

# 國立中科實驗高級中學 101 學年度教師甄選 英文科專業知能

## Part 1 : Multiple-choice (65%) (請用 2B 鉛筆於答案卡作答)

### I. Vocabulary (15%)

- The player could not \_\_\_\_\_ anything beyond being on the court, a career his family discouraged and which he was probably totally unsuited for.  
(A) envisage (B) invalidate (C) sustain (D) subsidize
- This year's two-month-long festival will \_\_\_\_\_ the city with art, concerts, and street parades.  
(A) confer (B) effectuate (C) abdicate (D) suffuse
- Some disappointing global data and mixed domestic economic reports created uneasiness among traders, even as the averages \_\_\_\_\_ held on to their beliefs.  
(A) inadvertently (B) tenaciously (C) expeditiously (D) superciliously
- Possession of wealth that was not \_\_\_\_\_ with one's earnings has been criminalized under the new proposed law in an effort to promote transparency.  
(A) superfluous (B) corporeal (C) recalcitrant (D) commensurate
- Those who succeed are equipped with determination and the ability to ward off dangerous moments with \_\_\_\_\_ to reach the winning post.  
(A) emissary (B) conscription (C) complicity (D) equanimity
- Minority members of the committee \_\_\_\_\_ with the majority members, saying that the proposal was unjust; nevertheless, it was approved.  
(A) remonstrated (B) rescinded (C) venerated (D) oscillated
- The Treaty of Versailles, which concluded World War I, was deliberately \_\_\_\_\_, imposing tremendous penalties on the defeated nation.  
(A) suppliant (B) inordinate (C) refulgent (D) vindictive
- Generally, if one party to an agreement \_\_\_\_\_ on its contractual obligations, it must provide appropriate compensation to the other party.  
(A) reneges (B) lambastes (C) inveigles (D) imputes
- When genetic engineering began in the 1970s, there was a(n) \_\_\_\_\_, and sometimes acrimonious, debate among scientists themselves about its dangers.  
(A) contumacious (B) equable (C) execrable (D) contentious
- For their gig, they will \_\_\_\_\_ older songs with new material from a forthcoming CD.  
(A) intersperse (B) embroil (C) disport (D) constringe
- The ESPN put forth an offensive headline about New York Knicks \_\_\_\_\_ Jeremy Lin on its mobile website, causing public discontent.

- (A) gimmick      (B) harbinger      (C) endorsement      (D) sensation
12. The motion regarding the amendment was seconded and then passed \_\_\_\_\_ by a hand vote.
- (A) anonymously    (B) condescendingly    (C) capriciously    (D) unanimously
13. The rampant fraud and charity scams have \_\_\_\_\_ public trust and confidence in social order and humanity.
- (A) supplicated    (B) exempted              (C) squandered    (D) exuded
14. Small island nations in the Pacific and Caribbean, whose lands are often merely centimeters above sea level, are threatened with \_\_\_\_\_ by rising seas.
- (A) inundation    (B) confluence              (C) amphibian    (D) innuendo
15. The parliament proposed to hold a referendum on extending the term of the \_\_\_\_\_ president until 2018 without holding a nationwide election.
- (A) gratuitous      (B) strident              (C) residual      (D) incumbent

## II. Cloze (10%):

The dream of postponing death has captivated humans throughout history. Over the past 150 years, improved sanitation and infectious-disease control have led to healthier and longer lives for many people. Now the golden age of genetics may bring us even closer to   16   the ultimate nemesis. Take, for example, a biotech company based in Cambridge, Massachusetts, with the   17   name of Elixir Pharmaceuticals. Scientists there say they are working on a pill that is expected to have an extraordinary side effect—slowing down aging and extending life span. Elixir CEO William Heiden says, “We are about two years away from putting this compound into humans for testing.”

The pill is being developed as a treatment for such metabolic disorders as obesity and diabetes, conditions that   18   the body and shorten life span. What goes wrong in these disorders involves insulin, the hormone that helps the body absorb and store sugar. Insulin levels rise and fall   19   on the body’s energy needs and how much blood sugar is available for storage. Humans have evolved to store energy when food surpluses are available and to minimize the loss of fat when food is   20  . But in times of plenty, when people can easily eat too much all too often, the system is stressed by insulin overproduction. Constant overeating can cause the feedback signals regulating energy storage to go awry.   21   rising insulin levels come not only obesity but also the increased risk of diabetes, heart disease, and other physiological changes that age organs and reduce life span.

The obvious key to living longer is to eat less, and significantly cutting calories has been shown to lengthen life span   22   in model organisms such as worms and mice. The studies suggest that it may also be an ancient survival strategy: Eating less when there is not enough food slows down an organism’s metabolism, and that alone prolongs life. Elixir’s approach is to   23   the same effect by delivering a drug that targets

hormones, enzymes, and other proteins involved in metabolism.

The pill works in mice by blocking the action of an enzyme called ghrelin that regulates 24. If it can be shown to work in humans, it could decrease obesity, lengthening life. Healthy people might take the pill, says Heiden, 25 by reducing food intake they could mimic evolutionary pressures that slow aging. However, Heiden declines to say how much longer his test mice are living compared with normal mice.

