Elite's Grid Verbal Ability



The RC Companion—Curated Passages from the CAT & beyond

Series 1

Nitesh Raj

<u>Introduction – Who is this book for?</u>

Reading Comprehension or RC as it is fondly remembered as in the prep circles is a wily beast. Feared by most, tamed by few & mastered by fewer still, it pops up in almost all MBA entrance exams. In CAT however, RC plays a rather vital role. A whopping 24 RC questions can make or break your percentile for this section.

That being said, who is this book for?

It is for you. The Elite's Grid VA student.

This book, the first of many, in conjunction with our sessions together, will help you tame the RC section. This particular book contains 10 actual CAT passages handpicked by me. These have been and will be discussed in the VARC sessions. The Answer keys with explanations will be released in batches based on the RCs discussed.

Practice well, practice hard. Remember, consistency, not novelty, is the key to uncommon results.

Nitesh

CAT RCs

1

Democracy rests on a tension between two different principles. There is, on the one hand, the principle of equality before the law, or, more generally, of equality, and, on the other, what may be described as the leadership principle. The first gives priority to rules and the second to persons. No matter how skilfully we contrive out schemes, there is a point beyond which the one principle cannot be promoted without some sacrifice of the other.

Alexis do Tocqueville, the great 19th-century writer on democracy, maintained that the age of democracy, whose birth he was witnessing, would also be the age of mediocrity, in saying this he was thinking primarily of a regime of equality governed by impersonal rules. Despite his strong attachment to democracy,he took great pains to point out what he believed to be its negative side: a dead level plane of achievement in practically every sphere of life. The age of democracy would, in his view, be an unheroic age; there would not be room in it for either heroes or hero-worshippers.

But modern democracies have not been able to do without heroes: this too was foreseen, with much misgiving, by Tocqueville. Tocqueville viewed this with misgiving because he believed, rightly or wrongly, that unlike in aristocratic societies there was no proper place in a democracy for heroes and, hence, when they arose they would sooner or later turn into despots. Whether they require heroes or not, democracies certainly require leaders, and, in the contemporary age, breed them in great profusion; the problem is to know what to do with them.

In a world preoccupied with scientific rationality the advantages of a system based on an impersonal rule of law should be a recommendation with everybody. There is something orderly and predictable about such a system. When life is lived mainly in small, self-contained communities, men are able to take finer personal distinctions into account in dealing with their fellow men. They are unable to do this in a large and amorphous society, and organised living would be impossible here without a system of impersonal rules. Above all, such a system guarantees a kind of equality to the extent that everybody, no matter in what station of life, is bound by the same explicit, often written, rules and nobody is above them.

But a system governed solely by impersonal rules can at best ensure order and stability; it cannot create any shining vision of a future in which mere formal equality will be replaced by real equality and fellowship. A world governed by impersonal rules cannot easily change itself, or when it does, the change is so gradual as to make the basic and fundamental feature of society appear unchanges. For any kind of basic or fundamental change, a push is needed from within, a kind of individual initiative which will create new rules, new terms and conditions of life.

The issue of leadership thus acquires crucial significance in the context of change. If the modern age is preoccupied with scientific rationality, it is no less preoccupied with change. To accept what exists on its own terms is traditional, not modern, and it may be all very well to appreciate tradition in music, dance and drama, but for society as a whole the choice has already been made in favour of modernisation and development. Moreover, in some countries the gap between ideal and reality has become so great that the argument for development and change is now irresistible.

In these countries no argument for development has greater appeal or urgency than the one which shows development to be the condition for the mitigation, if not the elimination, of inequality. There is something contradictory about the very presence of large inequalities in a society which profess to be democratic. It does not take people too long to realise that democracy by itself can guarantee only formal equality; beyond this, it can only whet people's appetite for real or substantive equality. From this arises their continued preoccupation with plans and schemes that will help to bridge the gap between the ideal of equality and the reality which is so contrary to it.

When pre-existing rules give no clear directions of change, leadership comes into its own. Every democracy invests its leadership with a measure of charisma, and expects from it a corresponding measure of energy and vitality. Now, the greater the urge for change in a society the stronger the appeal of a dynamic leadership in it. A dynamic leadership seeks to free itself from the constraints of existing rules: in a sense that is the test of its dynamism. In this process it may take a turn at which it ceases to regard itself as being bound by these rules, placing itself above them. There is always a tension between 'charisma' and 'discipline' in the case of a democratic leadership, and when this leadership puts forward revolutionary claims, the tension tends to be resolved at the expense of discipline.

Characteristically, the legitimacy of such a leadership rests on its claim to be able to abolish or at least substantially reduce the existing inequalities in society. From the argument that formal equality or equality before the law is but a limited good, it is often one short step to the argument that it is a hindrance or an obstacle to the establishment of real or substantive equality. The conflict between a 'progressive' executive and a 'conservative' judiciary is but one aspect of this larger problem. This conflict naturally acquires added piquancy when the executive is elected and the judiciary appointed.

- 1. Dynamic leaders are needed in democracies because
- a. they have adopted the principles of 'formal' equality rather than 'substantive' equality.
- b. 'formal' equality whets people's appetite for 'substantive' equality.
- c. systems that rely on the impersonal rules of 'formal' equality lose their ability to make large changes.
- d. of the conflict between a 'progressive' executive and a 'conservative' judiciary.
- 2. What possible factor would a dynamic leader consider a 'hindrance' in achieving the development goals of a nation?
- a. Principle of equality before the law
- b. Judicial activism
- c. A conservative judiciary
- d. Need for discipline
- 3. Which of the following four statements can be inferred from the above passage?
- A. Scientific rationality is an essential feature of modernity.
- B. Scientific rationality results in the development of impersonal rules.
- C. Modernisation and development have been chosen over traditional music, dance and drama.
- D. Democracies aspire to achieve substantive equality
- a. A, B, D but not C
- b. A, B but not C, D
- c. A, D but not B, C
- d. A, B, C but not D
- 4. Tocqueville believed that the age of democracy would be an un-heroic age because
- a. democractic principles do not encourage heroes.
- b. there is no urgency for development in democratic countries.
- c. heroes that emerged in democracies would become despots.
- d. aristocratic society had a greater ability to produce heroes.
- 5. A key argument the author is making is that
- a. in the context of extreme inequality, the issue of leadership has limited significance.
- b. democracy is incapable of eradicating inequality.
- c. formal equality facilitates development and change.
- d. impersonal rules are good for avoiding instability but fall short of achieving real equality.

