1.
Human Biology does nothing to structure human society. Age may enfeeble us all, but cultures vary considerably in the prestige and power they accord to the elderly. Giving birth is a necessary condition for being a mother, but it is not sufficient. We expect mothers to behave in maternal ways and to display appropriately maternal sentiments. We prescribe a clutch of norms or rules that govern the *role* of a mother. That the social role is independent of the biological base can be demonstrated by going back three sentences. (living birth is certainly not sufficient to be a mother but, as adoption and fostering show, it is not even necessary!

The fine detail of what is expected of a mother or a father or a dutiful son differs from culture to culture, but everywhere behaviour is coordinated by the *reciprocal* nature of roles. Husbands and wives, parents and children, employers and employees, waiters and customers, teachers and pupils, warlords and followers: each makes sense only in its relation to the other. The term 'role' is an appropriate one. because the metaphor of an actor in a play neatly expresses the rule-governed nature or scripted nature of much of social life and the sense that society is a joint production. Social life occurs only because people play their parts (and that is as true for war and conflicts as for peace and love) and those parts make sense only in the context of the overall show. The drama metaphor also reminds us of the artistic licence available to the players. We can play a part straight or, as the following from J.P. Sartre conveys, we can ham it up.

Let us consider this waiter in the café. His movement is quick and forward, a little too precise, a little too rapid. He comes towards the patrons with a step a little too quick. He bends forward a little too eagerly: his voice, his eyes express an interest a little too solicitous for the order of the customer. Finally there he returns, trying to imitate in his walk the inflexible stiffness of some kind of automation while carrying his tray with the recklessness of a tightropewalker…..All his behaviour seems to us a game….But what is he playing? We need not watch long before we can explain it: he is playing at being a waiter in a café.

The American sociologist Frying Goffman built an influential body of social analysis on elaborations of the metaphor of social life as drama. Perhaps his most telling point was that it is only through acting out a part that we express character. It is not enough to be evil or virtuous: we have to be seen to be evil or virtuous.

There is distinction between the roles we play and some underlying self. Here we might note that some roles are more absorbing than others. We would not be surprised by the waitress who plays the part in such a way as to signal to us that she is much more than her occupation. We would be surprised and offended by the father who played his part 'tongue in cheek'. Some roles are broader and more far-reaching than others. Describing someone as a clergyman or faith healer would say far more about that person than describing someone as a bus driver.

1. Which is the thematic highlight of this passage?

(1) In the absence of strong biological linkages, reciprocal roles provide the mechanism for coordinating human behaviour.
(2) In the absence of reciprocal roles, biological linkages provide the mechanism for coordinating human behaviour.
(3) Human behaviour is independent of biological linkages and reciprocal roles.
(4) Human behaviour depends on biological linkages and reciprocal roles.
(5) Reciprocal roles determine normative human behaviour in society.

2. Which of the following would have been true if biological linkages structured human society?

(1) The role of mother would have been defined through her reciprocal relationship with her children.
(2) We would not have been offended by the father playing his role 'tongue in cheek'.
(3) Women would have adopted and fostered children rather than giving birth to them.
(4) Even if warlords were physically weaker than their followers, they would still dominate them.

(5) Waiters would have stronger motivation to serve their customers.

3. It has been claimed in the passage that “some roles are more absorbing than others”. According to the passage, which of the following seem(s) appropriate reason(s) for such a claim?

A. Some roles carry great expectations from the society preventing manifestation of the true self.
B. Society ascribes so much importance to some roles that the conception of self may get aligned with the roles being performed.
C. Some roles require development of skill and expertise leaving little time for manifestation of self.

(1) A only
(2) B only
(3) C only
(4) A & B
(5) B & C

2.

Every civilized society lives and thrives on a silent but profound agreement as to what is to be accepted as the valid mould of experience. Civilization is a complex system of dams, dykes. and canals warding off, directing, and articulating the influx of the surrounding fluid element: a fertile fenland, elaborately drained and protected from the high tides of chaotic, unexercised, and inarticulate experience. In such a culture, stable and sure of itself within the frontiers of ‘naturalized’ experience, the arts wield their creative power not so much in width as in depth. They do not create new experience, but deepen and purify the old. Their works do not differ from one another like a new horizon from a new horizon, but like a madonna from a madonna.

The periods of art which are most vigorous in creative passion seem to occur when the established pattern of experience loosens its rigidity without as yet losing its force. Such a period was the Renaissance, and Shakespeare its poetic consummation. Then it was as though the discipline of the old order gave depth to the excitement of the breaking away, the depth of job and tragedy, of incomparable conquests and irredeemable losses. Adventurers of experience set out as though in lifeboats to rescue and bring back to the shore treasures of knowing and feeling which the old order had left floating on the high seas. The works of the early Renaissance and the poetry of Shakespeare vibrate with the compassion for live experience in danger of dying from exposure and neglect. In this compassion was the creative genius of the age. Yet, it was a genius of courage, not of desperate audacity. For, however elusively, it still knew of harbours and anchors, of homes to which to return, and of barns in which to store the harvest. The exploring spirit of art was in the depths of its consciousness still aware of a scheme of things into which to fit its exploits and creations.

