Reading Comprehension Questions & Answers

RC Passage 1:

Caffeine, the stimulant in coffee, has been called "the most widely used psychoactive substance on Earth." Synder, Daly and Bruns have recently proposed that caffeine affects behavior by countering the activity in the human brain of a naturally occurring chemical called adenosine. Adenosine normally depresses neuron firing in many areas of the brain. It apparently does this by inhibiting the release of neurotransmitters, chemicals that carry nerve impulses from one neuron to the next. Like many other agents that affect neuron firing, adenosine must first bind to specific receptors on neuronal membranes. There are at least two classes of these receptors, which have been designated A1 and A2.

Snyder et al propose that caffeine, which is structurally similar to adenosine, is able to bind to both types of receptors, which prevents adenosine from attaching there and allows the neurons to fire more readily than they otherwise would.

For many years, caffeine's effects have been attributed to its inhibition of the production of phosphodiesterase, an enzyme that breaks down the chemical called cyclic AMP. A number of neurotransmitters exert their effects by first increasing cyclic AMP concentrations in target neurons. Therefore, prolonged periods at the elevated concentrations, as might be brought about by a phosphodiesterase inhibitor, could lead to a greater amount of neuron firing and, consequently, to behavioral stimulation. But Snyder et al point out that the caffeine concentrations needed to inhibit the production of phosphodiesterase in the brain are much higher than those that produce stimulation.

Moreover, other compounds that block phosphodiesterase's activity are not stimulants.

To buttress their case that caffeine acts instead by preventing adenosine binding, Snyder et al compared the stimulatory effects of a series of caffeine derivatives with their ability to dislodge adenosine from its receptors in the brains of mice. "In general," they reported, "the ability of the compounds to compete at the receptors correlates with their ability to stimulate locomotion in the mouse; i.e., the higher their capacity to bind at the receptors, the higher their ability to stimulate locomotion." Theophylline, a close structural relative of caffeine and the major stimulant in tea, was one of the most effective compounds in both regards. There were some apparent exceptions to the general correlation observed between adenosine-receptor binding and stimulation. One of these was a compound called 3-isobuty1-1-methylxanthine(IBMX), which bound very well but actually depressed mouse locomotion. Snyder et al suggest that this is not a major stumbling block to their hypothesis. The problem is that the compound has mixed effects in the brain, a not unusual occurrence with psychoactive drugs. Even caffeine, which is generally known only for its stimulatory effects, displays this property, depressing mouse locomotion at very low concentrations and stimulating it at higher ones.

Based on the Passage, answer the following questions:

- 1. The primary purpose of the passage is to
- (A) discuss a plan for investigation of a phenomenon that is not yet fully understood
- (B) present two explanations of a phenomenon and reconcile the differences between them

- (C) summarize two theories and suggest a third theory that overcomes the problems encountered in the first two
- (D) describe an alternative hypothesis and provide evidence and arguments that support it
- (E) challenge the validity of a theory by exposing the inconsistencies and contradictions in it
- 2. According so Snyder et al, caffeine differs from adenosine in that caffeine
- (A) stimulates behavior in the mouse and in humans, whereas adenosine stimulates behavior in humans only
- (B) has mixed effects in the brain, whereas adenosine has only a stimulatory effect
- (C) increases cyclic AMP concentrations in target neurons, whereas adenosine decreases such concentrations
- (D) permits release of neurotransmitters when it is bound to adenosine receptors, whereas adenosine inhibits such release
- (E) inhibits both neuron firing and the production of phosphodiesterase when there is a sufficient concentration in the brain, whereas adenosine inhibits only neuron firing
- 3. In response to experimental results concerning IBMX, Snyder et al contended that it is not uncommon for psychoactive drugs to have
- (A) mixed effects in the brain
- (B) inhibitory effects on enzymes in the brain
- (C) close structural relationships with caffeine
- (D) depressive effects on mouse locomotion
- (E) the ability to dislodge caffeine from receptors in the brain
- 4. According to Snyder et al, all of the following compounds can bind to specific receptors in the brain EXCEPT
- (A) IBMX
- (B) caffeine
- (C) adenosine
- (D) theophylline
- (E) phosphodiesterase
- 5. Snyder et al suggest that caffeine's ability to bind to A1 and A2 receptors can be at least partially attributed to which of the following?
- (A) The chemical relationship between caffeine and phosphodiesterase

- (B) The structural relationship between caffeine and adenosine
- (C) The structural similarity between caffeine and neurotransmitters
- (D) The ability of caffeine to stimulate behavior
- (E) The natural occurrence of caffeine and adenosine in the brain

RC Passage 2

Archaeology as a profession faces two major problems.

First, it is the poorest of the poor. Only paltry sums are available for excavating and even less is available for publishing the results and preserving the sites once excavated. Yet archaeologists deal with priceless objects every day.

Second, there is the problem of illegal excavation, resulting in museum-quality pieces being sold to the highest bidder.

I would like to make an outrageous suggestion that would at one stroke provide funds for archaeology and reduce the amount of illegal digging. I would propose that scientific archeological expeditions and governmental authorities sell excavated artifacts on the open market. Such sales would provide substantial funds for the excavation and preservation of archaeological sites and the publication of results. At the same time, they would break the illegal excavator's grip on the market, thereby decreasing the inducement to engage in illegal activities.

