Thanks to slumping markets, investment banks are shedding many of their highly-paid traders. When markets recover, the banks might be tempted to replace them with rather cheaper talent. One alternative has been around for a while but has yet to catch on: autonomous trading agents-computers programmed to act like the human version without such pesky costs as holidays, lunch breaks or bonuses. Program trading has, of course, been done before. some blamed the 1987 stockmarket crash on computers instructed with simple decision-making rules. But robots can be smarter than that. Dave Cliff, a researcher at Hewlett-Packard Laboratories in Bristol, England, has been creating trading robots for seven years. In computer simulations he lets them evolve "genetically", and so allows them to adapt and fit models of real-world financial markets. His experiments have suggested that a redesign of some markets could lead to greater efficiency. Last year, a research group at IBM showed that Mr Cliff' s artificial traders could consistently beat the human variety, in various kinds of market. Nearly all take the shape of an auction. One well-known type is the English auction, familiar to patrons of the salesrooms of Christie' s and Sotheby' s, where sellers keep mum on their offer price, and buyers increase their bids by stages until only one remains. At the other extreme is the Dutch auction, familiar to 17th-century tulip-traders in the Netherlands as well as to bidders for American

Treasury bonds. Here, buyers remain silent, and a seller reduces his price until it is accepted. Most markets for shares, commodities, foreign exchange and derivatives are a hybrid of these two types: buyers and sellers can announce their bid or offer prices at any time, and deals are constantly being closed, a so-called "continuous double auction". Mr Cliff's novel idea was to apply his evolutionary computer programs to marketplaces themselves. Why not, he thought, try and see what types of auction would let traders converge most quickly towards an equilibrium price? The results were surprising. In his models, auctions that let buyers and sellers bid at any time like most of today's financial exchanges were less efficient than ones that required relatively more bids from either buyers or sellers. These "evolved auctions" also withstood big market shocks, such as crashes and panics, better than today's real-world versions. Mr Cliff's most recent results, which will be presented in Sydney, Australia, on December 10th, show that the best type of auction for any market depends crucially on even slight differences in the number of buyers and sellers   . Bank of America has been investigating these new auctions, along with robotic traders, for possible use in electronic exchanges. The hope is that today's financial auctions and online marketplaces might work better by becoming more like their English and Dutch forebears. But what to call such multi-ethnic hybrids? Here's introducing the "Cliffhanger". 1.The passage is mainly_____. [A] a review of two kinds of auctions [B] an introduction of trading robots [C] a survey of the trading market [D] about trading alternatives 2.Which

of the following is true according to the text? [A] David's robot traders have now been used in real-world markets. [B] Robot traders can evolve like creatures. [C] There is room for improvement in efficiency in trading markets. [D] The English auction is the most popular trading form. 3.If you were trading American Treasury bonds, you would most likely take the trading form of _____. [A] the English auction [B] the continuous double auction [C] the Dutch auction [D] the evolved auction 4.We can infer from the text that_____. [A] existing auctions can not withstand market shocks [B] the Dutch auction is better than the continuous double auction [C] it's hard for traders to reach an equilibrium price [D] the best type of auction takes place when the number of the buyers is equal to that of sellers 5.Toward robot traders, the writer's attitude can be said to be_____. [A] biased [B] objective [C] pessimistic [D] optimistic 100Test