But the more this scheme of things loses its stability, the more boundless and uncharted appears the ocean of potential exploration. In the blank confusion of infinite potentialities flotsam of significance gets attached to jetsam of experience: for everything is sea, everything is at sea-

…The sea is all about us;
The sea is the land’s edge also, the granite
Into which it reaches, the beaches where it tosses
Its hints of earlier and other creation…

– and Rilke tells a story in which, as in T.S. Eliot’s poem, it is again the sea and the distance of ‘other creation’ that becomes the image of the poet’s reality. A rowing boat sets out on a difficult passage. The oarsmen labour in exact rhythm. There is no sign yet of the destination. Suddenly a man. seemingly idle, breaks out into song. And if the labour of the oarsmen meaninglessly defeats the real resistance of the real waves, it is the idle single who magically conquers the despair of apparent aimlessness. While the people next to him try to come to grips with the element that is next to them, his voice seems to bind the boat to the farthest distance so that the farthest distance draws it towards itself. ‘I don’t know why and how,’ is Rilke’s conclusion, ‘but suddenly I understood the situation of the poet, his place and function in

this age. It does not matter if one denies him every place — except this one. There one must tolerate him.'

1 In the passage, the expression "like a madonna from a madonna" alludes to

(1) The difference arising as a consequence of artistic license.
(2) The difference between two artistic interpretations.
(3) The difference between 'life' and 'interpretation of life'.
(4) The difference between 'width' and 'depth' of creative power.
(5) The difference between the legendary character and the modern day singer.

2. The sea and 'other creation' leads Rilke to

(1) Define the place of the poet in his culture.
(2) Reflect on the role of the oarsman and the singer.
(3) Muse on artistic labour and its aimlessness.
(4) Understand the elements that one has to deal with.
(5) Delve into natural experience and real waves.

3. According to the passage, the term "adventurers of experience" refers to

(1) Poets and artists who are driven by courage.
(2) Poets and artists who create their own genre.
(3) Poets and artists of the Renaissance.
(4) Poets and artists who revitalize and enrich the past for us.
(5) Poets and artists who delve in flotsam and jetsam in sea.

3.

To discover the relation between rules, paradigms, and normal science, consider first how the historian isolates the particular loci of commitment that have been described as accepted rules. Close historical investigation of a given specialty at a given time discloses a set of recurrent and quasi-standard illustrations of various theories in their conceptual, observational, and instrumental applications. These are the community's paradigms, revealed in its textbooks, lectures, and laboratory exercises. By studying them and by practicing with them, the members of the corresponding community learn their trade. The historian, of course, will discover in addition a penumbral area occupied by achievements whose status is still in doubt, but the core of solved problems and techniques will usually be clear. Despite occasional ambiguities, the paradigms of a mature scientific community can be determined with relative ease.

That demands a second step and one of a somewhat different kind. When undertaking it, the historian must compare the community's paradigms with each other and with its current research reports. In doing so, his object is to discover what isolable elements, explicit or implicit, the members of that community may have abstracted from their more global paradigms and deploy it as rules in their research. Anyone who has attempted to describe or analyze the evolution of a particular scientific tradition will necessarily have sought accepted principles and rules of this sort. Almost certainly, he will have met with at least partial success. But, if his experience has been at all like my own, he will have found the search for rules both more difficult and less satisfying than the search for paradigms. Some of the generalizations he employs to describe the community's shared beliefs will present more problems. Others, however, will seem a shade too strong. Phrased in just that way, or in any other way he can imagine, they would almost certainly have been rejected by some members of the group he studies. Nevertheless, if the coherence of the research tradition is to be understood in terms of rules, some specification of common ground in the corresponding area is needed. As a result, the search for a body of rules competent to constitute a given normal research tradition becomes a source of continual and deep frustration.

Recognizing that frustration, however, makes it possible to diagnose its source. Scientists can agree that a Newton, Lavoisier, Maxwell, or Einstein has produced an apparently permanent solution to a group of

outstanding problems and still disagree, sometimes without being aware of it, about the particular abstract characteristics that make those solutions permanent. They can, that is, agree in their identification of a paradigm without agreeing on, or even attempting to produce, a full interpretation or rationalization of it. Lack of a standard interpretation or of an agreed reduction to rules will not prevent a paradigm from guiding research. Normal science can be determined in part by the direct inspection of paradigms, a process that is often aided by but does not depend upon the formulation of rules and assumption. Indeed, the existence of a paradigm need not even imply that any full set of rules exists.