You might object that professionals excavate to acquire knowledge, not money. Moreover, ancient artifacts are part of our global cultural heritage, which should be available for all to appreciate, not sold to the highest bidder. I agree. Sell nothing that has unique artistic merit or scientific value. But, you might reply, everything that comes out of the ground has scientific value. Here we part company.

Theoretically, you may be correct in claiming that every artifact has potential scientific value. Practically, you are wrong.

I refer to the thousands of pottery vessels and ancient lamps that are essentially duplicates of one another. In one small excavation in Cyprus, archaeologists recently uncovered 2,000 virtually indistinguishable small jugs in a single courtyard, even precious royal seal impressions known as melekh handles have been found in abundance — more than 4,000 examples so far.

The basement of museums is simply not large enough to store the artifacts that are likely to be discovered in the future. There is not enough money even to catalogue the finds; as a result, they cannot be found again and become as inaccessible as if they had never been discovered. Indeed, with the help of a computer, sold artifacts could be more accessible than are the pieces stored in bulging museum basements. Prior to sale, each could be photographed and the list of the purchasers could be maintained on the computer A purchaser could even be required to agree to return the piece if it should become needed for scientific purposes. It would be unrealistic to suggest that illegal digging would stop if artifacts were sold in the open market. But the demand for the clandestine product would be substantially reduced. Who would want an unmarked pot when another was available whose

provenance was known, and that was dated stratigraphically by the professional archaeologist who excavated it?

Based on the Passage, answer the following questions:

- 1. The primary purpose of the passage is to propose
- (A) an alternative to museum display of artifacts
- (B) a way to curb illegal digging while benefiting the archaeological profession
- (C) a way to distinguish artifacts with the scientific value from those that have no such value
- (D) the governmental regulation of archaeological sites
- (E) a new system for cataloging duplicate artifacts

2. The author implies that all of the following statements about duplicate artifacts are true EXCEPT:

- (A) A market for such artifacts already exists.
- (B) Such artifacts seldom have scientific value.
- (C) There is likely to be a continuing supply of such artifacts.
- (D) Museums are well supplied with examples of such artifacts.
- (E) Such artifacts frequently exceed in quality in comparison to those already cataloged in museum collections

3. Which of the following is mentioned in the passage as a disadvantage of storing artifacts in museum basements?

- (A) Museum officials rarely allow scholars access to such artifacts.
- (B) Space that could be better used for display is taken up for storage.
- (C) Artifacts discovered in one excavation often become separated from each other.
- (D) Such artifacts are often damaged by variations in temperature and humidity.
- (E) Such artifacts' often remain uncatalogued and thus cannot be located once they are put in storage

4. The author's argument concerning the effect of the official sale of duplicate artifacts on illegal excavation is based on which of the following assumptions?

- (A) Prospective purchasers would prefer to buy authenticated artifacts.
- (B) The price of illegally excavated artifacts would rise.
- (C) Computers could be used to trace sold artifacts.

- (D) Illegal excavators would be forced to sell only duplicate artifacts.
- (E) Money gained from selling authenticated artifacts could be used to investigate and prosecute illegal excavators

5. The author anticipates which of the following initial objections to the adoption of his proposal?

- (A) Museum officials will become unwilling to store artifacts.
- (B) An oversupply of salable artifacts will result and the demand for them will fall.
- (C) Artifacts that would have been displayed in public places will be sold to private collectors.
- (D) Illegal excavators will have an even larger supply of artifacts for resale.
- (E) Counterfeiting of artifacts will become more commonplace

RC Passage 3:

Federal efforts to aid minority businesses began in the 1960's when the Small Business Administration (SBA) began making federally guaranteed loans and government-sponsored management and technical assistance available to minority business enterprises. While this program enabled many minority entrepreneurs to form new businesses, the results were disappointing, since managerial inexperience, unfavorable locations, and capital shortages led to high failure rates. Even 15 years after the program was implemented, minority business receipts were not quite two percent of the national economy's total receipts. Recently federal policymakers have adopted an approach intended to accelerate development of the minority business sector by moving away from directly aiding small minority enterprises and toward supporting larger, growth-oriented minority firms through intermediary companies. In this approach, large corporations participate in the development of successful and stable minority businesses by making use of government-sponsored venture capital. The capital is used by a participating company to establish a Minority Enterprise Small Business Investment Company or MESBIC. The MESBIC then provides capital and guidance to minority businesses that have potential to become future suppliers or customers of the sponsoring company.

MESBIC's are the result of the belief that providing established firms with easier access to relevant

management techniques and more job-specific experience, as well as substantial amounts of capital, gives those firms a greater opportunity to develop sound business foundations than does simply making general management experience and small amounts of capital available. Further, since potential markets for the minority businesses already exist through the sponsoring companies, the minority businesses face considerably less risk in terms of location and market fluctuation. Following early financial and operating problems, sponsoring corporations began to capitalize MESBIC's far above the legal minimum of \$500,000 in order to generate sufficient income and to sustain the quality of management needed. MESBIC's are now emerging as increasingly important financing sources for minority enterprises.

