAT- 2008

(3rd Feb)

VERBAL ABILITY

Directions for questions 1 - 5: Choose the option that fills the blanks in each sentence.

Dire	oncode the option that in	3 the blanks in each sentence.		
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1.	. In the absence of native predators to stop the sprea	d of their population, the imported goats		
	to such an inordinate degree that they over-grazed	he countryside and the native vegetation.		
	(1) suffered, abandoned (2) propagated, cultivated	(3) thrived, threatened (4) dwindled, eliminated		
2.	. Carried away by the effects of the experi	mental medication, the patient his desire		
	to continue as a subject for as long as he could.			
	(1) noxious, proclaimed	(2) supplementary, announced		
	(3) frantic, repeated	(4) salutary, reiterated		
3.	. Just as a highway automobile accident leaves last	ing marks of spilled coolant,and oil, the		
	smashing together of gigantic land masses releases and redirects fluids that flow, heat and			
	deposit, having an enduring record of their presence			
	(1) fuel, evaporate (2) petrol, disappear	(3) paint, mark (4) anti-freeze, drip		
4.	. The young boy's attempts to explain to h	is girlfriend why he had failed to show up for their		
	movie date did little to ease her feelings.			
	(1) veracious, vacuous	(2) impassioned, disconsolate		
	(3) unbelievable, gluttonous	(2) impassioned, disconsolate (4) chronic, vicarious		
5.	. A few decades ago, about gender roles	A few decades ago, about gender roles made it somewhat difficult for a woman to study		
	veterinary science, but today, female veterinarians a	re quite		
	(1) preconceptions, prevalent	(2) diatribes, affluent		
	(3) mindsets, poor	(4) lectures, negligent		
Dire	virections for questions 6 – 10: Answer these questions	independent of each other.		
	\ \/ /			
6.	. The argument for liberalization which answers the	worries of the Left parties about the possible trade		
	deficits created by the opening up of the Indian economy goes thus: In today's economic scenario,			
	where there are many trading countries, the trade between two specific countries need be balanced.			
	The differing demands of goods and services and the differing productive capabilities of the same			
	among different countries will cause a country like India to have trade deficits with some countries and			
	surpluses with other countries. On the whole, the trade deficits and surpluses will balance out in order			
	to give a trade balance'.			
	Which of the following conclusions best summarises	the argument presented in the passage above?		
	(1) India's trade deficits and surpluses with other countries always balance out.			
	(2) Left parties need not worry about trade defici	ts in India since its trade will always be in balance		

even though it runs a deficit with a single country.

- (3) The Left parties in India should not be concerned about India's trade deficits with specific countries because they will balance out in the long run.
- (4) None of these
- 7. Inflation can only be fundamentally caused by two factors supply side factors and demand side factors. These factors are either reductions in the supply of goods and services or increases in demand due to either the increased availability of money or the reallocation of demand. Unless other compensating changes also occur, inflation is bound to result if either of these occurs. In economics prior to the introduction of banks (a pre—banking economy) the quantity of money available, and hence, the level of demand, was equivalent to the quantity of gold available.

If the statements above are true, then it is also true that in a pre-banking economy,

- (1) if other factors in the economy are unchanged, increasing the quantity of gold available would lead to inflation.
- (2) any inflation would be the result of reductions in the supply of goods and services.
- (3) if there is a reduction in the quantity of gold available, then, other things being equal, inflation would result.
- (4) whatever changes in demand occur, there would be compensating changes in the supply of goods and services.
- 8. The cost of housing in many urban parts of India has become so excessive that many young couples, with above—average salaries, can only afford small apartments. EMI and rent commitments are so huge that they cannot consider the possibility of starting a family since a new baby would probably mean either the mother or father giving up a well—paid position something they can ill afford. The lack of or great cost of child care facilities further precludes the return of both parents to work.

Which of the following adjustments could practically be made to the situation described above which would allow young couples to improve their housing prospects?

- (1) Encourage couples to have one child only
- (2) Encourage couples to remain childless
- (3) Encourage young couples to move to cheaper areas for living
- (4) None of these is likely to have an impact on the current situation
- 9. In a famous experiment at the IISC campus, when a cat smelled milk, it salivated. In the experiment, a bell was rung whenever food was placed near the cat. After a number of trials, only the bell was rung, whereupon the cat would salivate even though no food was present. Such behaviour has been observed in other animals such as dogs, monkeys, etc. and is a vital input for training domesticated animals.

Which of the following conclusions may be drawn from the above experiment?