- 6. Which of the following four statements can be inferred from the above passage?
- A. There is conflict between the pursuit of equality and individuality.
- B. The disadvantages of impersonal rules can be overcome in small communities.
- C. Despite limitations, impersonal rules are essential in large systems.
- D. Inspired leadership, rather than plans and schemes, is more effective in bridging inequality.
- a. B, D but not A, C
- b. A, B but not C, D
- c. A, D but not B, C
- d. A, C but not B, D

2

In the modern scientific story, light was created not once but twice. The first time was in the Big Bang, when the universe began its existence as a glowing, expanding, fireball, which cooled off into darkness after a few million years. The second time was hundreds of millions of years later, when the cold material condensed into dense suggests under the influence of gravity, and ignited to become the first stars.

Sir Martin Rees, Britain's astronomer royal, named the long interval between these two enlightements the cosmic 'Dark Age'. The name describes not only the poorly lit conditions, but also the ignorance of astronomers about that period. Nobody knows exactly when the first stars formed, or how they organised themselves into galaxies — or even whether stars were the first luminous objects. They may have been preceded by quasars, which are mysterious, bright spots found at the centres of some galaxies.

Now two independent groups of astronomers, one led by Robert Becker of the University of California, Davis, and the other by George Djorgovski of the Caltech, claim to have peered far enough into space with their telescopes (and therefore backwards enough in time) to observe the closing days of the Dark age.

The main problem that plagued previous efforts to study the Dark Age was not the lack of suitable telescopes, but rather the lack of suitable things at which to point them. Because these events took place over 13 billion years ago, if astronomers are to have any hope of unravelling them they must study objects that are at least 13 billion light years away. The best prospects are quasars, because they are so bright and compact that they can be seen across vast stretches of space. The energy source that powers a quasar is unknown, although it is suspected to be the intense gravity of a giant black hole. However, at the distances required for the study of Dark Age, even quasars are extremely rare and faint.

Recently some members of Dr Becker's team announced their discovery of the four most distant quasars known. All the new quasars are terribly faint, a challenge that both teams overcame by peering at them through one of the twin Keck telescopes in Hawaii. These are the world's largest, and can therefore collect the most light. The new work by Dr Becker's team analysed the light from all four quasars. Three of them appeared to be similar to ordinary, less distant quasars. However, the fourth and most distant, unlike any other quasar ever seen, showed unmistakable signs of being shrouded in a fog because newborn stars and quasars emit mainly ultraviolet light, and hydrogen gas is opaque to ultraviolet. Seeing this fog had been the goal of would-be Dark Age astronomers since 1965, when James Gunn and Bruce Peterson spelled out the technique for using quasars as backlighting beacons to observe the fog's ultraviolet shadow.

The fog prolonged the period of darkness until the heat from the first stars and quasars had the chance to ionise the hydrogen (breaking it into its constituent parts, protons and electrons). Ionised hydrogen is transparent to ultraviolet radiation, so at that moment the fog lifted and the universe became the well-lit place it is today. For this reason, the end of the Dark Age is called the 'Epoch of Re-ionisation'. Because the ultraviolet shadow is visible only in the most distant of the four quasars, Dr Becker's team concluded that the fog had dissipated completely by the time the universe was about 900 million years old, and one-seventh of its current size.

- 1 In the passage, the Dark Age refers to
- a. the period when the universe became cold after the Big Bang.
- b. a period about which astronomers know very little.
- c. the medieval period when cultural activity seemed to have come to an end.
- d. the time that the universe took to heat up after the Big Bang.
- 2. Astronomers find it difficult to study the Dark Age because
- a. suitable telescopes are few.
- b. the associated events took place aeons ago.
- c. the energy source that powers a quasars is unknown.
- d. their best chance is to study quasars, which are faint objects to begin with.
- 3. The four most distant quasars discovered recently
- a. could only be seen with the help of large telescopes.
- b. appear to be similar to other ordinary, quasars.
- c. appear to be shrouded in a fog of hydrogen gas.
- d. have been sought to be discovered by Dark Age astronomers since 1965
- 4. The fog of hydrogen gas seen through the telescopes
- a. is transparent to hydrogen radiation from stars and guasars in all states.
- b. was lifted after heat from starts and guasars ionised it.
- c. is material which eventually became stars and quasars.
- d. is broken into constituent elements when stars and quasars are formed.

The production of histories of India has become very frequent in recent years and may well call for some explanation. Why so many and why this one in particular? The reason is a two-fold one: changes in the Indian scene requiring a re-interpretation of the facts and changes in attitudes of historians about the essential elements of Indian history. These two considerations are in addition to the normal fact of fresh information, whether in the form of archeological discoveries throwing fresh light on an obscure period or culture, or the revelations caused by the opening of archives or the release of private papers. The changes in the Indian scene are too obvious to need emphasis. Only two generations ago British rule seemed to most Indian as well as British observers likely to extend into an indefinite future; now there is a teenage generation which knows nothing of it. Changes in the attitudes of historians have occurred everywhere, changes in attitudes to the content of the subject as well as to particular countries, but in India there have been some special features. Prior to the British, Indian historiographers were mostly Muslims, who relied as in the case of Sayyid Ghulam Hussain, on their own recollection of events and on information from friends and men of affairs. Only a few like Abu'l Fazl had access to official papers. These were personal narratives of events, varying in value with the nature of the writer. The early British writers were officials. In the 18th century they were concerned with some aspect of Company policy, or like Robert Orme in his Military Transactions gave a straight narrative in what was essentially a continuation of the Muslim tradition.

In the early 19th century the writers were still, with two notable exceptions, officials, but they were now engaged in chronicling, in varying moods of zest, pride, and awe, the rise of the British power in India to supremacy. The two exceptions were James Mill, with his critical attitude to the Company and John Marchman, the Baptist missionary. But they, like the officials, were anglo-centric in their attitude, so that the history of modern India in their hands came to be the history of the rise of the British in India.

The official school dominated the writing of Indian history until we get the first professional historian's approach. Ramsay Muir and P. E. Roberts in England and H. H. Dodwell in India. Then Indian historians trained in the English school joined in, of whom the most distinguished was Sir Jadunath Sarkar and the other notable writers: Surendranath Sen, Dr Radhakumud Mukherji, and Professor Nilakanta Sastri. They, it may be said, restored India to Indian history, but their bias was mainly political. Finally have come the

nationalists who range from those who can find nothing good or true in the British to sophisticated historical philosophers like K. M. Panikker.

