성균관대학교 2024학년도 자연계

25문항 · 90분

성균관대 10×10 완전분해 · Ⅱ 기출 10개년 · 튜나편입 재조판 5지선다 · 영어 25문항 차등 배점(1.8~2.2점) = 50점 (수학 20문항과 합해 100점)

수험번호	이름	점수

[01-02] Choose one that is either ungrammatical or unacceptable.

01 The click and flow of a word processor can be ① seductive, and you may find yourself ② adding a few unnecessary words or even a whole passage just ③ to experience the pleasure of running your fingers over the keyboard and ④ watching your words ⑤ appeared on the screen. [1.8점]

① ② ③ ④ ⑤

02 The patrol ① emerged from the wire, and the young marines ② climbing slowly up the slope of the new fire support base, ③ bent over with fatigue, ④ picking their way around shattered stumps and dead trees that ⑤ gave no shelter. [1.8점]

① ② ③ ④ ⑤

[03-05] Choose one that is closest in meaning to the underlined expression.

03 Mr. Putin has turned the exits of major Western companies into a windfall for Russia's loyal elite and state itself. [1.9점]

① loss ② bonanza ③ shortfall ④ disaster ⑤ disadvantage

04 Exchanges of missile and artillery fire between Israel and Hezbollah, a Lebanese Shia militia allied with Iran, presage a possible second front. [1.9점]

① explain ② prevent ③ escalate ④ foretell ⑤ follow

05 According to one research study, labor market performances of the subjects, who were in utero during the worst time of the Korean War (1950-1953), were significantly lower in 1990. [1.9점]

① child ② unborn ③ active ④ ill ⑤ refugee

[06-10] Choose one that is most appropriate for the blank.

06 A tea pavilion — _____ almost austere in expression, with thin walls, flat roof and empty walls — is only a background for the careful practice of preparing and sharing the drink between the host and the guests. Focus on subtle, sensual experience is a celebration of transient beauty of objects and careful gestures. [2.1점]

① a fully occupied space
② an extravagant building
③ the most impressive building
④ a pretty and luxurious flat
⑤ an extremely modest building

07 Here is an anecdote. Prince George's (PG) County, a Maryland county next to Washington, DC, used to have a large white majority. After the _____ of a large black middle class made the county much more diverse (although whites were still in the majority), PG voters passed a law called TRIM in 1978. TRIM puts a legal ceiling on the property tax rate, a binding constraint on the main source of revenue for school financing. [2.1점]

① influx ② induction ③ emigration ④ protest ⑤ prosperity

08 Like diversity, the post-pandemic spread of remote work brings benefits while raising coordination costs. Running a workforce virtually imposes what management organization scholars call “management overhead”. Even when the network connection is not patchy and people don't forget to unmute themselves, virtual meetings _____ lots of signals, such as eye contact and gestures. [2.1점]

① allow ② let out ③ strip out ④ promote on ⑤ pass under

09 When a disaster such as a hurricane strikes a region, many goods experience an increase in demand or a decrease in supply, putting upward pressure on prices. Policymakers often object to these price hikes. They argue that businesses and economists should pay more attention to our shared social values. “During a time of crisis, it's time for all of us to _____; it's not time for us to grab.” [2.2점]

① throw in ② take out ③ pull over ④ pitch in ⑤ persevere

10 On January 15, 2000, The New York Times reported that in the first week of the new millennium local hospitals had recorded an astonishing 50.8% more deaths than in the last week of 1999. The Times suggested that this phenomenon was due to infirm people willing themselves to stay alive long enough to witness the dawning of the new age. Apparently, the anticipation of _____ events can motivate people to live longer. [2.2점]

① trivial ② obscure ③ mundane ④ momentous ⑤ insignificant

Read the following passage and answer the questions.

[11-12] 204 words

The media often seem to thrive on superlatives, and we, their audience, are confused as to whether the price increases we have recently seen in the stock market are all that unusual. Data that suggest that we are setting some new record (or at least close to doing so) are regularly stressed in the media, and if reporters look at the data in enough different ways, they will often find something that is close to setting a record on any given day. In covering stock market, many writers mention "record one-day price changes" — measured in points on the Dow rather than percentage terms, so that records are much more likely. Although the media have become increasingly _____ about reporting in terms of points on the Dow in recent years, the practice still persists among some writers.

This record overload — the impression that new and significant records are constantly being set — only adds to the confusion people have about the economy. It makes it hard for people to recognize when something truly and importantly new really is happening. It also, with its deluge of different indicators, encourages an avoidance of individual assessment of quantitative data — a preference for seeing the data interpreted for us by experts.

11 What is most appropriate for the blank? [2.0점]

① reckless ② persistent ③ enlightened ④ encouraged ⑤ enthusiastic

12 What is NOT true of the above passage? [2.0점]

① The media often confuse people by their record overload.

② Record overload causes something new to go unrecognized.

③ The media often suggest that we are setting new record in the stock market.

④ Record overload encourages people to ignore opinions by the expert.

⑤ Measuring stock price changes in points rather than percentage terms makes setting new records more likely.

