1.

The United States hospital industry is an unusual market in that nonprofit and for-profit producers exist simultaneously. Theoretical literature offers conflicting views on whether nonprofit hospitals are less financially efficient. Theory suggests that nonprofit hospitals are so much more interested in offering high-quality service than in making money that they frequently input more resources to provide the same output of service as for-profit hospitals. This priority might also often lead them to be less vigilant in streamlining their services--eliminating duplication between departments, for instance. Conversely, while profit motive is thought to encourage for-profit hospitals to attain efficient production, most theorists admit that obstacles to that efficiency remain. For-profit hospital managers, for example, generally work independently of hospital owners and thus may not always make maximum financial efficiency their highest priority. The literature also suggests that widespread adoption of third-party payment systems may eventually eliminate any such potential differences between the two kinds of hospitals.

The same literature offers similarly conflicting views of the efficiency of nonprofit hospitals from a social welfare perspective. Newhouse (1970) contends that nonprofit hospital managers unnecessarily expand the quality and quantity of hospital care beyond the actual needs of the community, while Weisbrod (1975) argues that nonprofit firms--hospitals included--contribute efficiently to community welfare by providing public services that might be inadequately provided by government alone.

The passage suggests which of the following about the managers mentioned in the highlighted text?

## A.

They have generally been motivated to streamline hospital services as a result of direct intervention by hospital owners.

В.

They are more likely than managers of nonprofit hospitals to use unnecessary amounts of resources to provide services.

C.

Their most important self-acknowledged goal is to achieve maximum financial efficiency so that hospitals show a profit.

D.

Their decisions regarding services provided by their hospitals may not reflect hospital owners' priorities.

E.

They do not place a high priority on maximizing profits, despite their desire to achieve efficiency.

2.

Although the industrial union organizations that emerged under the banner of the Congress of Industrial Organizations (CIO) in the 1930s and 1940s embraced the

principles of nondiscrimination and inclusion, the role of women within unions reflected the prevailing gender ideology of the period. Elizabeth Faue's study of the labor movement in Minneapolis argues that women were marginalized by union bureaucratization and by the separation of unions from the community politics from which industrial unionism had emerged. Faue stresses the importance of women's contribution to the development of unions at the community level, contributions that made women's ultimate fate within the city's labor movement all the more poignant: as unions reached the peak of their strength in the 1940s, the community base that had made their success possible and to which women's contributions were so vital became increasingly irrelevant to unions' institutional life.

In her study of CIO industrial unions from the 1930s to the 1970s, Nancy F. Gabin also acknowledges the pervasive male domination in the unions, but maintains that women workers were able to create a political space within some unions to advance their interests as women. Gabin shows that, despite the unions' tendency to marginalize women's issues, working women's demands were a constant undercurrent within the union, and she stresses the links between the unions' women activists and the wave of feminism that emerged in the 1960s.

Which of the following can be inferred regarding the "gender ideology" mentioned in the highlighted text?

## A.

It prevented women from making significant contributions to the establishment of industrial unions.

R

It resulted from the marginalization of women in industrial unions.

C.

It had a significant effect on the advancement of women's issues within industrial unions.

D.

Its primary tenets were nondiscrimination and inclusion.

Ε.

Its effects were mitigated by the growth of industrial unions.

3.

The view has prevailed for the better part of the twentieth century that small firms do not perform an important role in Western economies. Official policies in many countries have favored large units of production because there were strong reasons to believe that large firms were superior to small firms in virtually every aspect of economic performance--productivity, technological progress, and job security and compensation. However, in the 1970s, evidence began to suggest that small firms in some countries were outperforming their larger counterparts. Perhaps the best example of this trend was in the steel industry, where new firms entered the market in the form of "mini-

mills," and small-firm employment expanded, while many large companies shut down plants and reduced employment. Although no systematic evidence exists to determine unequivocally whether smaller units of production are as efficient as large firms or are, in fact, more efficient, some researchers have concluded that the accumulated evidence to date indicates that small firms are at least not burdened with an inherent size disadvantage.