Along the types of historians with their varying bias have gone changes in the attitude to the content of Indian history. Here Indian historians have been influenced both by their local situation and by changes of thought elsewhere. It is this field that this work can claim some attention since it seeks to break new ground, or perhaps to deepen a freshly turned furrow in the field of Indian history. The early official historians were content with the glamour and drama of political history from Plassey to the Mutiny, from Dupleix to the Sikhs. But when the *raj* was settled down, glamour departed from politics, and they turned to the less glorious but more solid ground of administration. Not how India was conquered but how it was governed was the theme of this school of historians. It found its archpriest in H. H. Dodwell, its priestess in Dame Lilian Penson, and its chief shrine in the Volume VI of the *Cambridge History of India*. Meanwhile, in Britain other currents were moving, which led historical study into the economic and social fields. R. C. Dutt entered the first of these currents with his *Economic History of India* to be followed more recently by the whole group of Indian economic historians. W. E. Moreland extended these studies to the Mughal Period. Social history is now being increasingly studied and there is also of course a school of nationalist historians who see modern Indian history in terms of the rise and the fulfillment of the national movement.

All these approaches have value, but all share in the quality of being compartmental. It is not enough to remove political history from its pedestal of being the only kind of history worth having if it is merely to put other types of history in its place. Too exclusive an attention to economic, social, or administrative history can be as sterile and misleading as too much concentration on politics. A whole subject needs a whole treatment for understanding. A historian must dissect his subject into its elements and then fuse them together again into an integrated whole. The true history of a country must contain all the features just cited but must present them as parts of a single consistent theme.

- 1. Which of the following may be the closest in meaning to the statement 'restored India to Indian history'?
- A. Indian historians began writing Indian history.
- B. Trained historians began writing Indian history.
- C. Writing India-centric Indian history began.
- D. Indian history began to be written in India.
- 2. Which of the following is the closest implication of the statement 'to break new ground, or perhaps to deepen a freshly turned furrow'?
- A. Dig afresh or dig deeper.
- B. Start a new stream of thought or help establish a recently emerged perspective.
- C. Begin or conduct further work on existing archeological sites to unearth new evidence.
- D. Begin writing a history free of any biases.
- 3. Historians moved from writing political history to writing administrative history because
- A. attitudes of the historians changed.
- B. the *raj* was settled down.
- C. politics did not retain its past glamour.
- D. administrative history was based on solid ground.

- 5. According to the author, which of the following is not among the attitudes of Indian historians of Indian origin?
- A. Writing history as personal narratives.
- B. Writing history with political bias.
- C. Writing non-political history due to lack of glamour.
- D. Writing history by dissecting elements and integrating them again.

4

There are a seemingly endless variety of laws, restrictions, customs and traditions that affect the practice of abortion around the world. Globally, abortion is probably the single most controversial issue in the whole area of women's rights and family matters. It is an issue that inflames women's right groups, religious institutions, and the self-proclaimed 'guardians' of public morality. The growing worldwide belief is that the right to control one's fertility is a basic human right. This has resulted in a worldwide trend towards liberalization of abortion laws. Forty per cent of the world's population live in countries where induced abortion is permitted on request. An additional 25 per cent live in countries where it is allowed if the women's life would be endangered if she went to full term with her pregancy. The estimate is that between 26 and 31 million legal abortions were performed in that year. However, there were also between 10 and 22 million illegal abortions performed in that year.

Feminists have viewed the patriarchal control of women's bodies as one of the prime issues facing the contemporary women's movement. They abserve that the defintion and control of women's reproductive freedom have always been the province of men. Patriarchal religion, as manifest in Islamic fundamentalism, traditionalist Hindu practice, orthodox Judaism, and Roman Catholicism, has been an important historical contributory factor for this and continues to be an important presence in contemporary societies. In recent times, govenments, usually controlled by men, have 'given' women the right to contraceptive use and abortion access when their countries were perceived to have an overpopulation problem. When these countries are perceived to be underpopulated, that right had been absent. Until the 19th century, a woman's rights to an abortion followed English common law; it could only be legally challenged if there was a 'quickening', when the first movements of the fetus could be felt. In 1800, drugs to induce abrotions were widely advertised in local newpapers. By 1900, abortion was banned in every state except to save the life of the mother. The change was strongly influenced by medical profession, which focussed its campaign ostensibly on health and safety issues for pregnant women and the sancity of life. Its position was also a means of control of non-licensed medical practitioners such as midwives and women healers who practiced abortion.

The anti-abortion campaign was also influenced by political considerations. The large influx of eastern and southern European immigrants with their large families was seen as a threat to the population balance of the future United States. Middle and upper-classes Protestants were advocates of abortion as a form of birth control. By supporting abortion prohibitions the hope was that these Americans would have more children and thus prevent the tide of immigrant babies from overwhelming the demographic characteristics of Protestant America.

The anti-abortion legislative position remained in effect in the United States through the first 65 years of the 20th century. In the early 1960s, even when it was widely known that the drug thalidomide taken during pregnancy to alleviate anxiety was shown to contribute to the formation of deformed 'flipper-like' hands or legs of children, abortion was illegal in the United States. A second health tragedy was the severe outbreak of rubella during the same time period, which also resulted in major birth defects. These tragedies combined with a change of attitude towards a woman's right to privacy led a number of states to pass abortion permitting legislation.

On one side of the controversy are those who call themselves 'pro-life'. They view the foetus as a human life rather than as an unformed complex of cells; therefore, they hold to the belief that abortion is essentially murder of an unborn child. These groups cite both legal and religious reasons for their opposition to abortion. Pro-lifers point to the rise in legalised abortion figures and see this as morally intolerable. On the other side of the issue are those who call themselves 'pro-choice'. They believe that

women, not legislators or judges, should have the right to decide whether and under what circumstances they will bear children. Pro-choicers are of the opinion that laws will not prevent women from having abortions and cite the horror stories of the past when many women died at the hands of 'backroom' abortionists and in desperate attempts to self-abort. They also observe that legalized abortion is especially important for rape victims and incest victims who became pregnant. They stress physical and mental health reasons why women should not have unwanted children.

To get a better understanding of the current abortion controversy, let us examine a very important work by Kristin Luker titled *Abortion and the Politics of Motherhood*. Luker argues that female pro-choice and prolife activists hold different world views regarding gender, sex, and the meaning of parenthood. Moral positions on abortions are seen to be tied intimately to views on sexual bahaviour, the care of children, family life, technology, and the importance of the individual. Luker identified 'pro-choice' women as educated, affluent, and liberal. Their contrasting counterparts, 'pro-life' women, support traditional concepts of women as wives and mothers. It would be instructive to sketch out the differences in the world views of these two sets of women. Luker examines California, with its liberalized abortion law, as a case history. Public documents and newspaper accounts over a 26-year period were analysed and over 200 interviews were held withheld with both pro-life and pro-choice activists.