- (1) The ringing of a bell was associated with food in the mind of the cat.
- (2) Cats and other animals can be easily tricked.
- (3) A conclusion cannot be reached on the basis of one experiment.
- (4) Two stimuli are stronger than one.

- 10. Chewing tobacco has many benefits. However, the primary benefits occur in the area of mental health. The habit originates in a search for contentment. The life expectancy of our people has increased greatly in recent years; it is possible that the relaxation and contentment and enjoyment produced by tobacco chewing has lengthened many lives. Hence, chewing tobacco is beneficial.
 - Which of the following, if true, would weaken the above conclusion?
 - (1) The evidence cited in the statement covers only one example of the effects of tobacco chewing.
 - (2) The government earns millions of rupees from the sales of chewing tobacco.
 - (3) There is as yet no statistical evidence to prove a link between chewing and longevity.
 - (4) None of these

<u>Directions for questions 11 – 15:</u> Each question has a group of sentences marked A, B, C, D and E. Arrange these to form a logical sequence.

- 11. A. It will take extraordinary political commitment and liberal public funding during the 11th Plan for affordable housing to become a credible goal.
 - B. The National Urban Housing and Habitat Policy of the United Progressive Alliance Government seeks to make access to housing, long acknowledged as a fundamental right, a reality for all.
 - C. The task is staggering even if we go by conservative estimates.
 - D. The housing shortage to be met during the Plan is 26.53 million units, which include the backlog from the 10th Plan.
 - E. If the existing stock of poor quality dwellings and the growing urbanization—driven demand are taken into account, the real deficit will be even higher.
 - (1) ADBEC
- (2) ACDEB
- (3) ABEDC
- (4) ABCDE
- 12. A. The upsurge of public activism against the setting up of Special Economic Zones, which eventually forced the State Government to announce the scrapping of all 15 such projects, is an impressive case in point.
 - B. Early last year, a similar agitation coerced the government into calling for a revision of the Goa Regional Plan 2011, a controversial document that opened up large swathes of land, including green belts and coastal stretches, for construction.
 - C. The broad-based agitation against SEZs has demonstrated the power of popular protest in the State.
 - D. Those opposed to the projects had questioned the propriety of the government acquiring large tracts of land and then selling them to promoters at low prices.
 - E. A coastal State with an area of 3,700 square kilometers and a population of about 1.4 million, Goa has always been extremely sensitive to the impact of unrestrained economic development.
 - (1) CDEAB
- (2) BCDEA
- (3) EABCD
- (4) DABCE

- 13. A. India's security apparatus responds well when beset by crisis. However, successful security depends not on crisis.
 - B. Potential targets must be secured as if terror strikers were imminent.
 - C. Here the Indian system's record is appalling.
 - D. Despite years of painful experience, sensitive government installations in New Delhi, including the headquarters of some of India's key military organizations and covert services, are defended in a manner that would be considered unconscionably negligent in many parts of the world.
 - E. However, successful security depends not on crisis—time creativity but on the disciplined and effective implementation of mundane, everyday protocols.
 - (1) ABDEC
- (2) AEBCD
- (3) ADECB
- (4) ABEDC
- 14. A. On the Republican side, the lowa results have left the picture somewhat murkier.
 - B. Mike Huckabee beat the putative front—runner, Mitt Romney, by a margin of 34.4 per cent to 25.4 per cent, but is not expected to carry the momentum forward into New Hampshire.
 - C. Mr. Huckabee's victory is attributable largely to the strong support he got from evangelical Christians who are estimated to make up as much as 60 per cent of the caucus goers.
 - D. Social and religious conservatives, will constitute only small proportion of voters, in which national security and fiscal concerns are expected to be the main issues.
 - E. However, while Mr. Romney might be free of a Huckabee challenge in New Hampshire, he might be hard pressed to fend off John McCain and Rudolph Guiliani, both of whom largely stayed out of the lowa campaign.
 - (1) ABCDE
- (2) AEBCD
- (3) ACDEB
- (4) ABCED
- 15. A. Using biofuels made from corn, sugar cane and soy could have a greater environmental impact than burning fossil fuels, according to experts.
 - B. Although the fuels themselves emit fewer greenhouse gases, they all have higher costs in terms of biodiversity loss and destruction of farmland.
 - C. The EU has proposed that 10% of all fuel used in transport should come from biofuels by 2020 and the emerging global market is expected to be worth billions of dollars a year.
 - D. But the new fuels have attracted controversy.
 - E. The problems of climate change and the rising cost of oil have led to a race to develop environment–friendly biofuels, such as palm oil or ethanol derived from corn and sugar cane.
 - (1) DECBA
- (2) ABCED
- (3) ABECD
- (4) CDEBA

<u>Directions for questions 16 – 28:</u> Study the passages to answer the questions that follow each passage.