Thus, an alternative view has emerged in the economics literature, arguing that small firms make several important contributions to industrial markets. First, small firms are often the source of the kind of innovative activity that leads to technological change. Small firms generate market turbulence that creates additional dimensions of competition, and they also promote international competition through newly created niches. Finally, small firms in recent years have generated the preponderant share of new jobs

However, empirical knowledge about the relative roles of large and small firms is generally based upon anecdotal evidence and case studies, and such evidence has proved inadequate to answer major questions concerning the role of small firms across various industries and nations. An additional difficulty is that it is not obvious what criteria one should use to distinguish small firms from large ones. While a "small firm" is often defined as an enterprise with fewer than 500 employees, research studies of small firms use a wide variety of definitions.

The passage suggests which of the following about the empirical study of small firms' role?

A.

Anecdotal evidence does not support the theory that small firms' role is significant.

B.

Degrees of market turbulence are the primary indicator of small firms' role.

C.

An examination of new niches created by small firms has provided important data for the analysis of such firms' role.

D.

Case studies have provided reliable evidence to answer major questions concerning small firms' role.

E.

A more precise definition of the term "small firm" is crucial to making a conclusive analysis about small firms' role.

4.

The Black Death, a severe epidemic that ravaged fourteenth-century Europe, has intrigued scholars ever since Francis Gasquet's 1893 study contending that this epidemic greatly intensified the political and religious upheaval that ended the Middle

Ages. Thirty-six years later, historian George Coulton agreed but, paradoxically, attributed a silver lining to the Black Death: prosperity engendered by diminished competition for food, shelter, and work led survivors of the epidemic into the Renaissance and subsequent rise of modern Europe.

In the 1930s, however, Evgeny Kosminsky and other Marxist historians claimed the epidemic was merely an ancillary factor contributing to a general agrarian crisis stemming primarily from the inevitable decay of European feudalism. In arguing that this decline of feudalism was economically determined, the Marxist asserted that the Black Death was a relatively insignificant factor. This became the prevailing view until after the Second World War, when studies of specific regions and towns revealed astonishing mortality rates ascribed to the epidemic, thus restoring the central role of the Black Death in history.

This central role of the Black Death (traditionally attributed to bubonic plague brought from Asia) has been recently challenged from another direction. Building on bacteriologist John Shrewsbury's speculations about mislabeled epidemics, zoologist Graham Twigg employs urban case studies suggesting that the rat population in Europe was both too sparse and insufficiently migratory to have spread plague. Moreover, Twigg disputes the traditional trade-ship explanation for plague transmissions by extrapolating from data on the number of dead rats aboard Nile sailing vessels in 1912. The Black Death, which he conjectures was anthrax instead of bubonic plague, therefore caused far less havoc and fewer deaths than historians typically claim.

Although correctly citing the exacting conditions needed to start or spread bubonic plague, Twigg ignores virtually a century of scholarship contradictory to his findings and employs faulty logic in his single-minded approach to the Black Death. His speculative generalizations about the numbers of rats in medieval Europe are based on isolated studies unrepresentative of medieval conditions, while his unconvincing tradeship argument overlooks land-based caravans, the overland migration of infected rodents, and the many other animals that carry plague.

5.

Most farmers attempting to control slugs and snails turn to baited slug poison, or molluscicide, which usually consists of a bran pellet containing either methiocarb or metaldehyde. Both chemicals are neurotoxins that disrupt that part of the brain charged with making the mouth move in a coordinated fashion--the "central pattern generator"-as the slug feeds. Thus, both neurotoxins, while somewhat effective, interfere with the slugs' feeding behavior and limit their ingestion of the poison, increasing the probability that some will stop feeding before receiving a lethal dose. Moreover, slugs are not the only consumers of these poisons: methiocarb may be toxic to a variety of species, including varieties of worms, carabid beetles, and fish.

Researchers are experimenting with an alternative compound based on aluminum,

which may solve these problems, but this may well have a limited future as we learn more about the hazards of aluminum in the environment. For example, some researchers suggest that acid rain kills trees by mobilizing aluminum in the soil, while others have noted that the human disease Alzheimer's is more prevalent in areas where levels of aluminum in the soil are high. With farmers losing as much as 20 percent of their crops to slugs and snails even after treatment with currently available molluscicides, there is considerable incentive for researchers to come up with better and environmentally safer solutions.