Ironically, MESBIC staffs, which usually consist of Hispanic and Black professionals, tend to approach investments in minority firms more pragmatically than do many MESBIC directors, who are usually senior managers from sponsoring corporations. The latter often still think mainly in terms of the "social responsibility approach" and thus seem to prefer deals that are riskier and less attractive than normal investment criteria would warrant. Such differences in viewpoint have produced uneasiness among many minority staff members, who feel that minority entrepreneurs and businesses should be judged by established business considerations. These staff members believe their point of view is closer to the original philosophy of MESBIC's and they are concerned that, unless a more prudent course is followed, MESBIC directors may revert to policies likely to re-create the disappointing results of the original SBA approach.

Based on the Passage, answer the following questions:

- 1. Which of the following best states the central idea of the passage?
- (A) The use of MESBIC's for aiding minority entrepreneurs seems to have greater potential for success than does the original SBA approach.
- (B) There is a crucial difference in point of view between the staff and directors of some MESBIC's.
- (C) After initial problems with management and marketing, minority businesses have begun to expand at a steady rate.
- (D) Minority entrepreneurs wishing to form new businesses now have several equally successful federal programs on which to rely.
- (E) For the first time since 1960, large corporations are making significant contributions to the development of minority businesses

2. According to the passage, the MESBIC approach differs from the SBA approach in that MESBIC's

- (A) seek federal contracts to provide markets for minority businesses
- (B) encourage minority businesses to provide markets for other minority businesses
- (C) attempt to maintain a specified rate of growth in the minority business sector
- (D) rely on the participation of large corporations to finance minority businesses
- (E) select minority businesses on the basis of their location

3. Which of the following does the author cite to support the conclusion that the results of the SBA program were disappointing?

- (A) The small number of new minority enterprises formed as a result of the program
- (B) The small number of minority enterprises that took advantage of the management and technical assistance offered under the program

- (C) The small percentage of the nation's business receipts earned by minority enterprises following the programs, implementation.
- (D) The small percentage of recipient minority enterprises that were able to repay federally guaranteed loans made under the program
- (E) The small number of minority enterprises that chose to participate in the program
- 4. Which of the following statements about the SBA program can be inferred from the passage?
- (A) The maximum term for loans made to recipient businesses was 15 years.
- (B) Business loans were considered to be more useful to recipient businesses than was management and technical assistance.
- (C) The anticipated failure rate for recipient businesses was significantly lower than the rate that actually resulted.
- (D) Recipient businesses were encouraged to relocate to areas more favorable for business development.
- (E) The capitalization needs of recipient businesses were assessed and then provided for adequately
- 5. The author's primary objective in the passage is to
- (A) disprove the view that federal efforts to aid minority businesses have been ineffective
- (B) explain how federal efforts to aid minority businesses have changed since the 1960's
- (C) establish a direct link between the federal efforts to aid minority businesses made before the 1960's and those made in the 1980's
- (D) analyze the basis for the belief that job-specific experience is more useful to minority businesses than is general management experience
- (E) argue that the "social responsibility approach" to aiding minority businesses is superior to any other approach

RC Passage 4:

The majority of successful senior managers do not closely follow the classical rational model of first clarifying goals, assessing the problem, formulating options, estimating likelihoods of success, making a decision, and only then taking action to implement the decision. Rather, in their day-by-day tactical maneuvers, these senior executives rely on what is vaguely termed "intuition" to manage a network of interrelated problems that require them to deal with ambiguity, inconsistency, novelty, and surprise; and to integrate action into the process to thinking.

Generations of writers on management have recognized that some practicing managers rely heavily on intuition. In general, however, such writers display a poor grasp of what intuition is. Some see it as the opposite of rationality; others view it as an excuse for capriciousness.

Isenberg's recent research on the cognitive processes of senior managers reveals that managers' intuition is neither of these. Rather, senior managers use intuition in at least five distinct ways. First, they intuitively sense when a problem exists. Second, managers rely on intuition to perform

well-learned behavior patterns rapidly. This intuition is not arbitrary or irrational, but is based on years of painstaking practice and hands-on experience that build skills. A third function of intuition is to synthesize isolated bits of data and practice into an integrated picture, often in an "Aha!" experience. Fourth, some managers use intuition as a check on the results of more rational analysis. Most senior executives are familiar with the formal decision analysis models and tools, and those who use such systematic methods for reaching decisions are occasionally leery of solutions suggested by these methods which run counter to their sense of the correct course of action. Finally, managers can use intuition to bypass in-depth analysis and move rapidly to engender a plausible solution. Used in this way, intuition is an almost instantaneous cognitive process in which a manager recognizes familiar patterns.

One of the implications of the intuitive style of executive management is that "thinking" is inseparable from acting. Since managers often "know" what is right before they can analyze and explain it, they frequently act first and explain later. Analysis is inextricably tied to action in thinking/acting cycles, in which managers develop thoughts about their companies and organizations not by analyzing a problematic situation and then acting, but by acting and analyzing in close concert.