Passage - I

The year 2007 will go down in history as the year when a phase shift occurred in global public awareness of the climate change crisis. It will also go down as the year when the people of the world and heir future generations were shortchanged by a clique of business interests that manipulate the policies of a few powerful rich countries. The recently concluded U.N. conference at Bali was held in the backdrop of a three–part consensus report produced by more than 2,500 scientists under the auspices of the U.N. sponsored body,

Intergovernmental Panel on Climate Change (IPCO), that catalogued the current and likely impact of the unmitigated release into the atmosphere of greenhouse gases, mainly due to the burning of coal and oil. It further re-asserted the widely held view that exceeding a heating up of the planet by more than 2°C from preindustrial levels of which we have already committed to more than 1.2°C through past emissions – would be too disastrous to contemplate for life on earth. The Bali conference was held in the backdrop of latest scientific assessments which showed the IPCC estimates to be very conservative, that the current rate of world emissions was three times that of the 1990s' exceeding the IPCC's worst-case scenario, and that the Arctic ice was "screaming", disappearing a lot faster than predicted. It was held in the backdrop of the understanding that this galloping pace of anticipated warming implied that species losses would accelerate, the Amazon rainforest could disappear sooner, natural disasters would intensify faster, vector diseases would intensify faster, vector diseases would spread even more, the water crisis would worsen, food production would decline more rapidly, the sea level would rise much higher and there would be millions of deaths and cases of displacement of people as a result of all these catastrophes. There was the further backdrop that the real scientific consensus on what was required to keep the warming to about 2°C was becoming more and more visible through the fog of deliberate propaganda, hoping against hope, disbelief, avoidance of scaremongering tag and frank fudging to accommodate "political reality". It was becoming clearer and clearer that it was not 550 parts per million (ppm), nor even 450 ppm, but 400 ppm of carbon dioxide concentration in the atmosphere that should be the cap to keep the risk of exceeding 2°C warming within reasonable limits. Against this target the current concentration is 383 ppm, growing at 19 ppm a decade at present, a 25 per cent climb from the rate of increase of the last decade. There was also the assessment that we were very close to a "tipping point", beyond which we would lose control over a self-generating, feedback induced warming as with polar ice melt shrinking the reflective white surface, which induces even further heating up, or the warming oceans progressively losing their capacity to absorb carbon dioxide. There were also some views that we might have already triggered certain positive feedback cycles. What all this meant for Bali lose. We were standing at the brink of disaster and needed to take action on a war footing to curb the use of coal, petroleum and gas if humanity itself was to survive for some centuries, forget other species. The message was getting dinned into the policymakers of the world, and the Nobel Committee played a small role in flagging the issue through its Peace Prize award this year, to the IPCC and Al Gore, the latter narrow loss of the U.S. Presidency to George W. Bush. For the delegates of all world governments at Bali, there was no lack of information from scientists on what was happening to the world at large as a result of man-made greenhouse gas accumulation in the atmosphere, on where we were heading if we went on business as usual, on what its impacts were, and on what needed to be done to avoid crossing the threshold. They also had no lack of information on the various technologies available to produce electricity and to move from place to place without burning carbon. There were also many reports available on what tools of economics would work in what manner to turn people away from a carbon-rich lifestyle. In fact, a number of civil society organizations had established paradigms and models of energy saving lifestyle changes that individuals could be influenced to adopt with adequate awareness generation. For more than 10 days the delegates grappled with the issue and right from the beginning it was clear that his was going to be another Kyoto-type wrangle, with a little more pressure to come to terms, may be but basically establishing the ground reality that the political will be tackle the problem was weak and urgency for action was not yet felt by the policymakers. It was a Kyoto replica in another sense - the U.S. government played spoilsport, blocking specific action as