6.

The storms most studied by climatologists have been those that are most easily understood by taking atmospheric measurements. Hurricanes and tornadoes, for example, are spatially confined, the forces that drive them are highly concentrated, and they have distinctive forms and readily quantifiable characteristics. Consequently, data about them are abundant, and their behavior is relatively well understood, although still difficult to predict.

Hurricanes and tornadoes are also studied because they are highly destructive storms, and knowledge about their behavior can help minimize injury to people and property. But other equally destructive storms have not been so thoroughly researched, perhaps because they are more difficult to study. A primary example is the northeaster, a type of coastal storm that causes significant damage along the eastern coast of North America. Northeasters, whose diffuse nature makes them difficult to categorize, are relatively weak low-pressure systems with winds that rarely acquire the strength of even the smallest hurricane. Although northeasters are perceived to be less destructive than other storms, the high waves associated with strong northeasters can cause damage comparable to that of a hurricane, because they can affect stretches of coast more than 1,500 kilometers long, whereas hurricanes typically threaten a relatively small ribbon of coastline--roughly 100 to 150 kilometers.

7.

The identification of femininity with morality and a belief in the innate moral superiority of women were fundamental to the cult of female domesticity in the nineteenth-century United States. Ironically, this ideology of female benevolence empowered women in the realm of social activism, enabling them to escape the confines of their traditional domestic spheres and to enter prisons, hospitals, battlefields, and slums. By following this path, some women came to wield considerable authority in the distribution of resources and services in their communities.

The sentimentalized concept of female benevolence bore little resemblance to women's actual work, which was decidedly unsentimental and businesslike, in that it involved chartering societies, raising money, and paying salaries. Moreover, in the face of legal limitations on their right to control money and property, women had to find ingenious legal ways to run and finance organized philanthropy. In contrast to the day-

to-day reality of this work, the idealized image of female benevolence lent a sentimental and gracious aura of altruism to the very real authority and privilege that some women commanded--which explains why some women activists clung tenaciously to this ideology. But clinging to this ideology also prevented these women from even attempting to gain true political power because it implied a moral purity that precluded participation in the messy world of partisan politics.

8.

Maps made by non-Native Americans to depict Native American land tenure, resources, and population distributions appeared almost as early as Europeans' first encounters with Native Americans and took many forms: missionaries' field sketches, explorers' drawings, and surveyors' maps, as well as maps rendered in connection with treaties involving land transfers. Most existing maps of Native American lands are reconstructions that are based largely on archaeology, oral reports, and evidence gathered from observers' accounts in letters, diaries, and official reports; accordingly, the accuracy of these maps is especially dependent on the mapmakers' own interpretive abilities.

Many existing maps also reflect the 150-year role of the Bureau of Indian Affairs (BIA) in administering tribal lands. Though these maps incorporate some information gleaned directly from Native Americans, rarely has Native American cartography contributed to this official record, which has been compiled, surveyed, and authenticated by non-Native Americans. Thus our current cartographic record relating to Native American tribes and their migrations and cultural features, as well as territoriality and contemporary trust lands, reflects the origins of the data, the mixed purposes for which the maps have been prepared, and changes both in United States government policy and in non-Native Americans' attitudes toward an understanding of Native Americans.

9.

After the Second World War, unionism in the Japanese auto industry was company-based, with separate unions in each auto company. Most company unions played no independent role in bargaining shop-floor issues or pressing autoworkers' grievances. In a 1981 survey, for example, fewer than 1 percent of workers said they sought union assistance for work-related problems, while 43 percent said they turned to management instead. There was little to distinguish the two in any case: most union officers were foremen or middle-level managers, and the union's role was primarily one of passive support for company goals. Conflict occasionally disrupted this cooperative relationship--one company union's opposition to the productivity campaigns of the early 1980s has been cited as such a case. In 1986, however, a caucus led by the Foreman's Association forced the union's leadership out of office and returned the union's policy to one of passive cooperation. In the United States, the potential for such company unionism grew after 1979, but it had difficulty taking hold in the auto industry, where a single union represented workers from all companies, particularly since federal law prohibited foremen from joining or leading industrial unions.