[13-15] 273 words

The health risk from bedbugs is minor: itchy bites and a small risk of allergies and secondary infections. Mosquitoes spread malaria, dengue fever and yellow fever. But no human pathogen is known to use bedbugs as a vector. As the present panic suggests, the bigger impact (of bedbugs) tends to be psychological. Mosquitoes, leeches, and other parasites are unpleasant, but do not colonize your home. If a traveler brings bedbugs back from their holidays, they can start an infestation that can be very difficult to shift.

The insects thrive in warm environments with plenty of dark places to hide. Cities, and crowded blocks of flats, are ideal. The bugs shelter in the crannies of furniture, in mattress seams or in cracks in walls, coming out to feed at night. Warm, centrally heated homes accelerate their life-cycles, making the problem worse — as does a warming climate.

The introduction and widespread use of insecticide such as DDT in the aftermath of the second world war came close to eliminating the bugs from most rich-world houses. But that chemical assault exerted a powerful evolutionary pressure on the insects to develop resistance to the poisons. Just as bacteria have evolved resistance to many of the antibiotics once used to kill them, modern bedbugs are almost invulnerable to at least some insecticides. That growing resistance has been boosted by a depleting arsenal of chemicals to hurl against them. Fumigants such as hydrogen cyanide, sulphur dioxide and DDT itself are now regarded in most places too toxic to use. Pyrethroids, which are the active ingredients in many commercially available insecticide sprays, are safer, but become less effective every year.

13 Health risk of bedbugs is relatively lower than that of other insects because bedbugs _____. [2.0점]

① only thrive in warm climate
② do not colonize your home
③ only come out to feed at night
④ are relatively easy to kill
⑤ do not carry diseases around

14 According to the passage, _____ is NOT a reason for the spread of bedbugs. [1.9점]

① poor hygiene
② global warming
③ frequent travel
④ ineffective insecticides
⑤ centrally heated homes

15 Fumigants such as hydrogen cyanide, sulphur dioxide, and DDT are no longer used to kill bedbugs because _____. [2.1점]

① Fumigants have become less effective
② Bedbugs are invulnerable to most fumigants
③ Fumigants are harmful even to human body
④ Commercially available insecticides use Pyrethroids
⑤ Fumigants such as DDT are too costly to use

[16-17] 249 words

The world has forgotten _____. We analyzed data from the Fraser Institute, a free-market think-tank, which measures "economic freedom" on a ten-point scale. We considered cases where a country improves by 1.5 points or more — a quarter of the gap between Switzerland and Venezuela — within a decade, indicating that bold, liberalizing reforms have been undertaken. In the 1980s and 1990s such "daredevil economics" was common, as countries left the Soviet Union, and many deemed unreformable, such as Ghana and Peru, proved they were in fact reformable. Politicians changed foreign-trade rules, fortified central banks, cut budget deficits and sold state-owned firms. In recent years just a handful of countries, including Greece and Ukraine, have implemented reforms. By the 2010s reforms have ground to a halt.

Daredevil economics has declined in popularity in part because there is less need for it. Although in recent years economies have become less liberal, the average one today is 30% freer than it was in 1980s. There are fewer state-run companies. Tariffs are lower. But the decline of daredevil economics also reflects a widely held belief that liberalization failed. In the popular imagination, terms such as "structural-adjustment plan" or "shock therapy" conjure up images of impoverishment in Africa, the creation of mafia states in Russia and Ukraine, and human-right abuses in Chile. Books such as Joseph Stiglitz's "Globalization and its Discontents" fomented opposition to the free-market Washington consensus. In Latin America, "neoliberal" is now a term of abuse; elsewhere, it is rarely used as an endorsement.

16 What is most appropriate for the blank? [2.0점]

① how to reform
② how to overcome inequality
③ how to run central banks
④ how to protect human rights
⑤ how to oppose to the free market

17 According to the passage, which one is NOT associated with the "daredevil economics"? [2.0점]

① promoting free market
② lowering import tax
③ promoting economic freedom
④ pursuing market liberalization
⑤ increasing state-run companies

[18-20] 282 words

The banning of menthol cigarettes, the mint-flavored products that have been aggressively marketed to Black Americans, has long been an elusive goal for public health regulators. But Covid-19 and the Black Lives Matter movement have put new pressure on Congress and the White House to reduce racial health disparities. And there are few starker examples than this: Black smokers smoke less but die of heart attacks, strokes and other causes linked to tobacco use at higher rates than white smokers do. About 85 percent of Black smokers use Newport, Kool and other menthol brands that are easier to become addicted to and harder to quit than plain tobacco.

Menthol is a substance found in mint plants, and it can also be synthesized in a lab. It creates a cooling sensation in tobacco products and _____ the harshness of the smoke, making it more tolerable. Some studies have shown that menthol also acts as a mild anesthetic. Back in 1953, when menthol was not widely used, a Philip Morris Co. survey revealed that 2 percent of white smokers preferred a menthol brand, while 5 percent of Black smokers did. “The industry looked at that and said, ‘We're missing an opportunity,' and consciously targeted the African-American community,” said Matthew L. Myers, president of the Campaign for Tobacco-Free Kids.