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much as possible and dampening any sense of urgency, the same role it played 10 years back at Kyoto in Japan to destroy the consensus built among all other countries and to reduce forcibly the emission reduction target and inject the carbon trading mechanism into the deal, converting it to mechanism into the deal, converting it to Kyotolite, as some environmentalists called it. This shameful role became even more dishonourable as the U.S. government subsequently refused to ratify the Protocol that it deliberately and systematically weakened, its delegation head Al-Gore, then Vice-President of his country, having come armed with a unanimous resolution of the U.S. Senate to disregard "any international agreement that does not set emission targets for developing countries". There was a further replica of Kyoto at Bali. The European Union, long regarded as the most environment-friendly group at these conferences, applauded and hailed the U.S. for coming on board at the last minute at Kyoto – and did the same at Bali. No matter consensus reached in both places. In the intervening period it did hardly anything to pressure the U.S. to come on board Kyoto. One can anticipate that the U.S. will play its expected role and so will the E.U. in the coming two years, the time specified at Bali for the post-Kyoto agreement. There could have been an alternative scenario at Bali. The U.S. could have changed track on its Kyoto policy as it has done on its Iraq policy, said it was listening to its people, 68 per cent of whom said in a recent Yale University and Gallup sample survey that they were for their government signing an international agreement to cut emissions by 90 per cent by 2050. If it refused to listen to its people who, in an earlier survey, considered global warming to be as much a threat as terrorism, the E.U. and other rich countries could have said that this was the time for emergency action to save the planet, there wasno time for niceties. They could have sidelined the U.S. at Bali, could have concluded a much stronger and more just agreement with the developing nations and could have threatened the U.S. with sanctions unless it too, fell in line with the rest of the world. The Social Democrats in Germany have just, now suggested this as a future course of action. But none of this happened at Bali. It was really business as usual a term abhorred by climate activists campaigning to cut down drastically global emissions of greenhouse gases. The IPCC's "business as usual" scenario is a straight path to doom. But then business-as-usual is what business wants, the powerful business class behind wants, the powerful business class behind the oil, coal, electricity and automobile industries the world over. The business class that pulls the strings in the Bush administration and exercises influence all over Europe and over all countries of the world. The business class that contributed lavishly to get the Bush team_elected to_the White House, that openly claimed credit for the publicity blitz that shaped U.S. policy at Kyoto "What we are doing, and we think successfully, is buying time for our industries by holding up these talks"

- 16. "No matter that the US succeeded in decimating the consensus reached in both places." Which are the places referred to?
 - (1) Kyoto and Bali
- (2) Kyoto and Yale
- (3) Yale and Bali
- (4) None of these
- 17. What should be the cap of carbon dioxide concentration to keep warming within reasonable limits?
 - (1) 450 ppm
- (2) 550 ppm
- (3) 400 ppm
- (4) 383 ppm
- 18. Which organization has catalogued the impact of release of greenhouse gases?
 - (1) IPCC
- (2) Yale University
- (3) Gallup
- (4) E.U.

- 19. Which one of the following statements is not correct according to the passage?
 - (1) At Bali, US government blocked specific action weakening any sense of urgency.
 - (2) Business class behind industries like coal, electricity, oil, etc exert influence over all countries of the world.
 - (3) The Nobel Committee played a big role in highlighting the climate change issues through its Peace Prize award.
 - (4) US people were for the government signing an international agreement to cut emission.
- 20. The impact of global warming implies that
 - (1) water crisis would worsen.

- (2) natural disasters would intensify.
- (3) food production would decline.
- (4) All these
- 21. According to the passage, if the human race, leave aside other species, has to survive at least for a few more centuries,
 - (1) use of coal is to be reduced.

- (2) use of petroleum and gas is to be checked.
- (3) renewable energy sources are to be tapped.
- (4) both (1) and (2)