The Japanese model was often invoked as one in which authority decentralized to the shop floor empowered production workers to make key decisions. What these claims failed to recognize was that the actual delegation of authority was to the foreman, not the workers. The foreman exercised discretion over job assignments, training, transfers, and promotions; worker initiative was limited to suggestions that fine-tuned a management-controlled production process. Rather than being proactive, Japanese workers were forced to be reactive, the range of their responsibilities being far wider than their span of control. For example, the founder of one production system, Taichi Ohno, routinely gave department managers only 90 percent of the resources needed for production. As soon as workers could meet production goals without working overtime, 10 percent of remaining resources would be removed. Because the "OH! NO!" system continually pushed the production process to the verge of breakdown in an effort to find the minimum resource requirement, critics described it as "management by stress."

The author of the passage mentions the "OH! NO!" system primarily in order to

## A.

indicate a way in which the United States industry has become more like the Japanese auto industry

B.

challenge a particular misconception about worker empowerment in the Japanese auto industry

C.

illustrate the kinds of problem-solving techniques encouraged by company unions in Japan

D.

suggest an effective way of minimizing production costs in auto manufacturing

provide an example of the responsibilities assumed by a foreman in the Japanese auto industry

10.

Planter-legislators of the post-Civil War southern United States enacted crop lien laws stipulating that those who advanced cash or supplies necessary to plant a crop would receive, as security, a claim, or lien, on the crop produced. In doing so, planters, most of whom were former slaveholders, sought access to credit from merchants and control over nominally free laborers--former slaves freed by the victory of the northern Union over the southern Confederacy in the United States Civil War. They hoped to reassure merchants that despite the emancipation of the slaves, planters would produce crops and pay debts. Planters planned to use their supply credit to control their workers, former slaves who were without money to rent land or buy supplies. Planters imagined continuation of the pre-Civil War economic hierarchy: merchants supplying landlords, landlords supplying laborers, and laborers producing crops from which their scant

wages and planters' profits would come, allowing planters to repay advances. Lien laws frequently had unintended consequences, however, thwarting the planter fantasy of mastery without slavery. The newly freed workers, seeking to become self-employed tenant farmers rather than wage laborers, made direct arrangements with merchants for supplies. Lien laws, the centerpiece of a system designed to create a dependent labor force, became the means for workers, with alternative means of supply advances, to escape that dependence.

## 11.

In the 1980's, astronomer Bohdan Paczynski proposed a way of determining whether the enormous dark halo constituting the outermost part of the Milky Way galaxy is composed of MACHO's (massive compact halo objects), which are astronomical objects too dim to be visible. Paczynski reasoned that if MACHO's make up this halo, a MACHO would occasionally drift in front of a star in the Large Magellanic Cloud, a bright galaxy near the Milky Way. The gravity of a MACHO that had so drifted, astronomers agree, would cause the star's light rays, which would otherwise diverge, to bend together so that, as observed from Earth, the star would temporarily appear to brighten, a process known as microlensing. Because many individual stars are of intrinsically variable brightness, some astronomers have contended that the brightening of intrinsically variable stars can be mistaken for microlensing. However, whereas the different colors of light emitted by an intrinsically variable star are affected differently when the star brightens, all of a star's colors are equally affected by microlensing. Thus, if a MACHO magnifies a star's red light tenfold, it will do the same to the star's blue light and yellow light. Moreover, it is highly unlikely that a star in the Large Magellanic Cloud will undergo microlensing more than once, because the chance that a second MACHO would pass in front of exactly the same star is minuscule.

The passage is primarily concerned with

A.

outlining reasons why a particular theory is no longer credited by some astronomers B.

presenting data collected by a researcher in response to some astronomers' criticism of a particular line of reasoning

C.

explaining why a researcher proposed a particular theory and illustrating how influential that theory has been

D.

showing how a researcher's theory has been used to settle a dispute between the researcher and some astronomers

E.

describing a line of reasoning put forth by a researcher and addressing a contention concerning that line of reasoning