Given the great uncertainty of many of the management issues that they face, senior managers often instigate a course of action simply to learn more about an issue. They then use the results of the action to develop a more complete understanding of the issue. One implication of thinking/acting cycles is that action is often part of defining the problem, not just of implementing the solution.

Based on the Passage, answer the following questions:

- 1. According to the passage, senior managers use intuition in all of the following ways EXCEPT to
- (A) speed up of the creation of a solution to a problem
- (B) identify a problem
- (C) bring together disparate facts
- (D) stipulate clear goals
- (E) evaluate possible solutions to a problem
- 2. The passage suggests which of the following about the "writers on management" mentioned in paragraph 2?
- (A) They have criticized managers for not following the classical rational model of decision analysis.
- (B) They have not based their analyses on a sufficiently large sample of actual managers.

- (C) They have relied in drawing their conclusions on what managers say rather than on what managers do.
- (D) They have misunderstood how managers use intuition in making business decisions.
- (E) They have not acknowledged the role of intuition in managerial practice
- 3. According to the passage, the classical model of decision analysis includes all of the following EXCEPT
- (A) evaluation of a problem
- (B) creation of possible solutions to a problem
- (C) establishment of clear goals to be reached by the decision
- (D) action undertaken in order to discover more information about a problem
- (E) comparison of the probable effects of different solutions to a problem
- 4. It can be inferred from the passage that which of the following would most probably be one major difference in behavior between Manager X, who uses intuition to reach decisions, and Manager Y, who uses only formal decision analysis?
- (A) Manager X analyzes first and then acts; Manager Y does not.
- (B) Manager X checks possible solutions to a problem by systematic analysis; Manager Y does not
- (C) Manager X takes action in order to arrive at the solution to a problem; Manager Y does not.
- (D) Manager Y draws on years of hands-on experience in creating a solution to a problem; Manager X does not.
- (E) Manger Y depends on day-to-day tactical maneuvering; manager X does not
- 5. The passage provides support for which of the following statements?
- (A) Managers who rely on intuition are more successful than those who rely on formal decision analysis.
- (B) Managers cannot justify their intuitive decisions.
- (C) Managers' intuition works contrary to their rational and analytical skills
- (D) Logical analysis of a problem increases the number of possible solutions.
- (E) Intuition enables managers to employ their practical experience more efficiently.

RC Passage 5:

Nearly a century ago, biologists found that if they separated an invertebrate animal embryo into two parts at an early stage of its life, it would survive and develop as two normal embryos. This led them to believe that the cells in the early embryo are undetermined in the sense that each cell has the potential to develop in a variety of different ways. Later biologists found that the situation was not so simple. It

matters in which plane the embryo is cut. If it is cut in a plane different from the one used by the early investigators, it will not form two whole embryos.

A debate arose over what exactly was happening. Which embryo cells are determined, just when do they become irreversibly committed to their fates, and what are the "morphogenetic determinants" that tell a cell what to become? But the debate could not be resolved because no one was able to ask the crucial questions in a form in which they could be pursued productively. Recent discoveries in molecular biology, however, have opened up prospects for a resolution of the debate. Now investigators think they know at least some of the molecules that act as morphogenetic determinants in early development. They have been able to show that, in a sense, cell determination begins even before an egg is fertilized.

Studying sea urchins, biologist Paul Gross found that an unfertilized egg contains substances that function as morphogenetic determinants. They are located in the cytoplasm of the egg cell; i.e., in that part of the cell's protoplasm that lies outside of the nucleus. In the unfertilized egg, the substances are inactive and are not distributed homogeneously. When the egg is fertilized, the substances become active and, presumably, govern the behavior of the genes they interact with. Since the substances are unevenly distributed in the egg, when the fertilized egg divides, the resulting cells are different from the start and so can be qualitatively different in their own gene activity.

The substances that Gross studied are maternal messenger RNA's –products of certain maternal genes. He and other biologists studying a wide variety of organisms have found that these particular RNA's direct, in large part, the synthesis of histones, a class of proteins that bind to DNA. Once synthesized, the histones move into the cell nucleus, where sections of DNA wrap around them to form a structure that resembles beads, or knots, on a string. The beads are DNA segments wrapped around the histones; the string is the intervening DNA. And it is the structure of these beaded DNA strings that guides the fate of the cells in which they are located.

Based on the Passage, answer the following questions:

1. It can be inferred from the passage that the morphogenetic determinants present in the early embryo are

- (A) located in the nucleus of the embryo cells
- (B) evenly distributed unless the embryo is not developing normally
- (C) inactive until the embryo cells become irreversibly committed to their final function
- (D) identical to those that were already present in the unfertilized egg
- (E) present in larger quantities than is necessary for the development of a single individual
- 2. The main topic of the passage is
- (A) the early development of embryos of lower marine organisms
- (B) the main contribution of modern embryology to molecular biology