Tobacco companies have targeted Black communities with menthol cigarettes for decades. They distributed free samples, offered discounts and sponsored countless concerts and special events, among them the famous Kool Jazz Festival. Tobacco companies also gained good will by advertising in newspapers and magazines geared to a Black readership and by donating money to civil rights organizations. The companies have also been frequent donors to Black political candidates.

18 What is most appropriate for the blank? [1.9점]

① does ② masks ③ reveals ④ emphasizes ⑤ sets aside

19 According to the passage, which one is NOT a tactic that tobacco companies use to target Black smokers with menthol cigarettes? [2.0점]

① offering price discounts
② distributing free samples
③ advertising in Black newspapers
④ donating to civil rights organization
⑤ reducing cigarette tax for Black smokers

20 According to the passage, banning menthol cigarettes will _____. [2.1점]

① bankrupt the cigarette industry
② make white smokers consume more menthol cigarettes
③ increase the demand for menthol cigarettes
④ decrease racial health disparities
⑤ reduce the quality of menthol cigarettes

[21-22] 269 words

Beyond animosity toward particular groups, there is another possible cause of discrimination, called statistical discrimination. It is based on the assumption that employers have imperfect information about possible employees. If some relevant but unobservable employee characteristic happens to be correlated with an otherwise irrelevant but observable characteristic, then employers may rely on the observable characteristic when making hiring decisions.

Some employers, for instance, prefer not to hire workers with criminal records. The simplest way to avoid doing so is to ask job applicants whether they have criminal records, and many employers do. Some U.S. states, however, have passed "ban the box" laws that prohibit employers from asking. (The "box" refers to the place on the job application that a person would check to signal a clean record.) The goal of these laws is to help ex-offenders find jobs and thus reenter society as law-abiding citizens.

Despite the noble intent of these laws, one unintended consequence is that they foster statistical discrimination. Statistics show that black men are more likely to have served time in prison than white men. If employers are aware of this fact, those who care about criminal records but are prohibited from asking about them may avoid hiring black men. As a result, black men without a criminal past would suffer from discrimination because of their group's average characteristics. Some studies have compared states with and without "ban the box" policies and have found that these laws significantly reduce employment for young black men without college degrees. These results suggest that policymakers should look for ways to help ex-offenders that do not inadvertently promote statistical discrimination.

21 Employers use statistical discrimination in hiring decisions because they _____. [2.0점]

① have a good knowledge of statistics
② do not have enough information about applicants
③ can simply ask job applicants about criminal records
④ want to satisfy the demand of their customers
⑤ do not use the observable characteristic when making hiring decisions

22 The objective of the "ban the box" laws is _____. [2.0점]

① to ban hiring employees with certain beliefs
② to reduce the burden of applicants in the job market
③ to help employers hire the best possible job applicants
④ to better screen the job candidates with criminal records
⑤ to protect ex-offenders from being discriminated in the job market

[23-25] 324 words

Fifteen years ago, Easterly and Levine published "Africa's Growth Tragedy", highlighting the disappointing performance of Africa's growth, and the toll it has taken on the poor. Since then, growth has picked up, averaging 5-6 percent a year, and poverty is declining at about one percentage point a year. The statistical tragedy is that we cannot be sure this is true. Take economic growth, which is measured in terms of growth in GDP. GDP in turn is measured by national accounts. While there has been some progress, today, only 35 percent of Africa's population lives in countries that use the 1993 UN System of National Accounts: the others use earlier systems, some dating back to the 1960s.

The proximate causes of the problem with statistics are: weak capacity in countries to collect, manage and disseminate data; inadequate funding; diffuse responsibilities; and fragmentation, with many diffuse data collection efforts. But I would submit that the underlying cause is that statistics are _____. Take the poverty estimates. They assess whether people are better off today than they were five years ago. If the estimate takes place during an election year, there is a strong tendency to keep the results under wraps. Worse still, there is a tendency to drag their feet in completing the survey. And the raw data of household surveys are almost never publicly available (so there is little chance of being able to replicate them).

There is another aspect to the statistical tragedy. After a lot of bad experiences, the international community has decided that African countries should develop their own National Statistical Development Strategies (NSDS), and that all statistical activities should be consistent with the NSDS. The tragedy is that donors, including the World Bank, undertake statistical activities without ensuring that they are consistent with the NSDS. Why? Because they need data for their own purpose — to publish reports — and this means getting it faster, with little time to strengthen the countries' statistical capacity.

23 What is most appropriate for the blank? [1.9점]

① inherently opaque
② inherently equitable
③ fundamentally political
④ economically efficient
⑤ unreasonably misleading

24 What is the best title of the passage? [2.0점]

① Africa's statistical tragedy
② Africa's unreliable poverty data
③ Africa's disappointing growth performance
④ Africa's National Statistical Development Strategies (NSDS)
⑤ Guideline to Africa's data gathering practice for international organizations

25 What is NOT the problem with statistics in Africa? [2.1점]

① lack of funding
② Africa's electoral system
③ scattered data collection efforts
④ low ability to collect and manage data
⑤ inconsistency between NSDS and donors' statistical activities