1. What is the author attempting to illustrate through this passage?

(1) Relationships between rules, paradigms, and normal science
(2) How a historian would isolate a particular 'loci of commitment'
(3) How a set of shared beliefs evolves into a paradigm
(4) Ways of understanding a scientific tradition
(5) The frustrations of attempting to define a paradigm of a tradition

2. The term 'loci of commitment' as used in the passage would most likely correspond with which of the following?

(1) Loyalty between a group of scientists in a research laboratory
(2) Loyalty between groups of scientists across research laboratories
(3) Loyalty to a certain paradigm of scientific inquiry
(4) Loyalty to global patterns of scientific inquiry
(5) Loyalty to evolving trends of scientific inquiry

3. The author of this passage is likely to agree with which of the following?

(1) Paradigms almost entirely define a scientific tradition.
(2) A group of scientists investigating a phenomenon would benefit by defining a set of rules.
(3) Acceptance by the giants of a tradition is a sine qua non for a paradigm to emerge.
(4) Choice of isolation mechanism determines the type of paradigm that may emerge from a tradition.
(5) Paradigms are a general representation of rules and beliefs of a scientific tradition.

4.

The difficulties historians face in establishing cause-and-effect relations in the history of human societies are broadly similar to the difficulties facing astronomers, climatologists, ecologists, evolutionary biologists; geologists, and palaeontologists. To varying degrees each of these fields is plagued by the impossibility of performing replicated, controlled experimental interventions, the complexity arising from enormous numbers of variables, the resulting uniqueness of each system, the consequent impossibility of formulating universal laws, and the difficulties of predicting emergent properties and future behaviour. Prediction in history, as in other historical sciences, is most feasible on large spatial scales and over long times, when the unique features of millions of small-scale brief events become averaged out. Just as I could predict the sex ratio of the next 1,000 newborns but not the sexes of my own two children. the historian can recognize factors that made inevitable the broad outcome of the collision between American and Eurasian societies after 13,000 years of separate developments, but not the outcome of the 1960 U.S. presidential election. The details of which candidate said what during a single televised debate in October 1960 could have given the electoral victory to Nixon instead of to Kennedy, but no details of who said what could have blocked the European conquest of Native Americans.

How can students of human history profit from the experience of scientists in other historical sciences? A methodology that has proved useful involves the comparative method and so-called natural experiments. While neither astronomers studying galaxy formation nor human historians can manipulate their systems in controlled laboratory experiments, they both can take advantage of natural experiments, by comparing systems differing in the presence or absence (or in the strong or weak effect) of some putative causative factor. For example, epidemiologists, forbidden to feed large amounts of salt to people experimentally,

have still been able to identify effects of high salt intake by comparing groups of humans who already differ greatly in their salt intake: and cultural anthropologists, unable to provide human groups experimentally with varying resource abundances for many centuries, still study long-term effects of resource abundance on human societies by comparing recent Polynesian populations living on islands differing naturally in resource abundance.

The student of human history can draw on many more natural experiments than just comparisons among the five inhabited continents. Comparisons can also utilize large islands that have developed complex societies in a considerable degree of isolation (such as Japan, Madagascar. Native American Hispaniola, New Guinea, Hawaii, and many others), as well as societies on hundreds of smaller islands and regional societies within each of the continents. Natural experiments in any field, whether in ecology or human history, are inherently open to potential methodological criticisms. Those include confounding effects of natural variation in additional variables besides the one of interest, as well as problems in inferring chains of causation from observed correlations between variables. Such methodological problems have been discussed in great detail for some of the historical sciences. In particular, epidemiology, the science of drawing inferences about human diseases by comparing groups of people (often by retrospective historical studies), has for a long time successfully employed formalized procedures for dealing with problems similar to those facing historians of human societies.

In short, I acknowledge that it is much more difficult to understand human history than to understand problems in fields of science where history is unimportant and where fewer individual variables operate. Nevertheless, successful methodologies for analyzing historical problems have been worked out in several fields. As a result, the histories of dinosaurs, nebulae, and glaciers are generally acknowledged to belong to fields of science rather than to the humanities.

1. Why do islands with considerable degree of isolation provide valuable insights into human history?

(1) Isolated islands may evolve differently and this difference is of interest to us.
(2) Isolated islands increase the number of observations available to historians.
(3) Isolated islands, differing in their endowments and size may evolve differently and this difference can be attributed to their endowments and size.
(4) Isolated islands. differing in their endowments and size, provide a good comparison to large islands such as Eurasia, Africa, Americas and Australia.
(5) Isolated islands, in so far as they are inhabited, arouse curiosity about how human beings evolved there.