- (C) the role of molecular biology in disproving older theories of embryonic development
- (D) cell determination as an issue in the study of embryonic development
- (E) scientific dogma as a factor in the recent debate over the value of molecular biology
- 3. According to the passage, when biologists believed that the cells in the early embryo were undetermined, they made which of the following mistakes?
- (A) They did not attempt to replicate the original experiment of separating an embryo into two parts.
- (B) They did not realize that there was a connection between the issue of cell determination and the outcome of the separation experiment.
- (C) They assumed that the results of experiments on embryos did not depend on the particular animal species used for such experiments.
- (D) They assumed that it was crucial to perform the separation experiment at an early stage in the embryo's life.
- (E) They assumed that different ways of separating an embryo into two parts would be equivalent as far as the fate of the two parts was concerned
- 4. It can be inferred from the passage that the initial production of histones after an egg is fertilized takes place
- (A) in the cytoplasm
- (B) in the maternal genes
- (C) throughout the protoplasm
- (D) in the beaded portions of the DNA strings
- (E) in certain sections of the cell nucleus
- 5. It can be inferred from the passage that which of the following is dependent on the fertilization of an egg?
- (A) Copying of maternal genes to produce maternal messenger RNA's
- (B) Sythesis of proteins called histones
- (C) Division of a cell into its nucleus and the cytoplasm
- (D) Determination of the egg cell's potential for division
- (E) Generation of all of a cell's morphogenetic determinants
- 6. According to the passage, the morphogenetic determinants present in the unfertilized egg cell are which of the following?

- (A) Proteins bound to the nucleus
- (B) Histones
- (C) Maternal messenger RNA's
- (D) Cytoplasm
- (E) Non Beaded intervening DNA

RC Passage 6:

In the two decades between 1910 and 1930, over ten percent of the Black population of the United States left the South, where the preponderance of the Black population had been located, and migrated to northern states, with the largest number moving, it is claimed, between 1916 and 1918. It has been frequently assumed, but not proved, that the majority of the migrants in what has come to be called the Great Migration came from rural areas and were motivated by two concurrent factors: the collapse of

the cotton industry following the boll weevil infestation, which began in 1898, and increased demand in the North for labor following the cessation of European immigration caused by the outbreak of the First World War in 1914. This assumption has led to the conclusion that the migrants' subsequent lack of economic mobility in the North is tied to rural background, a background that implies unfamiliarity with urban living and a lack of industrial skills.

But the question of who actually left the South has never been rigorously investigated. Although numerous investigations document an exodus from rural southern areas to southern cities prior to the Great Migration, no one has considered whether the same migrants then moved on to northern cities. In 1910, over 600,000 Black workers, or ten percent of the Black work force, reported themselves to be engaged in "manufacturing and mechanical pursuits," the federal census category roughly encompassing the entire industrial sector. The Great Migration could easily have been made up entirely of this group and their families. It is perhaps surprising to argue that an employed population could be enticed to move, but an explanation lies in the labor conditions prevalent in the South.

About thirty-five percent of the urban Black population in the South was engaged in skilled trades. Some were from the old artisan class of slavery-blacksmiths, masons, carpenters-which had had a monopoly of certain trades, but they were gradually being pushed out by competition, mechanization, and obsolescence. The remaining sixty-five percent, more recently urbanized, worked in newly developed industries—tobacco, lumber, coal and iron manufacture and railroads. Wages in the South, however, were low, and Black workers were aware, through labor recruiters and the Black press, that they could earn more even as unskilled workers in the North than they could as artisans in the South. After the boll weevil infestation, urban Black workers faced competition from the continuing influx of both Black and White rural workers, who were driven to undercut the wages formerly paid for industrial jobs.

Thus, a move towards the North would be seen as advantageous to a group that was already urbanized and steadily employed, and the easy conclusion tying their subsequent economic problems in the North to their rural background comes into question.

Based on the Passage, answer the following questions:

- 1. The author indicates explicitly that which of the following records has been a source of information in her investigation?
- (A) United States Immigration Service reports from 1914 to 1930
- (B) Payrolls of southern manufacturing firms between 1910 and 1930
- (C) The volume of cotton exports between 1898 and 1910
- (D) The federal census of 1910
- (E) Advertisements of labor recruiters appearing in southern newspapers after 1910
- 2. In the passage, the author anticipates which of the following as a possible objection to her argument?
- (A) It is uncertain how many people actually migrated during the Great Migration.
- (B) The eventual economic status of the Great Migration migrants has not been adequately traced.
- (C) It is not likely that people with steady jobs would have reason to move to another area of the country.
- (D) It is not true that the term "manufacturing and mechanical pursuits" actually encompasses the entire industrial sector.
- (E) Of the Black workers living in southern cities, only those in a small number of trades were threatened by obsolescence.
- 3. According to the passage, which of the following is true about the wages in southern cities in 1910?
- (A) They were being pushed lower as a result of increased competition.
- (B) They had begun to rise so that southern industry could attract rural workers.
- (C) They had increased for skilled workers but decreased for unskilled workers.
- (D) They had increased in large southern cities but decreased in small southern cities.
- (E) They had increased in newly developed industries but decreased in the older trades.
- 4. The author cites each of the following as possible influences in a Black worker's decision to migrate north in the Great Migration EXCEPT
- (A) wage levels in northern cities

- (B) labor recruiters
- (C) competition from rural workers
- (D) voting rights in northern states
- (E) the Black press
- 5. The primary purpose of the passage is to
- (A) support an alternative to an accepted methodology
- (B) present evidence that resolves a contradiction
- (C) introduce a recently discovered source of information
- (D) challenge a widely accepted explanation
- (E) argue that a discarded theory deserves new attention

RC Passage 7:

Let us go then, you and I, When the evening is spread out against the sky Like a patient etherized upon a table; Let us go, through certain half-deserted streets, The muttering retreats Of restless nights in

one-night cheap hotels And sawdust restaurants with oyster-shells: Streets that follow like a tedious argument Of insidious intent To lead you to an overwhelming question. . . Oh, do not ask, "What is it?" Let us go and make our visit.