Luker found that pro-life and pro-choice activists have intrinsically different views with respect to gender. Pro-life women have a notion of public and private life. The proper place for men is in the public sphere of work; for women, it is the private sphere of the home. Men benefit through the nurturance of women; women benefit through the protection of men. Children are seen to be the ultimate beneficiaries of this arrangement of having the mother as a full-time loving parent and by having clear role models. Pro-choice advocates reject the view of separate spheres. They object to the notion of the home being the 'women's sphere'. Women's reproductive and family roles are seen as potential barriers to full equality. Motherhood is seen as a voluntary, not a mandatory or 'natural' role.

In summarizing her findings, Luker believes that women become activists in either of the two movements as the end result of lives that centre around different conceptualizations of motherhood. Their beliefs and values are rooted to the concrete circumstances of their lives, their educations, incomes, occupations, and the different marital and family choices that they have made. They represent two different world views of women's roles in contemporary society and as such the abortion issues represent the battleground for the justification of their respective views.

- 1. According to your understanding of the author's arguments, which countries are more likely to allow abortion?
- A. India and China
- B. Australia and Mongolia
- C. Cannot be inferred from the passage
- D. Both (1) and (2)
- 2. Which amongst these was not a reason for banning of abortions by 1900?
- A. Medical professionals stressing the health and safety of women
- B. Influx of eastern and sourthern European immigrants
- C. Control of unlicensed medical practitioners
- D. A tradition of matriarchal control
- 3. A pro-life woman would advocate abortion if
- A. the mother of an unborn child is suicidal.
- B. bearing a child conflicts with a woman's career prospects.
- C. the mother becomes pregnant accidentally.
- D. None of these

- 4. Pro-choice women object to the notion of the home being the 'women's sphere' because they believe
- A. that home is a 'joint sphere' shared between men and women.
- B. that reproduction is a matter of choice for women
- C. that men and women are equal
- D. Both (2) and (3)
- 5. Two health tragedies affecting the US society in the 1960s led to
- A. a change in attitude to women's right to privacy.
- B. retaining the anti-abortion laws with some exceptions.
- C. scrapping of anti-abortion laws.
- D. strengthening of the pro-life lobby.
- 6. Historically, the pro-choice movements has got support from, among others,
- A. major patriarchal religions.
- B. countries with low population density.
- C. medical profession.
- D. None of these

5

The conceptions of life and the world which we call 'philosophical' are a product of two factors: one inherited religious and ethical conceptions; the other, the sort of investigation which may be called 'scientific', using this word in its broadest sense. Individual philosophers have differed widely in regard to the proportions in which these two factors entered into their systems, but it is the presence of both, in some degree, that characterizes philosophy.

'Philosophy' is a word which has been used in many ways, some wider, some narrower. I propose to use it in a very wide sense, which I will now try to explain.

Philosophy, as I shall understand the word, is something intermediate between theology and science. Like theology, it consists of speculations on matters as to which definite knowledge has, so far, been unascertainable; but like science, it appeals to human reason rather than to authority, whether that of tradition or that of revelation. All definite knowledge so I should contend belongs to science; all dogma as to what surpasses definite knowledge belongs to thelogy. But between theology and science there is a 'No man's Land', exposed to attack from both sides; this 'No Man's Land' is philosophy. Almost all the questions of most interest to speculative minds are such as science cannot answer, and the confident answers of theologians no longer seem so convincing as they did in former centuries. Is the world divided into mind and matter, and if so, what is mind and what is matter? Is mind subject to matter, or is it possessed of independent powers? Has the universe any unity or purpose? It is evolving towards some goal? Are there really laws of nature, or do we believe in them only because of our innate love of order? Is man what he seems to the astronomer, a tiny lump of carbon and water impotently crawling on a small and unimportant planet? Or is he what he appears to Hamlet? Is he perhaps both at once? Is there a way of living that is noble and another that is base, or are all ways of living merely futile? If there is a way of living that is noble, in what does it consist, and how shall we achieve it? Must the good be eternal in order to deserve to be valued, or is it worth seeking even if the universe is inexorably moving towards death? Is there such a thing as wisdom, or is what seems such merely the ultimate refinement of folly? To such questions no answer can be found in the laboratory. Theologies have professed to give answers, all too definite; but their definiteness causes modern minds to view them with suspicion. The studying of these questions, if not the answering of them, is the business of philosophy.

Why, then, you may ask, waste time on such insoluble problems? To this one may answer as a historian, or as an individual facing the terror of cosmic loneliness.

The answer of the historian, in so far as I am capable of giving it, will appear in the course of this work. Ever since men became capable of free speculation, their actions in innumerable important respects, have depended upon their theories as to the world and human life, as to what is good and what is evil. This is as true in the present day as at any former time. To understand an age or a nation, we must understand its philosophy, and to understand its philosophy we must ourselves be in some degree philosopheres. There is here a reciprocal causation: the circumstances of men's lives do much to determine their philosophy, but, conversely, their philosophy does much to determine their circumstances.

There is also, however, a more personal answer. Science tells us what we can know, but what we can know is little, and if we forget how much we cannot know we may become insensitive to many things of very great importance. Theology, on the other hand, induces a dogmatic belief that we have knowledge, where in fact we have ignorance, and by doing so generates a kind of impertinent insolence towards the universe. Uncertainty, in the presence of vivid hopes and fears, is painful, but must be endured if we wish to live without the support of comforting fairy tales. It is good either to forget the questions that philosophy asks, or to persuade ourselves that we have found indubitable answers to them. To teach how to live without certainty, and yet without being paralyzed by hesitation, is perhaps the chief thing that philosophy, in our age, can still do for those who study it.

- 1. The purpose of philosophy is to
- A. reduce uncertainty and choas.
- B. help us to cope with uncertainty and ambiguity.
- C. help us to find explanations for uncertainty.
- D. reduce the terror of cosmic loneliness
- 2. Based on the passage, what can be concluded about the relation between philosophy and science?
- A. The two are antagonistic.
- B. The two are complementary.
- C. There is no relation between the two.
- D. Philosophy derives from science
- 3. From reading the passage, what can be concluded about the profession of the author? He is most likely not to be a
- A. historian.
- B. philosopher.
- C. scientist.
- D. theologian.
- 4. According to the author, which of the following statements about the nature of universe must be definitely true?
- A. The universe has unity.
- B. The universe has a purpose.
- C. The universe is evolving towards a goal.
- D. None of these

Cells are the ultimate multi-taskers: they can switch on genes and carry out their orders, talk to each other, divide in two, and much more, all at the same time. But they couldn't do any of these tricks without a power source to generate movement. The inside of a cell bustles with more traffic than Delhi roads, and, like all vehicles, the cell's moving parts need engines. Physicists and biologists have looked 'under the hood' of the cell and laid out the nuts and bolts of molecular engines.