Passage – II

The link between high economic growth and job creation or poverty reduction is not a straightforward one. Though the Indian economy has been growing at nearly 6 per cent for the past two decades and at nearly 9 per cent for the past four years, the impact of this on employment and poverty has been mixed. Speaking in Oslo in October 2007, Finance Minister, P. Chidambaram said, "The average annual economic growth, which had been constant and tardy at 3.5 per cent during the first thirty years of Independence, increased to 5.7 per cent during the 1990s and, since 2003 - 04 the average rate, has increased further to 8.6 per cent. This growth has not been jobless growth. During this period, the rate of growth of employment was 2.9 per cent per year. The proportion of people living below the poverty line in India has declined from 51.3 per cent in 2004 -05. But in absolute terms they still number around 250 million." If that sounds impressive, there is more to come. Though growth during 2006 - 07 touched a high of 9.4 per cent, the consensus among leading national and international institutions is that it will slow down to between 8.5 and 9.2 per cent in 2007 – 08. The outlook on poverty is not too bright either. The report of the Steering Committee on rapid poverty reduction and local area development, prepared for the Planning Commission for the Eleventh Five Year Plan (2007 - 2012) maintains, that while poverty fell from 54.8 per cent of the population in 1973 to 27.5 per cent in 2004 based on food consumption, "Income poverty in the country has declined over three decades by less than one million a year, and it will take at least 300 years at this rate to eliminate poverty from India". And adds, "for growth to be pro-poor, it will have to benefit the poor disproportionately, only then can the numbers of the poor decline." This poverty line was determined on the basis of the level of per capita expenditure that could meet a calorie norm of 2400 per person per day for rural areas and 2100 per person per day for urban areas on an average, for the country as a whole. The poverty line for 2004 – 05 is Rs. 356 per person per month for rural and Rs. 539 per person per month for urban areas. In a recent analysis, Persistence of Rural Poverty in India, the National council for Applied Economic Research (NCAER) points out that, "All the economic growth that has taken place during the period of economic reforms has not improved the lot of the 'lower income' households." There is little agreement on the policy measures that can do this. The World Bank believes that the best way of eliminating poverty is by concentrating on agriculture. In its World Development Report 2008: Agriculture for Development, the bank maintains: "Cross-country econometric estimates show that overall GDP growth originating in agriculture is, on average, at least twice as effective in benefiting the poorest half of a country's population as growth generated in nonagricultural sector." This view is echoed by A.K. Bandyopadhyay, Chief General Manager of NABARD. "Because of the many restrictions in the agricultural sector, yield levels have remained stagnant in recent years," he says. "If reforms are marketing of produce are taken care of, an agricultural growth of over 4 per cent is possible," he adds. Not everyone focuses on agriculture. For Subir Gokarn, chief economist, Asia Pacific, for Standard and Poor's, greater employment in manufacturing is the key to reducing poverty. "Manufacturing was a key players in Southeast Asia and China for creating low skill jobs such as garments, leather and electronics," says Gokarn. "We came into the international market when services were going up. But we can't run on one engine alone and need manufacturing." A study done by the rating agency Crisil for the National Association for Software and Service Companies (NASSCOM) earlier and this year had revealed, "While the IT-ITeS sector provides direct employment to 1.3 million people, it creates additional employment for 5.2 million people. Among the various consumption categories, spending on housing/construction, food items, clothing, outdoor eating/holidays induce maximum employment". Gokarn says that one reason that the IT-ITeS sector was able to take off was the flexible labour laws that allowed firms to lay off people when there was a slump. "If this flexibility was not there then may IT firms would have shut down after the Y2K boom in the late 90s. Flexibility was the key to the survival of the service sector." The says. An unusual trend is that many of the employment opportunities are not through jobs but by selfemployment. Economics C.P. Chandrasekhar and Jayati Ghosh, maintain in a recent paper, "Around half of the work force in India currently does not work for a direct employer. This is true not only in agriculture, but increasingly in a wide range of non-agricultural activities. The real expansion in employment has come in the form of self-employment, which now accounts for around half of the work force in India." They also argue, "This makes the issue of remuneration in self-employment a particularly important one". The latest NSS report confirms that just under half of all self-employed workers do not find their work to be remunerative. While many new service opportunities are opening in area like health care, education, media and entertainment, and retail, manufacturing would still need to remain the main avenue for the transition from agriculture. Most of the larger players are downsizing their work force and the only way manufacturing can generate more jobs is for new enterprises and downstream units to be set up. "For this there are three critical factors," says Gokarn. "Firstly labour laws have to be made more flexible, you have to have the infrastructure of utilities and connectivity for new enterprises to set up industry, and you have to provide vocational training since the universities the not doing so." This was what companies like NIIT and Aptech were providing for the IT sector and many smaller enterprises are now doing for other sectors.

22.	According to the World Bank, poverty can be best eliminated through				
	(1) manufacturing sector	(2) IT-ITeS sector	(3) agricultural growth	(4) GDP growth	
23.	As per the chief economist of Standard and Poor's would be the main avenue for transition				
	from agriculture.				
	(1) education	(2) health care	(3) retail	(4) manufacturing	
24.					
	(1) Vocational training	(2) Flexible labour laws	(3) Infrastructure	(4) All these	