In the room the women come and go Talking of Michelangelo. The yellow fog that rubs its back upon the window-panes

The yellow smoke that rubs its muzzle on the window-panes Licked its tongue into the corners of the evening Lingered upon the pools that stand in drains, Let fall upon its back the soot that falls from chimneys, Slipped by the terrace, made a sudden leap, And seeing that it was a soft October night Curled once about the house, and fell asleep.

And indeed there will be time For the yellow smoke that slides along the street, Rubbing its back upon the window-panes; There will be time, there will be time To prepare a face to meet the faces that you meet; There will be time to murder and create, And time for all the works and days of hands That lift

and drop a question on your plate; Time for you and time for me, And time yet for a hundred indecisions And for a hundred visions and revisions Before the taking of a toast and tea.

In the room the women come and go Talking of Michelangelo. And indeed there will be time To wonder, "Do I dare?" and, "Do I dare?"

Time to turn back and descend the stair, With a bald spot in the middle of my hair— [They will say: "How his hair is growing thin!"] My morning coat, my collar mounting firmly to the chin, My necktie rich and modest, but asserted by a simple pin— [They will say: "But how his arms and legs are thin!"] Do I

dare Disturb the universe? In a minute there is time for decisions and revisions which a minute will reverse.

For I have known them all already, known them all; Have known the evenings, mornings, afternoons, I have measured out my life with coffee spoons; I know the voices dying with a dying fall Beneath the music from a farther room. So how should I presume?

Based on the Passage, answer the following questions:

1. Which of the following meanings can be inferred from the lines "o I dare Disturb the universe?"

- (A) The author is referring to his bright future.
- (B) The author fears that he will cause some major upheaval in world.
- (C) The author refers to the 'status quo' in which he is in.
- (D) The author expresses his feeling of being pinned against a wall.
- (E) The author is apprehensive about his last days.
- 2. What, according to the passage, is the reason for the author's optimism?
- (A) That the women are talking of Michelangelo.
- (B) That the yellow fog rubs upon the window-panes.
- (C) That it was an October night.
- (D) That there will be moments for everything.
- (E) That the falling soot made a sudden leap.

3. In the first ten lines of the passage the author embodies which of the following with human attributes?

- (A) toast
- (B) restaurants
- (C) intent
- (D) retreats
- (E) arguments

4. In the passage, evening is compared to:

- (A) The spreading sky
- (B) The anesthetized patient
- (C) Wicked people

- (D) The deserted streets
- (E) A walk in the streets

ANSWERS

RC Passage 1:

- 1. **D** is the best answer. This question requires one to identify the primary concern of the passage as a whole. In the first paragraph, a recent hypothesis about the effects of caffeine on behavior was presented. The second paragraph describes an earlier and widely accepted hypothesis about how caffeine affects behavior and then presents evidence that is not consistent with that hypothesis. The third and fourth paragraphs return to the newer hypothesis introduced in the first paragraph and provide "evidence and arguments" that support this alternative hypothesis.
- 2. **D** is the best answer. The passage states that adenosine "depresses neuron firing" by binding to specific receptors on neuronal membranes, which in turn inhibits the release of neurotransmitters. The passage describes Snyder et al's hypothesis about caffeine. They propose that caffeine binds to specific receptors on neuronal membranes, which prevents adenosine from binding to those receptors and "allows the neurons to fire more readily than they otherwise would". Therefore, according to Snyder et al, caffeine differs from adenosine in that caffeine permits neurotransmitter release when it is bound to adenosine receptors, whereas adenosine inhibits neuro transmitter release.
- **3. A is the best answer**. The effects of IBMX are discussed in the last paragraph of the passage. IBMX apparently binds to adenosine-specific receptors on neuronal membranes, but, in contrast to the other caffeine derivatives that Snyder et al experimented with, IBMX depresses rather than stimulates mouse locomotion. Snyder et al respond to this experimental result by stating that IBMX has "mixed effects in the brain, a not unusual occurrence with psychoactive drugs".
- **4. E is the best answer**. This question asks you to identify which compound, according to Snyder et al, does NOT bind to specific receptors in the brain. Phosphodiesterase, identified as an "enzyme that breaks down the chemical called cyclic AMP" is the only compound that is not identified as one that binds to specific receptors in the brain.
- **5. B** is the best answer. This question asks you to identify information that is suggested rather than directly stated in the passage. To answer it, first look for the location in the passage of the information specified in the question. The A1 and A2 receptors are mentioned in the passage & it goes on to describe Snyder et al's hypothesis about the effects of caffeine on behavior. They propose that

caffeine, "which is structurally similar to adenosine," is able to bind to A1 and A2 receptors in the brain, the same receptors that adenosine normally binds to. Thus, the passage suggests that the structural relationship between caffeine and adenosine may be partially responsible for caffeine's ability to bind to A1 and A2 receptors.