The ability of such engines to convert chemical energy into motion is the envy nanotechnology researchers looking for ways to power molecule-sized devices. Medical researchers also want to understand how these engines work. Because these molecules are essential for cell division, scientists hope to shut down the rampant growth of cancer cells by deactivating certain motors. Improving motor-driven transport in nerve cells may also be helpful for treating diseases such as Alzheimer's, Parkinson's or ALS, also known as Lou Gehrig's disease

We wouldn't make it far in life without motor proteins. Our muscles wouldn't contract. We couldn't grow, because the growth process requires cells to duplicate their machinery and pull the copies apart. And our genes would be silent without the services of messenger RNA, which carries genetic instructions over to the cell's protein-making factories. The movements that make these cellular activities possible occur along a complex network of threadlike fibers, or polymers, along which bundles of molecules travel like trams. The engines that power the cell's freight are three families of proteins, called myosin, kinesin and dynein. For fuel, these proteins burn molecules of ATP, which cells make when they break down the carbohydrates and fats from the foods we eat. The energy from burning ATP causes changes in the proteins' shape that allow them to heave themselves along the polymer track. The results are impressive: In one second, these molecules can travel between 50 and 100 times their own diameter. If a car with a five-foot-wide engine were as efficient, it would travel 170 to 340 kilometres per hour.

Ronald Vale, a researcher at the Howard Hughes Medical Institute and the University of California at San Francisco, and Ronald Milligan of the Scripps Research Institute have realized a long-awaited goal by reconstructing the process by which myosin and kinesin move, almost down to the atom. The dynein motor, on the other hand, is still poorly understood. Myosin molecules, best known for their role in muscle contraction, form chains that lie between filaments of another protein called actin. Each myosin molecule has a tiny head that pokes out from the chain like oars from a canoe. Just as rowers propel their boat by stroking their oars through the water, the myosin molecules stick their heads into the actin and hoist themselves forward along the filament. While myosin moves along in short strokes, its cousin kinesin walks steadily along a different type of filament called a microtubule. Instead of using a projecting head as a lever, kinesin walks on two 'legs'. Based on these differences, researchers used to think that myosin and kinesin were virtually unrelated. But newly discovered similarities in the motors' ATP-processing machinery now suggest that they share a common ancestor — molecule. At this point, scientists can only speculate as to what type of primitive cell-like structure this ancestor occupied as it learned to burn ATP and use the energy to change shape. "We'll never really know, because we can't dig up the remains of ancient proteins, but that was probably a big evolutionary leap," says Vale.

On a slightly larger scale, loner cells like sperm or infectious bacteria are prime movers that resolutely push their way through to other cells. As L. Mahadevan and Paul Matsudaira of the Massachusetts Institute of Technology explain, the engines in this case are springs or ratchets that are clusters of molecules, rather than single proteins like myosin and kinesin. Researchers don't yet fully understand these engines' fueling process or the details of how they move, but the result is a force to be reckoned with. For example, one such engine is a spring-like stalk connecting a single-celled organism called a vorticellid to the leaf fragment it calls home. When exposed to calcium, the spring contracts, yanking the vorticellid down at speeds approaching three inches (eight centimetres) per second

Springs like this are coiled bundles of filaments that expand or contract in response to chemical cues. A wave of positively charged calcium ions, for example, neutralizes the negative charges that keep the filaments extended. Some sperm use spring-like engines made of actin filaments to shoot out a barb that penetrates the layers that surround an egg. And certain viruses use a similar apparatus to shoot their DNA into the host's cell. Ratchets are also useful for moving whole cells, including some other sperm and

pathogens. These engines are filaments that simply grow at one end, attracting chemical building blocks from nearby. Because the other end is anchored in place, the growing end pushes against any barrier that gets in its way.

Both springs and ratchets are made up of small units that each move just slightly, but collectively produce a powerful movement. Ultimately, Mahadevan and Matsudaira hope to better understand just how these particles create an effect that seems to be so much more than the sum of its parts. Might such an understanding provide inspiration for ways to power artificial nano-sized devices in the future? "The short answer is absolutely," says Mahadevan. "Biology has had a lot more time to evolve enormous richness in design for different organisms. Hopefully, studying these structures will not only improve our understanding of the biological world, it will also enable us to copy them, take apart their components and recreate them for other purpose."

- 1 According to the author, research on the power source of movement in cells can contribute to
- A. control over the movement of genes within human systems.
- B. the understanding of nanotechnology.
- C. arresting the growth of cancer in a human being.
- D. the development of cures for a variety of diseases.
- 2. The author has used several analogies to illustrate his arguments in the article. Which of the following pairs of words are examples of the analogies used?
- A. Cell activity and vehicular traffic
- B. Polymers and tram tracks
- C. Genes and canoes
- D. Vorticellids and ratchets
- 1. A and B
- 2. B and C
- 3. A and D
- 4. A and C
- 3. Read the five statements below: A, B, C, D, and E. From the options given, select the one which includes a statement that is not representative of an argument presented in the passage.
- A. Sperms use spring like engines made of actin filament.
- B. Myosin and kinesin are unrelated.
- C. Nanotechnology researchers look for ways to power molecule-sized devices.
- D. Motor proteins help muscle contraction.
- E. The dynein motor is still poorly understood.
- 1. A. B and C
- 2. C, D and E
- 3. A, D and E
- 4. A, C and D
- 4. Read the four statements below: A, B, C and D. From the options given, select the one which includes only statements that are representative of arguments presented in the passage.
- A. Protein motors help growth processes.
- B. Improved transport in nerve cells will help arrest tuberculosis and cancer.
- C. Cells, together, generate more power than the sum of power generated by them separately.
- D. Vorticellid and the leaf fragment are connected by a calcium engine.
- 1. A and B but not C 2. A and C but not D
- 3. A and D but not B 4. C and D but not B

- 5. Read the four statements below: A, B, C and D. From the options given, select the one which includes statements that are representative of arguments presented in the passage.
- A. Myosin, kinesin and actin are three types of protein.
- B. Growth processes involve a routine in a cell that duplicates their machinery and pulls the copies apart.
- C. Myosin molecules can generate vibrations in muscles.
- D. Ronald and Mahadevan are researchers at Massachusetts Institute of Technology.
- 1. A and B but not C and D
- 2. B and C but not a
- 3. B and D but not A and C
- 4. A, B and C but not D

If translated into English, most of the ways economists talk among themselves would sound plausible enough to poets, journalists, businesspeople, and other thoughtful though *non-economical* folk. Like serious talk anywhere — among boat desingers and baseball fans, say — the talk is hard to follow when one has not made a habit of listening to it for a while. The culture of the conversation makes the words arcane. But the people in the unfamiliar conversation are not Martians. Underneath it all (the economist's favourite phrase) conversational habits are similar. Economics uses mathematical models and statistical tests and market arguments, all of which look alien to the literary eye. But looked at closely they are not so alien. They may be seen as figures of speech-metaphors, analogies, and appeals to authority.