2. According to the author, why is prediction difficult in history?

(1) Historical explanations are usually broad so that no prediction is possible.
(2) Historical outcomes depend upon a large number of factors and hence prediction is difficult for each case.
(3) Historical sciences, by their very nature, are not interested in a multitude of minor factors, which might be important in a specific historical outcome.
(4) Historians are interested in evolution of human history and hence are only interested in longterm predictions.
(5) Historical sciences suffer from the inability to conduct controlled experiments and therefore have explanations based on a few long-term factors.

3. According to the author, which of the following statements would be true?

(1) Students of history are missing significant opportunities by not conducting any natural experiments.
(2) Complex societies inhabiting large islands provide great opportunities for natural experiments.
(3) Students of history are missing significant opportunities by not studying an adequate variety of natural experiments.
(4) A unique problem faced by historians is their inability to establish cause and effect relationships.
(5) Cultural anthropologists have overcome the problem of confounding variables through natural

experiments.

5.
A game of strategy, as currently conceived in game theory, is a situation in which two or more “players” make choices among available alternatives (moves). The totality of choices determines the outcomes of the game, and it is assumed that the rank order of preferences for the outcomes is different for different players. Thus the “interests” of the players are generally in conflict. Whether these interests are diametrically opposed or only partially opposed depends on the type of game.

Psychologically, most interesting situations arise when the interests of the players are partly coincident and partly opposed, because then one can postulate not only a conflict among the players but also inner conflicts within the players. Each is torn between a tendency to cooperate, so as to promote the common interests, and a tendency to compete, so as to enhance his own individual interests.

Internal conflicts are always psychologically interesting. What we vaguely call “interesting” psychology is in very great measure the psychology of inner conflict. Inner conflict is also held to be an important component of serious literature as distinguished from less serious genres. The classical tragedy, as well as the serious novel reveals the inner conflict of central figures. The superficial adventure story on the other hand, depicts only external conflict; that is, the threats to the person with whom the reader (or viewer) identifies stem in these stories exclusively from external obstacles and from the adversaries who create them. On the most primitive level this sort of external conflict is psychologically empty. In the fisticuffs between the protagonists of good and evil, no psychological problems are involved or, at any rate, none are depicted in juvenile representations of conflict.

The detective story, the “adult” analogue of a juvenile adventure tale, has at times been described as a glorification of intellectualized conflict. However, a great deal of the interest in the plots of these stories is sustained by withholding the unraveling of a solution to a problem. The effort of solving the problem is in itself not a conflict if the adversary (the unknown criminal) remains passive, like Nature, whose secrets the scientist supposedly unravels by deduction. If the adversary actively puts obstacles in the detective’s path toward the solution, there is genuine conflict. But the conflict is psychologically interesting only to the extent that it contains irrational components such as a tactical error on the criminal’s part or the detective’s insight into some psychological quirk of the criminal or something of this sort. Conflict conducted in a perfectly rational manner is psychologically no more interesting than a standard Western. For example, Tic-tac-toe, played perfectly by both players, is completely devoid of psychological interest. Chess may be psychologically interesting but only to the extent that it is played not quite rationally. Played completely rationally, chess would not be different from Tic-tac-toe.

In short, a pure conflict of interest (what is called a zero-sum game) although it offers a wealth of interesting conceptual problems, is not interesting psychologically, except to the extent that its conduct departs from rational norms.

1. According to the passage, internal conflicts are psychologically more interesting than external conflicts because

(1) internal conflicts, rather than external conflicts, form an important component of serious literature as distinguished from less serious genres.
(2) only juveniles or very few “adults” actually experience external conflict, while internal conflict is more widely prevalent in society.
(3) in situations of internal conflict, individuals experience a dilemma in resolving their own preferences for different outcomes.
(4) there are no threats to the reader (or viewer) in case of external conflicts.

2. Which, according to the author, would qualify as interesting psychology?

(1) A satistician’s dilemma over choosing the best method to solve an optimization problem.
(2) A chess player’s predicament over adopting a defensive strategy against an aggressive opponent.

(3) A mountaineer's choice of the best path to Mt. Everest from the base camp.
(4) A finance manager's quandary over the best way of raising money from the market.

3. According to the passage, which of the following options about the application of game theory to a conflict-of-interest situation is true?

(1) Assuming that the rank order of preferences for options is different for different players.
(2) Accepting that the interests of different players are often in conflict.
(3) Not assuming that the interests are in complete disagreement.
(4) All of the above.

4. The problem solving process of a scientist is different from that of a detective because

(1) scientists study inanimate objects, while detectives deal with living criminals or law offenders.
(2) scientists study known objects, while detectives have to deal with unknown criminals or law offenders
(3) scientists study phenomena that are not actively altered, while detectives deal with phenomena that have been deliberately influenced to mislead.
(4) scientists study psychologically interesting phenomena, while detectives deal with "adult" analogues of juvenile adventure tales.