RC Passage 2:

1. B is the best answer. The first paragraph identifies two major problems faced by the archaeological profession: inadequate funding and illegal digging. The passage indicates that the author is going to suggest how to remedy both problems, thereby benefiting the archaeological profession. The author proceeds to propose allowing the sale of excavated artifacts and to explain how this would solve both problems. The author then supports the proposal by countering possible objections to it, and in the last paragraph explains how the proposal would curb illegal digging. Thus, the way information is organized

in the passage indicates that the author's purpose is to suggest that allowing the sale of excavated artifacts would provide funds for the archaeological profession and curb illegal digging.

- **3. E is the best answer**. The question requires you to identify the answer choice that CANNOT be inferred from the passage. Nothing in the passage implies that duplicate artifacts exceed museum objects in quality.
- **3. E** is the best answer. The disadvantages of storing artifacts in museum basements are discussed in the fifth paragraph. The passage states that "There is not enough money...to catalogue the finds" and declare that, as a result stored objects cannot be located.
- **4. A is the best answer**. The author's argument concerning the effect of the official sale of duplicate artifacts on illegal excavation appears in the passage where the author predicts that such official sale would reduce the demand for "the clandestine product." The rhetorical question that follows indicates that the author finds it unlikely that any purchaser would prefer objects of unknown provenance to objects of known origin, or, to rephrase, the author assumes that most people would prefer to purchase objects of authenticated provenance, as this choice states.
- **5. C** is the best answer. The author begins the third paragraph by saying "you might object..." in order to anticipate possible objections to the adoption of his proposal. In the next sentence the author asserts that "ancient artifacts...should be available for all to appreciate, not sold to the highest bidder", acknowledging an opponent's fear that individuals might be allowed to purchase objects that ought to be displayed in public institutions. This objection is paraphrased in this choice.

RC Passage 3:

1. A is the best answer. The passage begins by indicating that the results of the SBA approach to aiding minority entrepreneurs "were disappointing". The passage states that "MESBIC's are now emerging as increasingly important financing sources for minority enterprises." Much of the passage is devoted to supporting the author's view that MESBIC's have the greater potential for success, and the last sentence in the passage confirms this view.

- **2. D** is the best answer. In the second paragraph, the author describes the MESBIC approach as one in which "large corporations participate in the development of successful and stable minority businesses by making use of government-sponsored venture capital". There is no indication in the passage that the SBA approach relies on the participation of large corporations.
- **3. C** is the best answer. The author concludes that the results of the SBA approach "were disappointing". Then he supports the conclusion by citing the fact that "Even 15 years after the program was implemented, minority business receipts were not quite two percent of the national economy's total receipts".
- **4. C** is the best answer. This question asks you to draw an inference about the SBA program. Although the passage does not actually state that the failure rate for SBA recipient businesses was higher than anticipated, in the first paragraph the author does state that the results of the SBA program were disappointing, in part because of the high failure rate among SBA-sponsored businesses. From this it can be inferred that the anticipated failure rate was lower than the actual rate.
- **5. B** is the best answer. The passage describes efforts undertaken in the 1960's to and minority businesses and then describes MESBIC's, a newer approach to such efforts.

RC Passage 4:

- **1. D** is the best answer. The question requires you to recognize which of the choices is NOT mentioned in the passage as a way in which senior managers use intuition. The passage does not mention stipulating goals.
- **2. D** is the best answer. The author asserts that the writers in question "display a poor grasp of what intuition is". The next paragraph presents a view that, according to the author of the passage, characterizes intuition more accurately than the writers on management do. Isenberg's research is specifically described as showing the ways in which managers use intuition. Therefore, what Isenberg correctly comprehends, and the writers in question misunderstand, is how managers use intuition, as this choice states.
- **3. D** is the best answer. The question requires you to recognize which of the choices is NOT mentioned in the passage as a component of the classical model of decision analysis. Only this choice, "action undertaken in order to discover more information about a problem," does not appear in the passage.
- **4. C** is the best answer. The question requires you to compare behavior based on intuition with behavior based on formal decision analysis. This choice specifies that the manager who uses intuition incorporates action into the decision-making process, but the manager who uses formal analysis does not. This distinction is made in several places in the passage. The passage emphasizes that decision-making and action-taking are separate steps in formal decision analysis: "making a decision, and only then taking action." On the other hand, those who use intuition "integrate action into the process of thinking". Again, the author mentions that in the intuitive style of management, " 'thinking' is inseparable from acting", and "action is often part of defining the problem".

5. E is the best answer. The question requires you to identify a statement that can be inferred from information in the passage but is not explicitly stated. The author asserts that intuitive managers can "move rapidly to engender a plausible solution" and that their intuition is based on "experience that builds skill". This implies that the combination of skill and rapidity enables managers to employ their practical experience more efficiently, as this choice states.