Figures of speech are not mere frills. They think for us. Someone who thinks of a market as an 'invisible hand' and the organization of work as a 'production function' and his coefficients as being 'significant', as an economist does, is giving the language a lot of responsibility. It seems a good idea to look hard at his language.

If the economic conversation were found to depend a lot on its verbal forms, this would not mean that economics would be not a science, or just a matter of opinion, or some sort of confidence game. Good poets, though not scientists, are serious thinkers about symbols; good historians, though not scientists, are serious thinkers about data. Good scientists also use language. What is more (though it remains to be shown) they use the cunning of language, without particularly meaning to. The language used is a social object, and using language is a social act. It requires cunning (or, if you prefer, consideration), attention to the other minds present when one speaks.

The paying of attention to one's audience is called 'rhetoric', a word that I later exercise hard. One uses rhetoric, of course, to warn of a fire in a theatre or to arouse the xenophobia of the electorate. This sort of yelling is the vulgar meaning of the word, like the president's 'heated rhetoric' in a press conference or the 'mere rhetoric' to which our enemies stoop. Since the Greek flame was lit, though, the word has been used also in a broader and more amiable sense, to mean the study of all the ways of accomplishing things with language: inciting a mob to lynch the accused, to be sure, but also persuading readers of a novel that its characters breathe, or bringing scholars to accept the better argument and reject the worse.

The question is whether the scholar- who usually fancies himself an announcer of 'results' or a stater of 'conclusions' free of rhetoric — speaks rhetorically. Does he try to persuade? It would seem so. Language, I just said, is not a solitary accomplishment. The scholar doesn't speak into the void, or to himself. He speaks to a community of voices. He desires to be heeded, praised, published, imitated, honoured, en-Nobeled. These are the desires. The devices of language are the means.

Rhetoric is the proportioning of means to desires in speech. Rhetoric is an economics of language, the study of how scarce means are allocated to the insatiable desires of people to be heard. It seems on the face of it a reasonable hypothesis that economists are like other people in being talkers, who desire listeners whey they go to the library or the laboratory as much as when they go to the office or the polls. The purpose here is to see if this is true, and to see if it is useful: to study the rhetoric of economic scholarship.

The subject is scholarship. It is not the economy, or the adequacy of economic theory as a description of the economy, or even mainly the economist's role in the economy. The subject is the conversation economists have among themselves, for purposes of persuading each other that the interest elasticity of demand for investment is zero or that the money supply is controlled by the Federal Reserve.

Unfortunately, though, the conclusions are of more than academic interest. The conversations of classicists or of astronomers rarely affect the lives of other people. Those of economists do so on a large scale. A well known joke describes a May Day parade through Red Square with the usual mass of soldiers, guided missiles, rocket launchers. At last come rank upon rank of people in gray business suits. A bystander asks, "Who are those?" "Aha!" comes the reply, "those are economists: you have no idea what damage they can do!" Their conversations do it.

- 1. According to the passage, which of the following is the best set of reasons for which one needs to 'look hard' at an economist's language?
- A. Economists accomplish a great deal through their language.
- B. Economics is an opinion-based subject.
- C. Economics has a great impact on other's lives.
- D. Economics is damaging.
- 1. A and B
- 2. C and D
- 3. A and C
- 4. B and D
- 2. In the light of the definition of rhetoric given in the passage, which of the following will have the least element of rhetoric?
- 1. An election speech
- 2. An advertisement iingle
- 3. Dialogues in a play
- 4. Commands given by army officers
- 3. As used in the passage, which of the following is the clolsest meaning to the statement 'The cultural of the conversation makes the words arcane'?
- 1. Economists belong to a different culture.
- 2. Only mathematicians can understand economicsts.
- 3. Economists tend to use terms unfamiliar to the lay person, but depend on familiar linguistic forms.
- 4. Economists use similes and adjectives in their analysis.
- 4. As used in the passage, which of the following is the closest alternative to the word 'arcane'?
- 1. Mysterious
- 2. Secret
- 3. Covert
- 4. Perfidious
- 5. Based on your understanding of the passage, which of the following conclusions would you agree with?
- 1. The geocentric and the heliocentric views of the solar system are equally tenable.
- 2. The heliocentric view is superior because of better rhetoric.
- 3. Both views use rhetoric to persuade.
- 4. Scientists should not use rhetoric.

At the heart of the enormous boom in wine consumption that has taken place in the English speaking world over the last two decades or so is a fascinating, happy paradox. In the days when wine was exclusively the preserve of a narrow cultural elite, bought either at auctions or from gentleman wine merchants in wing collars and bow-ties, to be stored in rambling cellars and decanted to order by one's butler, the ordinary drinker didn't get a look-in. Wine was considered a highly technical subject, in which anybody without the necessary ability could only fall flat on his or her face in embarrassment. It wasn't just that you needed a refined aesthetic sensibility for the stuff if it wasn't to be hopelessly wasted on you. It required an intimate knowledge of what came from where, and what it was supposed to taste like.

Those were times, however, when wine appreciation essentially meant a familiarity with the great French classics, with perhaps a smattering of other wines — like sherry and port. That was what the wine trade dealt in. These days, wine is bought daily in supermarkets and high-street chains to be consumed that evening, hardly anybody has a cellar to store it in and most don't even possess a decanter. Above all, the wines of literally dozens of countries are available on our market. When a supermarket offers its customers a couple of fruity little numbers from Brazil, we scarcely raise an eyebrow.

It seems, in other words, that the commercial jungle that wine has now become has not in the slightest deterred people from plunging adventurously into the thickets in order to taste and see. Consumers are no longer intimidated by the thought of needing to know their Pouilly-Fume from their Pouilly-Fuisse, just at the very moment when there is more to know than ever before.

The reason for this new mood of confidence is not hard to find. It is on every wine label from Australia, New Zealand, South Africa and the United States: the name of the grape from which the wine is made. At one time that might have sounded like a fairly technical approach in itself. Why should native English-speakers know what Cabernet Sauvignon or Chardonnay were? The answer lies in the popularity that wines made from those grape varieties now enjoy. Consumer effectively recognize them as brand names, and have acquired a basic lexicon of wine that can serve them even when confronted with those Brazilian upstarts.