Passage - III

Is there a plant that eats animals? And if I were to eat that plant, will I become a non-vegetarian, albeit once removed? After all, such a plant is technically a non-vegetarian! The question is not just coffee-table chatter. There are insect eating plants in nature. The Venus fly trap is an often-quoted example. Now comes the starling information about a member of the pitcher-plant family, which has a particular preference for termites, and eats thousands of them at one go. Drs. Marlis and Dennis Merbach and their associates from Germany report on such a plant in the 3rd January issue of Nature. Our general opinion about plants is that they are truly ascetic, demanding little from other life forms. Much of what they need comes from whatever there is in the ground below, sunlight, some water and air. They make carbohydrates out of this Spartan set of ingredients and store them in their bodies. Animals like us pluck these and feed ourselves. Many of us humans pride ourselves by declaring that we eat nothing but plants, and that we do not eat meat since that amounts to harming animals. The truth is, plants are life forms too; furthermore, such interdependence and "big fish eat small fish" is an inescapable part of existence. Wanton hurting of other life forms is what we should not be practicing. The relation between insects and plants has always been intimate and mutually beneficial. Many plants need insects such as bees to help in propagation. For this purpose, they have put out elaborate structures in their flowers, which entice the bee. The colour attracts the insect while the nectar offers a meal. For its part, the insect carries the pollen across to another plant, helping the latter to propagate through such dispersal. In many instances, this mutualism has become so one-to-one as to be finicky or specific. For example, it is a particular legume plant alone that the insect called psyllid (or the jumping plant ice) will go to and none other an example of "made for each other". It is all very well, as long as it is the flower and the nectar that the insect is interested in. But if the insect were to start eating any other part of the plant, say the leaf or the seed, it has had it! The plant puts up a strong reaction. Its defence or self-protection can be pretty offensive. The plant releases chemicals that can stun or even kill the insect. The neem tree is an example. It synthesizes and stores a chemical called azadirachtin. When the insect takes a bite at the plant, the released chemical kills all further desire in the insect to take any more bites. As a result, the insect dies a slow death of starvation. Azadirachtin is therefore called an insect antifeedant. Other plants use other strategies aimed at the same defensive purpose. For example, why are all fruits two-faced? The pulp in them is entirely tasty and nutritious. But the kernel and seed are at best indigestible (they actually can give you a stomach upset), and at worst poisonous (recall the desperate poor tribals of Orissa who suffered eating mango kernels). The pulp is the enticement, the come-hither. The seed should not be destroyed but simply dispersed, so that the next generation plant can grow. We know that all plants are not passive bystanders in the theatre of life. Several of them are activists that seek out their food and nutrition beyond air, water, soil and sunlight. There is a whole bunch of tropical plants that are carnivorous. Yes, they gobble up insects for food! The Venus fly trap mentioned above is the famous one. Its leaf has two lobes, edged with interlocking "teeth". On the surface, they have many trigger hairs. When a hapless insect were do disturb these hairs, the leaf snaps shut. Upon this, the plant secretes some digestive juice into the enclosure, which dissolves much of the insect. The food so mashed up into a puree or soup is absorbed by the plant. The chitinous outer layer of the insect is all that is left, which is discarded by later. Here is a twist-the leaft of the plant holds its stomach! What Dr. Merbach and coworkers found in the Southeast Asian country Brunei was an even more striking example of a non-veg plant. Called "Monkey's Rice Port" in West Australia, it is technically known as Nepenthes albomarginata. The

family Nepenthes has many subspecies. The name is Greek in origin and means banisher of sorrow. One account has it that the plant was used by the ancient Greeks to banish sorrow and induce restful sleep. Obviously, it's nectar or some other component has a sedative influence. (Parenthetically, Dr. Dennis Merbach writes to me that he doubts this since not even Alexander the Great came far enough east to find this plant). The genus Nepenthes is found in Southeast Asia, Seychelles and Madagascar, and Australia, but N. albomarginata is abundant in Peninsular-Malaysia, Sumatra, Borneo and Burnei. The German work was done in Brunei. Albomarginata literally means white border, and is so named because the pitcher that it presents at its leaf tips is rimmed with white hair-like protrusions. It is a slender, heat-loving plant that has attractive green-red pitchers rimmed white, and does very well in a stove house or heated frames. N. albomarginata is quite different from its cousins of the pitcher plant genus Nepenthes. Others are not choosy about their prey. They catch any insect that is careless enough to step on their slippery, toothy appendage. Monkey's Rice Pot, or N. albomarginata is picky - it loves to eat termites! In order to do so, it presents its pitcher to the prey, luring them with its colour and distinctive smell. The white hairs that fringe the rim of the pitcher are edible. Termites seem to love the hair and come to it in hordes. The scientists usually found not one or ten, but thousands of termites trapped in a single pitcher! All the termites they found in one pitcher belonged to the same species and were in the same state of decomposition. This led the researchers to conclude that a whole battalion was caught over a short period of time. The termites caught and gobbled up were largely from no more than three genera, with one particular genus called Hospitalitermes predominating. It thus seems that these fellows are picky about N. albomarginata, and the latter returns the compliment. In fact, the plant pretty much starves when termites are not around. Over the six-month-lifespan of the pitcher, it gets by with a few dozen ants, beetles of flies (while neighbouring pitcher plants of other provenance, not being so picky, get along much better). For its part, the termites genus mentioned above too gets by usually with live fungi and algae, but upon sensing the plant, it forages in massive columns, and meets its death by the thousands at the teeth of the pitcher plant. Extraordinary, till death do them apart! It is the white hairs that the termites go for. Pitchers with no hair, are ignored. When the researchers placed near a termite marching column, both pitchers with hair and pitchers shaven off, the lead termite sensed the white hair, went back and called his mates for the forage. They came in numbers, started gobbling up the edible hairs and making food pellets out of them to carry home. In the process, they fell into the pitcher and could not escape. The fall-in rate was one every three seconds (could be even faster with a bigger marching band). After an hour, when all the hairs were gone, the pitcher was no longer of any interest to the termites. What is it in the hairs that attract the termite is not clear yet. It could be some volatile molecule, but the researchers could not detect any smell in their, study. As of now, it appears that contact happens by chance. To date, N. albomarginata appears to be the only one known plant that offers up its own tissue as bait, and the only one too that specializes on a single prey. Reading the article, it occurred to me that here is a clean and green way to rid your house of termites plant a hedge of N. albomarginata around your house, and it will do the rest. Alas, when I raised this point, Dr. Merbach disappointed me with his e mail message, stating that this group of termites does not feed on wood, since they feed over ground. The wood enter termites feed underground, while the plant presents its pitchers above.