RC Passage 5:

- 1. **E is the best answer**. The second and third paragraphs of the passage indicate that morphogenetic determinants are substances in the embryo that are activated after the egg has been fertilized and that "tell a cell what to become". If, as the author asserts in the first paragraph, biologists have succeeded in dividing an embryo into two parts, each of which survives and develops into a normal embryo, it can be concluded that the quantity of morphogenetic determinants in the early embryo is greater than that required for the development of a single individual.
- **2. D** is the best answer. In identifying the main topic of the passage, you must consider the passage as a whole. In the first paragraph, the author provides a historical context for the debate described in the second paragraph, concerning when and how the determination of embryo cells takes place. The third and fourth paragraphs provide a specific example of the "Recent discoveries in molecular biology" that may lead to the resolution of that debate.
- **3. E is the best answer**. According to the author, early investigators arrived at the conclusion that the cells of the embryo are undetermined because they "found that if they separated an invertebrate animal embryo into two parts at an early stage of its life, it would survive and develop as two normal embryos". However, later biologists discovered that when an embryo was cut in places different from the one used by the early investigators, it did not form two whole embryos. Because the earlier biologists apparently arrived at their conclusion without attempting to cut an embryo in different

planes, it would appear that they assumed, erroneously, that different ways of separating the embryos would not affect the fate of the two embryo parts.

- **4. A is the best answer**. In the third paragraph, the author asserts that substances that function as morphogenetic determinants are located in the cytoplasm of the cell and become active after the cell is fertilized. In the fourth paragraph we learn that these substances are "maternal messenger RNA's" and that they "direct, in large part, the synthesis of histones," which, after being synthesized, "move into the cell nucleus". Thus, it can be inferred that after the egg is fertilized, the initial production of histones occurs in the cytoplasm.
- 5. **B** is the best answer. Lines in the passage indicate that substances that function as morphogenetic determinants are inactive in the unfertilized egg and that when the egg is fertilized, they "become active and, presumably, govern the behavior of the genes they interact with." In the fourth paragraph, we learn that these substances exert their control over the fate of the cell by directing "the synthesis of histones." Because these histones cannot be synthesized until the substances that function as morphogenetic determinants become active, and because these substances do not become active

until the egg is fertilized, it can be inferred that the synthesis of the histones is dependent on the fertilization of the egg.

6. C is the best answer. In his study of sea urchins, Gross "found that an unfertilized egg contains substances that function as morphogenetic determinants." The passage asserts that the "substances that Gross studied are maternal messenger RNA's," and we learn that these maternal messenger RNA's can be found in " a wide variety of organisms".

RC Passage 6:

- 1. D is the best answer. In the passage, the author states that ten percent of the Black workers in the South were employed in "manufacturing and mechanical pursuits" and then identifies "manufacturing and mechanical pursuits" as the general federal census category for industrial occupations in 1910. Thus, she indicates that she used the federal census as a source of information.
- 2. C is the best answer. To answer this question, you must first identify the author's argument. The author argues that it is possible that Black migrants to the North were living and working in urban areas of the South rather than in rural areas, as researchers had previously assumed. In the passage, the author states that it may be "surprising" that an employed population would relocate. Thus, the author anticipates an objection to her argument on the grounds that Black urban workers in the South would have been unlikely to leave an economically secure existence. She meets that objection by stating that "an explanation lies in the labor conditions then prevalent in the South", and discusses the low wages that may have motivated Black workers to migrate north for higher pay.
- **3. A is the best answer**. The author discusses wages in southern cities in the third paragraph. Lines state that an increase in the number of rural workers who migrated to southern cities after the collapse of the cotton industry led to increased competition for jobs and resulted in wages being pushed lower.
- **4. D** is the best answer. This question asks you to identify the possible influences that motivated Black workers in their decision to migrate north, and then to recognize which of the choices is NOT mentioned as an influence on Black workers. This is the only option not mentioned in the passage as an influence that may have motivated southern Black workers to move north.
- **5. D** is the best answer. The first paragraph describes a common assumption about the Great Migration, that the majority of migrants came from rural areas. It also restates the conclusion that is based on this assumption, that the subsequent economic difficulties of Black migrants in the North were a result of their unfamiliarity with urban life. In the second paragraph, the author states that the "question of who actually left the South" has never been adequately researched. She goes on to

argue that Black migrants may actually have been from urban areas rather than rural areas, and thus that their subsequent economic problems in northern cities were not caused by their rural background. In making this argument, the author is challenging the "widely accepted explanation" presented in the first paragraph.

RC Passage 7:

- 1. C is the best answer. The lines "And indeed... I presume?" spell out the circle of concern which is limited to the immediate and the temporal world, nowhere do the lines depict any issues with the larger picture in life. The author is in a 'status quo' and deciding what to do.
- **2. D** is the best answer. The passage stresses on the fact that "there will be time" for everything.
- **3. D** is the best answer. The phrase "muttering retreats" makes option (d) correct.
- **4. B** is the best answer. In the olden days, ether was used to anesthetize patients.