In the wine heartlands of France, they are scared to death of that trend—not because they think their wine isn't as good as the best from California or South Australia (what French winemaker will ever admit that?) but because they don't traditionally call their wines Cabernet Saucignon or Chardonnay. They call them Chateau Ducru Beaucaillou or Corton-Charlemagne, and they aren't about the change. Some areas, in the middle of southern France, have now produced a generation of growers using the varietal names on their labels and are tempting consumers back to French wine. It will be an uphill struggle, but there is probably no other way if France is to avoid simply becoming a specialty source of old-fashioned wines for old-fashioned connoisseurs.

Wine consumption was also given a significant boost in the early 1990s by the work of Dr. Serge Renaud, who has spent many years investigating the reasons for the uncannily low incidence of coronary heart disease in the south of France. One of his major findings is that the fat-derived cholesterol that builds up in the arteries and can eventually lead to heart trouble, can be dispersed by the tannins in wine. Tannin is derived from the skins of grapes, and is therefore present in higher levels in red wines, because they have to be infused with their skins to attain the red colour. That news caused a huge upsurge in red wine consumption in the United States. It has not been accorded the prominence it deserves in the UK, largely because the medical profession still sees all alcohol as a menace to health, and is constantly calling for it to be made prohibitively expensive. Certainly, the manufacturers of anticoagulant drugs might have something to lose if we all got the message that we would do just as well by our hearts by taking half a bottle of red wine every day!

- 1. The tone that the author uses while asking "what French winemaker will ever admit that?" is best described as
- 1. caustic
- 2. satirical
- 3. critical

- 4. hypocritical
- 2. What according to the author should the French do to avoid becoming a producer of merely oldfashioned wines?
- 1. Follow the labeling strategy of the English-speaking countries
- 2. Give their wines English names
- 3. Introduce fruity wines as Brazil has done
- 4. Produce the wines that have become popular in the English-speaking world
- 3. The development which has created fear among winemakers in the wine heartland of France is the
- 1. tendency not to name wines after the grape varieties that are used in the wines
- 2. 'education' that consumers have derived from wine labels from English speaking countries.
- 3. new generation of local winegrowers who use labels that show names of grape varieties
- 4. ability of consumers to understand a wine's qualities when confronted with "Brazilian upstarts".
- 4 Which one of the following, if true, would provide most support for Dr. Renaud's findings about the effect of tannins?
- 1. A survey showed that film celebrities based in France have a low incidence of coronary heart disease.
- 2. Measurements carries out in southern France showed red wine drinkers had significantly higher levels of coronary heart incidence than white wine drinkers did.
- 3. Data showed a positive association between sales of red wine and incidence of coronary heart disease.
- 4. Long-term surveys in southern France showed that the incidence of coronary heart disease was significantly lower in red wine drinkers than in those who did not drink red wine.
- 5. Which one of the following CANNOT be reasonably attributed to the labeling strategy of followed by wine producers in English speaking countries?
- 1. Consumers buy wines on the basis of their familiarity with a grape variety's name.
- 2. Even ordinary customers now have more access to technical knowledge about wine.
- 3. Consumers are able to appreciate better quality wines.
- 4. Some non-English speaking countries like Brazil indicate grape variety names on their labels.

Right through history, imperial powers have clung to their possessions to death. Why, then, did Britain in 1947 give up the jewel in its crown, India? For many reasons. The independence struggle exposed the hollowness of the white man's burden. Provincial self-rule since 1935 paved the way for full self-rule. Churchill resisted independence, but the Labour government of Atlee was anti-imperialist by ideology. Finally, the Royal Indian Navy mutiny in 1946 raised fears of a second Sepoy mutiny, and convinced British waverers that it was safer to withdraw gracefully. But politico-military explanations are not enough. The basis of empire was always money. The end of empire had much to do with the fact that British imperialism had ceased to be profitable. World War II left Britain victorious but deeply indebted, needing Marshall Aid and loans from the World Bank. This constituted a strong financial case for ending the nolonger profitable empire.

Empire building is expensive. The US is spending one billion dollars a day in operations in Iraq that fall well short of full scale imperialism. Through the centuries, empire building was costly, yet constantly undertaken because it promised high returns. The investment was in armies and conquest. The returns came through plunder and taxes from the conquered.

No immorality was attached to imperial loot and plunder. The biggest conquerors were typically revered (hence titles like Alexander the Great, Akbar the Great, and Peter the Great). The bigger and richer the empire, the more the plunderer was admired. This mindset gradually changed with the rise of new ideas

about equality and governing for the public good, ideas that culminated in the French and American revolutions. Robert Clive was impeached for making a little money on the side, and so was Warren Hastings. The white man's burden came up as a new moral rationale for conquest. It was supposedly for the good of the conquered. This led to much muddled hypocrisy. On the one hand, the empire needed to be profitable. On the other hand, the white man's burden made brazen loot impossible.

An additional factor deterring loot was the 1857 Sepoy Mutiny. Though crushed, it reminded the British vividly that they were a tiny ethnic group who could not rule a gigantic subcontinent without the support of important locals. After 1857, the British stopped annexing one princely state after another, and instead treated the princes as allies. Land revenue was fixed in absolute terms, partly to prevent local unrest and partly to promote the notion of the white man's burden. The empire proclaimed itself to be a protector of the Indian peasant against exploitation by Indian elites. This was denounced as hypocrisy by nationalists like Dadabhoy Naoroji in the 19th century, who complained that land taxes led to an enormous drain from India to Britain. Objective calculations by historians like Angus Maddison suggest a drain of perhaps 1.6 percent of Indian Gross National Product in the 19th century. But land revenue was more or less fixed by the Raj in absolute terms, and so its real value diminished rapidly with inflation in the 20th century. By World War II, India had ceased to be a profit center for the British Empire.

Historically, conquered nations paid taxes to finance fresh wars of the conqueror. India itself was asked to pay a large sum at the end of World War I to help repair Britain's finances. But, as shown by historian Indivar Kamtekar, the independence movement led by Gandhiji changed the political landscape, and made mass taxation of India increasingly difficult. By World War II, this had become politically impossible. Far from taxing India to pay for World War II, Britain actually began paying India for its contribution of men and goods. Troops from white dominions like Australia; Canada and New Zealand were paid for entirely by these countries, but Indian costs were shared by the British government. Britain paid in the form of nonconvertible sterling balances, which mounted swiftly. The conqueror was paying the conquered, undercutting the profitability on which all empire is founded. Churchill opposed this, and wanted to tax India rather than owe it money. But he was overruled by Indian hands who said India would resist payment, and paralyze the war effort. Leo Amery, Secretary of State for India, said that when you are driving in a taxi to the station to catch a life-or-death train, you do not loudly announce that you have doubts whether to pay the fare. Thus, World War II converted India from a debtor to a creditor with over one billion pounds in sterling balances. Britain, meanwhile, became the biggest debtor in the world. It's not worth ruling over people you are afraid to tax.