There goes another of my brilliant solutions! I wonder whether N. albomarginata is seen in India, since there are other members of Nepenthes that grow in our subcontinent. It will also be interesting to check whether some of these are pest–gobblers. One plant, called N. Khasiana, is found in the Khasi hills of Assam, but its

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termite-preference has not been tested so far, to the best of my knowledge. This pitcher plant is an undemanding highland species that grows slowly to a height of about two feet. It is able to tolerate low humidity and temperature and thus, should be cultivable in other chosen areas of India. And it better be soon, since this plant is already in the endangered list because of encroachment by farmers who have cleared up land in that area for agriculture.

- 25. What of the following is facing the threat of extinction?
 - (1) Azadirachtin
- (2) N. albomarginata
- (3) N. Khasiana

(2) kills the insect.

(4) Hospitalitermes

- According to the passage, Azadirachtin 26.
 - (1) acts as a poison.
 - (3) acts as a repellant.
- 27. It can be inferred from the passage that
 - (1) tropical plants are carnivorous.
 - (3) tropical plants depend upon insects for food.
- (2) tropical plants are omnivorous.
- (4) some tropical plants absorb the insect soup.

(4) has the effect of starving the insect to death.

- 28. According to the passage, Hospitalitermes
 - (1) is the main food of N. albomarginata.
 - (2) is a termite genus.
 - loves to eat the white hairs that fringe the rim of the pitcher. (3)
 - (4) All these

<u>Directions for questions 29 – 33:</u> Each of these questions are followed by two arguments numbered I and II. Decide which of the arguments is a 'strong' argument and which is a 'weak' argument. Mark answer as

- if only Argument II is strong. (1)
- (2) if only Argument I is strong.
- (3)if either Argument I or II is strong.
- (4) if neither Argument I nor II is strong.
- 29. Should there be only one rate of interest for term deposits of varying durations in banks?

Arguments:

- No, people will refrain money for longer duration resulting into reduction of liquidity level of Ι. banks.
- II. Yes, this will be much simpler for the common people and they may be encouraged to keep more money in banks.
- Should all those who have come in contact with the patients infectious respiratory disease be 30. quarantined in their houses?

Arguments:

- No, nobody should be guarantined unless they are tested and found to be infected by the virus causing the disease.
- Yes, this is the only way to control the spread of the dreaded disease.
- 31. Should mutual funds be brought under strict Govt. control?

Arguments:

- I. Yes, that is one of the ways to protect the interest of the investors.
- II. No, strict Govt. controls are likely to be counter productive.

32. Should all the profit making public sector units be sold to private companies?

Arguments:

- I. Yes, this will help the government to augment its resources for implementing the development programmes.
- II. No, the private companies will not be able to run these units effectively.
- 33. Should the public sector undertakings be allowed to adopt hire and fire policy?

Arguments:

- I. Yes, this will help the public sector undertakings to get rid of non-performing employees and will also help to reward the performing employees.
- II. No, the management may not be able to implement the policy in an unbiased manner and the employees will suffer due to the high–handedness of the management.

<u>Directions for questions 34 – 38:</u> In each of these questions, a statement is followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. Mark answer as

- (1) if only Assumption II is implicit.
- (2) if only Assumption I is implicit.
- (3) if either Assumption I or II is implicit.
- (4) if neither Assumption I nor II is implicit.

