Critical Reasoning (Interpretation questions)

Question 1 - Conclusion

Software engineers know that a poorly written application can consume more memory than it should and that running out of memory can cause an application to crash. However, if a crashing application causes the whole operating system to crash, the fault lies with the operating system.

Which one of the following, if true, is least helpful in establishing that this conclusion is properly drawn?

- (A) Operating systems with generous amounts of memory are less susceptible to crashing, even when applications are poorly written.
- (B) Operating systems can isolate the memory used by individual applications, even when an application uses a large amount of memory.
- (C) An operating system can monitor an application's consumption of memory and take action when that gets too high.
- (D) Techniques for programming operating systems to catch and handle memory errors are well-defined and well-known among programmers.
- (E) Because many applications can run simultaneously under a single operating system, the operating system should have a well-defined method of managing memory consumption.

## Question 2 -

New methods developed in genetic research have led taxonomists to revise their views on the evolutionary relationships between many species. Traditionally the relatedness of species has been ascertained by a close comparison of their anatomy. The new methods infer the closeness of any two species' relationship to each other directly from similarities between the species' genetic codes.

Which of the following conclusions is best supported by the information?

- A. The apparent degree of relatedness of some species, as determined by anatomical criteria, is not borne out by their degree of genetic similarity.
- B. When they know the differences between two species' genetic codes, taxonomists can infer what the observable anatomical differences between those species must be.
- C. The degree to which individuals of the same species are anatomically similar is determined more by their genetic codes than by such environmental factors as food supply.
- D. The traditional anatomical methods by which taxonomists investigated the relatedness of species are incapable of any further refinement.
- E. Without the use of genetic methods, taxonomists would never be able to obtain any accurate information about species' degrees of relatedness to one another

Continuous technological advances are critical to many types of business, because they allow machines to do the work previously done by humans – and they don't have to be compensated. Banking executives are always looking for ways to cut costs, so they support a heavy emphasis on automated technology in the workplace. Yet what customers look for most in their banks is to be recognized by their teller and feel a sense of familiarity and friendliness upon entering, so the reliance of banks on machines should be minimized, rather than exacerbated.

Which of the following best outlines the main idea of the argument?

- (A) Banks should reduce their dependence on technology.
- (B) Bank patrons desire personal attention.
- (C) Machines can work faster than humans.
- (D) Bank executives are a greedy bunch.
- (E) Bank automation is inevitable.

### Ouestion 4

Most television viewers estimate how frequently a particular type of accident or crime occurs by how extensively it is discussed on television news shows. Television news shows report more on stories that include dramatic pictures such as fires and motor vehicle accidents than they do on more common stories that have little visual drama such as bookkeeping fraud.

If the statements above are true, it can be properly concluded that which of the following is also true?

- (A) The time that television news reporters spend researching news stories is directly related to the number of viewers who will be affected by events like those in the news stories.
- (B) It is easier for crimes such as bookkeeping fraud to go unprosecuted than it is for crimes such as arson.
- (C) The number of fires and motor vehicle accidents greatly increases after each television n~ws show that includes dramatic pictures of a fire or motor vehicle accident.
- (D) Viewers of television news shows tend to overestimate the number of fires and motor vehicle accidents that occur relative to the number of crimes of bookkeeping fraud.
- (E) The usual selection of news stories for television news shows is determined by the number of news reporters available for assignment.

Between 1960 and 1966, the State University system had 92 percent of its capacity filled by students. During this time the system admitted 31 students each year for every 100 available spots in the system; the remaining 61 spots were filled by upperclassmen. From 1967 to 1975, the State University system filled 99 percent of its capacity with students; however the system also lowered its admission rate to 23 students for every 100 available spots each year.

If the statements above are true, which of the following conclusions can be most properly drawn?

- A. As a university system's admission rate falls, it is generally true that the percent of capacity filled increases.
- B. The number of available spots in the State University system declined between the two time periods.
- C. The proportion of young people applying to college increased between the two time periods.
- D. The number of people dropping out before finishing their degrees declined between the two periods.
- E. The average length of time that a student stayed in the State University system increased between the two time periods.

Some philosophers of science claim that no serious scientific theory can be tested experimentally without taking for granted some other body of scientific beliefs, for we cannot interpret any experimental results without relying on such beliefs.

If this is true, then which of the following conclusions seems most likely?

- A) Any particular scientific theory can be consistently retained, even in the face of apparently incompatible evidence, if we are willing to give up certain other scientific beliefs.
- B) Experimental evidence is really irrelevant to scientific theorizing.
- C) Experimental evidence is more relevant to the testing of scientific theories than to their initial formulation.
- D) Experimental evidence is more relevant to the initial formulation of scientific theories than to their testing.
- E) The best scientific theories are those which are formulated in such a way as to be subject to conclusive experimental refutation.

Outsourcing is the practice of obtaining from an independent supplier a product or service that a company has previously provided for itself. Vernon, Inc, a small manufacturing company that has in recent years experienced a decline in its profits, plans to boost its profits by outsourcing those parts of its business that independent suppliers can provide at a lower cost than Vernon can itself.

Which of the following, if true, most strongly supports the prediction that Vernon's plan will achieve its goal?

- (A) Among the parts of its business that Vernon does not plan to outsource are some that require standards of accuracy too high for most independent suppliers to provide at a lower cost than Vernon can.
- (B) Vernon itself acts as an independent supplier of specialized hardware items to certain manufacturers that formerly made those items themselves.
- (C) Relatively few manufacturers that start as independent suppliers have been able to expand their business and become direct competitors of the companies they once supplied.
- (D) Vernon plans to select the independent suppliers it will use on the basis of submitted bids.
- (E) Attending to certain tasks that Vernon performs relatively inefficiently has taken up much of the time and effort of top managers whose time would have been better spent attending to Vernon's core business.

Storytelling appears to be a universal aspect of both past and present cultures. Comparative study of traditional narratives from widely separated epochs and diverse cultures reveals common themes such as creation, tribal origin, mystical beings and quasi-historical figures, and common story types such as fables and tales in which animals assume human personalities.

The evidence cited above from the study of traditional narratives most supports which one of the following statements?

- (A) Storytellers routinely borrow themes from other cultures.
- (B) Storytellers have long understood that the narrative is a universal aspect of human culture.
- (C) Certain human concerns and interests arise in all of the world's cultures.
- (D) Storytelling was no less important in ancient cultures than it is in modern cultures.
- (E) The best way to understand a culture is to understand what motivates its storytellers.