- 1. Why didn't Britain tax India to finance its World War II efforts?
- 1. Australia, Canada and New Zealand had offered to pay for Indian troops.
- 2. India has already paid a sufficiently large sum during World War I.
- 3. It was afraid that if India refused to pay. Britain's war efforts would be jeopardized.
- 4. The British empire was built on the premise that the conqueror pays the conquered.
- 2. What was the main lesson the British learned from the Sepoy Mutiny of 1857.
- 1. That the local princes were allies, not foes.
- 2. That the land revenue from India would decline dramatically.
- 3. That the British were a small ethnic group.
- 4. That India would be increasingly difficult to rule.
- 3. Which of the following was NOT a reason for the emergence of the 'white man's burden' as a new rationale for empire-building in India?
- 1. The emergence of the idea of the public good as an element of governance.
- 2. The decreasing returns from imperial loot and increasing costs of conquest.
- 3. The weakening of the immorality attached to an emperor's looting behaviour.
- 4. A growing awareness of the idea of equality among peoples.

- 4. Which of the following best captures the meaning of the 'white man's burden', as it is used by the author?
- 1. The British claim to a civilizing mission directed at ensuring the good of the natives.
- 2. The inspiration for the French and American revolutions.
- 3. The resource drain that had to be borne by the home country's white population.
- 4. An imperative that made open looting of resources impossible.
- 5. Which one of the following best expresses the main purpose of the author?
- 1. To present the various reasons that can lead to the collapse of an empire and the granting of independence of the subjects of an empire.
- 2. To point out the critical role played by the 'white man's burden' in making a colonizing power give up its claims to native possessions.
- 3. To highlight the contradictory impulse underpinning empire building which is a costly business but very attractive at the same time.
- 4. To illustrate how erosion of the financial basis of an empire supports the granting of independence to an empire's constituents.

The controversy over genetically modified food continues unabated in the West. Genetic modification (GM) is the science by which the genetic material of a plant is altered, perhaps to make it more resistant to pests or killer weeds, or to enhance its nutritional value. Many food biotechnologists claim that GM will be a major contribution of science to mankind in the 21st century. On the other hand, large numbers of opponents, mainly in Europe, claim that the benefits of GM are a myth propagated by multinational corporations to increase their profits, that they pose a health hazard, and have therefore called for government to ban the sale of genetically-modified food.

The anti-GM campaign has been quite effective in Europe, with several European Union member countries imposing a virtual ban for five years over genetically-modified food imports. Since the genetically-modified food industry is particularly strong in the United States of America, the controversy also constitutes another chapter in the US-Europe skirmishes which have become particularly acerbic after the US invasion of Iraq.

To a large extent, the GM controversy has been ignored in the Indian media, although Indian biotechnologists have been quite active in GM research. Several groups of Indian biotechnologists have been working on various issues connected with crops grown in India. One concrete achievement which has recently figured in the news is that of a team led by the former vice-chancellor of Jawaharlal Nehru university, Asis Datta — it has successfully added an extra gene to potatoes to enhance the protein content of the tuber by at least 30 percent. It is quite likely that the GM controversy will soon hit the headlines in India since a spokesperson of the Indian Central government has recently announced that the government may use the protato in its midday meal programme for schools as early as next year.

Why should "scientific progress", with huge potential benefits to the poor and malnourished, be so controversial? The anti-GM lobby contends that pernicious propaganda has vastly exaggerated the benefits of GM and completely evaded the costs which will have to be incurred if the genetically-modified food industry is allowed to grow unchecked. In particular, they allude to different types of costs.

This group contends that the most important potential cost is that the widespread distribution and growth of genetically-modified food will enable the corporate world (alias the multinational corporations – MNCs) to completely capture the food chain. A "small" group of biotech companies will patent the transferred genes as well as the technology associated with them. They will then buy up the competing seed merchants and seed-breeding centers, thereby controlling the production of food at every possible level. Independent farmers, big and small, will be completely wiped out of the food industry. At best, they will be reduced to the status of being subcontractors.

This line of argument goes on to claim that the control of the food chain will be disastrous for the poor since the MNCs, guided by the profit motive, will only focus on the high-value food items demanded by the affluent. Thus, in the long run, the production of basic staples which constitute the food basket of the poor will taper off. However, this vastly overestimates the power of the MNCs. Even if the research promoted by them does focus on the high-value food items, much of biotechnology research is also funded by governments in both developing and developed countries. Indeed, the protato is a by-product of this type of research. If the protato passes the field trials, there is no reason to believe that it cannot be marketed in the global potato market. And this type of success story can be repeated with other basic food items.

The second type of cost associated with the genetically modified food industry is environmental damage. The most common type of "genetic engineering" involved gene modification in plants designed to make them resistant to applications of weed-killers. This then enables farmers to use massive dosages of weedkillers

so as to destroy or wipe out all competing varieties of plants in their field. However, some weeds through genetically-modified pollen contamination may acquire resistance to a variety of weed-killers. The only way to destroy these weeds is through the use of ever-stronger herbicides which are poisonous and linger on in the environment.

- 1. The author doubts the anti-GM lobby's contention that MNC control of the food chain will be disastrous for the poor because
- 1. MNCs will focus on high-value food items.
- 2. MNCs are driven by the motive of profit maximization.
- 3. MNCs are not the only group of actors in genetically-modified food research.
- 4. Economic development will help the poor buy MNC-produced food.
- 2. Using the clues in the passage, which of the following countries would you expect to be in the forefront of the anti-GM campaign?
- 1. USA and Spain.
- 2. India and Iraq.
- 3. Germany and France.
- 4. Australia and New Zealand.
- 3. Genetic modification makes plants more resistant to killer weeds. However, this can lead to environmental damage by
- 1. wiping out competing varieties of plants which now fall prey to killer weeds.
- 2. forcing application of stronger herbicides to kill weeds which have become resistant to weak herbicides.
- 3. forcing application of stronger herbicides to keep the competing plants weed-free.
- 4. not allowing growth of any weeds, thus reducing soil fertility.
- 4. According to the passage, biotechnology research
- 1. is of utility only for high value food items.
- 2. is funded only by multinational corporations.
- 3. allows multinational corporations to control the food basket of the poor.
- 4. addresses the concerns of rich and poor countries.
- 5. Which of the following about the Indian media's coverage of scientific research does the passage seem to suggest?
- 1. Indian media generally covers a subject of scientific importance when its mass application is likely.
- 2. Indian media's coverage of scientific research is generally dependent on MNCs interests.
- 3. Indian media, in partnership with the government, is actively involved in publicizing the results of