34. Statement:

The KLM company has decided to go for tax-free and taxable bonds to raise its resources.

Assumptions:

- I. The KLM company has already explored other sources to raise money.
- II. The products of KLM company have little competition in the market.

35. Statement:

It is felt that when the airline is facing stiff competition coupled with a precarious financial position, the top level posts should be kept open for outside professionals than internal candidates.

- I. Internal candidates aspire only getting promotions, without much contribution.
- II. Experienced professionals are more likely to handle the problems of the airline.

36. Statement:

Lack of stimulation in the first four-five years of life can have adverse consequences.

Assumption:

- I. A great part of the development of observed intelligence occurs in the earliest years of life.
- II. 50 percent of the measurable intelligence at the age of 17 is already predictable by the age of four.

37. Statement:

Take this 'oven' home and you can prepare very tasty dishes which you were unable to prepare earlier – An advertisement of X brand oven.

Assumption:

- I. The user knows the procedure recipe of tasty dishes but does not have the proper oven to cook.
- II. Only 'X' brand oven can cook very tasty dishes.

38. Statement:

Who rises from the prayer a better man, his prayer is answered.

Assumptions:

- I. Prayer makes a man more human.
- II. Prayer atones all of our misdeeds.

<u>Directions for questions 39 – 43:</u> In each of these questions, a statement is followed by two courses of action numbered I and II. Assume everything in the statement to be true. Decide which of the suggested course(s) of action logically follow(s) for pursuing. Mark answer as

- (1) if only Course of Action I follows.
- (2) if only Course of Action II follows.
- (3) if neither Course of Action I nor II follows.
- (4) if both Courses of action I and II follow.

39. Statement:

The government has decided not to provide financial support to voluntary organizations from the next Five Year Plan and has communicated that all such organizations should raise funds to meet their financial needs.

Courses of Action

- I. Voluntary organizations should collaborate with foreign agencies.
- II. They should explore other sources of financial support.

40. Statement:

Exporters in the capital are alleging that commercial banks are violating a Reserve Bank of India directive to operate a post–shipment export credit denominated in foreign currency at international interest rates from January this year.

Courses of Action

- I. The officers concerned in the commercial banks are to be suspended.
- II. The RBI should be asked to stop giving such directives to commercial banks.

41. Statement:

The Chairman stressed the need for making the education system more flexible and regretted that the curriculum had not been revised in keeping with the pace of the changes taking place.

Courses of Action

- I. Curriculum should be reviewed and revised periodically.
- II. System of education should be made more flexible.

42. Statement:

The daytime temperatures in this summer have been four to five degrees Celsius above the normal temperature across the country.

Courses of Action

- I. The government machinery should be put on high alert and provided with necessary equipments to prevent any untoward incident.
- II. The government should make necessary arrangements to provide water in all the areas affected due to extreme heat waves.

43. Statement:

If the faculty members also join the strike, then there is going to be a serious problem.

Courses of Action

- I. The faculty members should be persuaded not to go on strike.
- li. Those faculty members who join the strike should be suspended.

<u>Directions for questions 44 – 45:</u> In each of the following questions, one or more of the sentences is/are incorrect. Identify the incorrect sentence(s).

- 44. A. I remember seeing a full page advertisement with a bright background colour.
 - B. The only other item on the page was a very small line of type in a lighter shade of the same colour.
 - C. Since I can still recall the ad, it must made an impression.
 - D. Using colour to impact your design works best when it involves the unexpected or extreme.
 - (1) C only
- (2) B only
- (3) D only
- (4) No error
- 45. A. In the long history of the world, only a few generations have been granted the role of defending freedom in its hour of maximum danger.
 - B. I do not believe that any of us would exchange places with any other people or any other generation.
 - C. The energy, the faith, the devotion which we bring to this endeavor will light our country and all who serve it.
 - D. The glow from that fire can truly light the world.
 - (1) B only
- (2) A
- (3) C only
- (4) No error

ANSWERS

1. 2. (4) (2)5. (2) (3)(3) (4) 3. 4. 6. 7. (1) 8. (4) 9. (3) 13. (1) 10. (3) 11. (4) 12. (1) 14. (1) 15. (3)16. (1) (3) 18. (1) (2) (2) 21. (2) (3) (4) 24. (4) 17. 19. 20. 22. 23. 25. (3) 26. (4) 27. (3) 28. (4) 29. (1) 30. (2) 31. (4) 32. (4) 33. (3)34. (4) 35. (4) 36. 37. (3) 38. (4) 39. (4) 40. (1) (1) 45. 41. (3) 42. (4) 43. (4) 44. (1) (3)