

1. In discussing the relative difficulties which the exact and inexact sciences face, let me begin with an analogy. Would you agree that swimmers are less skilful athletes than runners because swimmers do not move as fast as runners? You possibly would not. You would quickly point out that water offers greater resistance to swimmers than the air and ground do to runners! Agreed, that is just the point. In seeking to solve their problems, social scientists encounter greater resistance than physical scientists. The circumstances under which the social scientists must work would drive physical scientist frantic. Here are five of these conditions. He can make few experiments; he cannot measure the results exactly; he cannot control the conditions surrounding the experiments; he is often expected to get quick results with slow-acting economic forces; and he must work with people, not with inanimate objects.

An inexact science is one

- A) involving various experiments with chemical substances
- B) that all physical scientists are involved in
- C) that offers great resistance to scientists since they conduct many experiments
- D) which can be considered as a newly born science
- E) that doesn't enable the scientist to make accurate observations and measurements

The author makes a comparison

- A) to illustrate why exact sciences can't make many experiments
- B) between a runner and a scientist dealing with an inexact science
- C) between a social scientist and a swimmer, comparing a physical scientist to a runner
- D) to imply that physical scientists ought to experiment with people to see how burdensome it is
- E) in order to draw the reader's attention to some scientific areas

..... is not among the difficulties which a social scientist encounters.

- A) Finding appropriate lifeless objects
- B) Inaccurate measurement
- C) Conducting fewer experiments
- D) Controlling the circumstances of the experiment
- E) Lacking financial resources

4. The shocking death of Pamela Basu spurred a series of official actions to cope with carjacking. Within days of her murder, the D.C. City Council passed a law mandating 15-year prison sentences for armed carjackers. Last month, the President signed a law that makes carjacking a federal crime carrying a life sentence if it leads to someone's death. Motorists are scrambling for their own protection. At Auto stores in Detroit, customers can buy a device that silently signals a monitoring station if a car is moved while the alarm system is on. Others want security systems equipped with a "panic button" that activates a siren and flashing lights from inside a car. There is also increased interest in bullet-resistant glass. Jittery motorists hope these measures will buy them some safety till law enforcement can put the brakes on a singularly frightening crime.

In accordance with the newly passed law, any thief that uses a gun in stealing a car will

- A) get the gallows
- B) be hanged
- C) be sentenced to 15 years in jail
- D) spend his whole life in prison
- E) be tried in the federal court

The new law signed by the President

- A) includes life sentences for unarmed thefts
- B) includes life imprisonment for carjacking causing deaths
- C) has caused carjackers to take measures not to be easily caught
- D) increased the sale of ear-protection equipment
- E) is improbable to curb carjacking in suburbs

It is inferred from the passage that

- A) before Pamela's death, the punishment for carjacking was the same all over the U.S.A
- B) the president was forced by the public not to rarity the resolution to change the criminal act
- C) Pamela was killed in the latest carjacking attempts that have occurred recently
- D) it was such a new deterrent law that car protection equipment was no longer selling well
- E) if a crime is a federal one, its punishment is applicable only in one of the states of America

7. While the 1970s had demonstrated the importance of the Gulf region, the 1980s provided evidence of its fragility. In September 1980 Iraq launched an offensive into Iran that turned into a bloody eight-year of attrition. The war left hundreds of thousands dead, disrupted vital oil tanker traffic in the Gulf, and led to U.S. intervention in the form of naval escorts for Kuwaiti oil tankers. Meanwhile, the economies of the Gulf states, all of which depend to some degree on oil, were devastated by the crash of oil prices in the mid-1980s. Plummeting oil revenues forced the Gulf states to cut back severely on domestic development projects and services.

Owing to the sudden steep reduction in the income from oil in the mid-1980s,

- A) the gulf states developed economically
- B) Kuwaiti oil tankers were escorted by the U.S. ones for protection
- C) oil prices were also on the decrease
- D) the economies of the Gulf states retrogressed seriously
- E) the need for oil rigs became urgent again

10. If science has become remote from everyday experience, it has also broken from conventional notions of discovery. In virtually every cutting-edge field, from astrophysics to molecular genetics, the object of discovery is frequently totally inaccessible to the senses, and the process of discovery has become inferential rather than direct. When Wolszczan "discovered" the first planets outside our own solar system, he did not spy them through a telescope: he inferred their presence by the pattern of radio beeps coming from the pulsar they orbit. When chemists "discovered" a substance in broccoli that may prevent cancer, they did not peer at the stalks through a microscope: they looked for the chemical's footprints in the wavy printout of a chromatograph. In palaeontology one can still stub a toe and, by God, definitely and directly discover a fossil. But in other fields, "no one looks at the thing itself anymore," says physicist Nick Samios, director of Brookhaven National Laboratory in New York. "We look at what the thing does, at the traces it leaves behind."

What was conventionally understood from the conception of discovery was

- A) the unavailability of the thing discovered
- B) to sense directly the thing discovered
- C) that the discovered thing was sensed only by instruments
- D) that discoveries were inferential rather than direct
- E) the presence of the thing discovered was inferred from the traces it left

Any destabilisation of the Gulf region brings about global problems as

- A) the problems of Gulf states are the problems of all countries
- B) it is accountable for the significant part of the world's need for oil
- C) such wars are disruptive of oil tanker traffic between the gulf states
- D) Iraq and Iran have historical enmity toward each other
- E) in such a case oil companies would become very rich since it leads to higher oil prices

In the mid-1980s,

- A) Iraq waged a war against Iran
- B) the U.S. interfered in the Iran-Iraq war with its aircraft.
- C) the amount of income the Gulf states gained from oil decreased sharply
- D) the war between Iran and Iraq was going on outside the gulf region
- E) all economic projects and services to be carried out in the Gulf were stopped

Which of the discoveries below is directly accessible to the senses?

- A) The discovery of a new star through a detector.
- B) The indirect discovery of a substance in another one.
- C) The inferential discovery of an asteroid.
- D) the visual, spotting of a new plant in a jungle.
- E) The discovery of a new heart tumour using a cardiograph.

It isn't right to say that

- A) palaeontology is a science that deals with fossils
- B) the telescope is an instrument used for observing objects in the outer space
- C) microscope; is an instrument used for observing small things inaccessible to the naked eye
- D) the process of discovery was inferential in old ages, but there are advanced instruments now
- E) nowadays, discovery is achieved by looking at the traces the object leaves behind rather than looking at it itself