16. (A) fulfilling (B) delaying (C) approaching (D) prolonging  
17. (A) apt (B) akin (C) joint (D) exotic  
18. (A) strip down to (B) plow ahead with  
(C) chomp away on (D) wreak havoc on  
19. (A) depend (B) depending (C) to depend (D) depended  
20. (A) starchy (B) skimmed (C) greasy (D) scarce  
21. (A) In (B) With (C) Upon (D) As  
22. (A) inevitably (B) relentlessly (C) substantially (D) fortuitously  
23. (A) mitigate (B) provoke (C) cushion (D) aggravate  
24. (A) addiction (B) mishap (C) genome (D) appetite  
25. (A) because (B) whereas (C) unless (D) lest

### III. Blank-filling (10%)

(A) forging	(B) bode	(C) revenue	(D) exclusively
(E) indigenously	(AB) accessing	(AC) emaciate	(AD) released
(AE) contends	(BC) ubiquitous	(BD) funding	(BE) saving

While desktop and laptop computers remain the primary source of obtaining digital news, mobile devices are causing Americans to consume more news and for longer periods of time. The 2012 State of the News Media Report found that Americans are spending more time with news as smart phones and tablets become more 26. One in four Americans now consumes news through mobile devices, NPR reports, whose analysis suggests that news is becoming a more important and pervasive part of people's lives.

Though more news consumption is a bright spot for the industry, including long-form journalism, media sectors still reported a decline in 27 in 2011, the New York *Times* adds. Media companies are catching on to Silicon Valley's stronghold on the industry, 28 relations with tech companies to produce online content. Last year's launch of the new Facebook platform created partnerships with the *Guardian*, the

Wall Street *Journal* and the Washington *Post*, all of which 29 Social Reader apps. YouTube's campaign to produce original television content includes 30 Reuters, who will produce news shows for the video sharing site. ABC News also signed a deal to 31 provide news video for Yahoo! while AOL purchased the Huffington Post.

As Twitter and Facebook strengthen news consumption, perhaps it's how people are 32 these social sharing sites that's more important. The study 33 that 44% of adults own a smart phone while 18% own a tablet, giving people more platforms to news consumption. And though the news media may not be any closer to a new revenue model, a renewed appetite for news may 34 well for the industry. That, in the end, could prove a 35 factor for the future of journalism.

#### **IV. Discourse Structure (10%):**

The Romeikes are not your typical asylum seekers. 36 These music teachers left Germany because they didn't like what their children were learning in public school—and because homeschooling is illegal there. Uwe Romeike, an Evangelical Christian and a concert pianist, believed it was his fundamental right to decide how he wanted to teach his children. To put his belief into practice, he resolutely sold his treasured Steinway to help pay for the move. 37 Romeike and his wife had accrued about \$10,000 in fines at the time for home-schooling their three oldest children. The police had turned up at their doorstep and escorted the kids to school. They were sobbing and shivering, but nobody seemed to care. 38

The Romeikes took action and got into contact with the Virginian-based Home School Legal Defense Association (HSLDA), which suggested they go to the U.S. and settle in Morrison, Tenn. The nonprofit organization, which defends the rights of the U.S. homeschooling community—with its estimated 2 million children, or about 4% of the total school-age population—is expanding its overseas outreach. With the help of HSLDA, the Romeikes have their dream come true. 39 The ruling is tricky politically for Washington and its allies in Europe, where several countries—including Spain and the Netherlands—allow homeschooling only under exceptional circumstances, such as when a child is extremely ill. Legal observers say it is likely that the federal government will appeal the Romeike ruling, issued by an immigration judge in Memphis, Tenn.

40 The ruling could impose greater burden on the already heavily backlogged immigration courts, which will be flooded with asylum petitions from homeschoolers in countries typically regarded as having non-repressive governments.

(A) It was the straw that broke the camel's back.

(B) On June 26, they become the first people granted asylum in the U.S. for being

persecuted for homeschooling.

- (C) The unprecedented decision has raised concerns.
- (D) They did not go to the U.S. to flee war or despotism in their native land.
- (E) It was in 2008 that the Romeikes decided to uproot their family.

## **V. Reading Comprehension (20%):**

Damien Hirst may be rich and famous, but he does not have everything. The 46-year-old artist has never had a solo retrospective in a modern-art museum. If he is to turn his notoriety into immortality, he needs the backing of public institutions and the praise of serious critics. Mr. Hirst and his dealers have favored fast sales over the art-historical side of his career. But Tate Modern has come to the rescue with an Olympic blockbuster show, which runs for five months from April 4th. The exhibition consists of 73 works made over a 22-year period, arranged chronologically to convey the evolution of Mr. Hirst's ideas. The general trajectory is from gritty to glitzy, from punk assemblages, such as cabinets filled with pills and cigarette butts, to art that looks like bespoke luxury goods. If viewers cast aside their hostility, what may astonish them is Mr. Hirst's ability to transform dry conceptual art into witty, emotionally engaging work.

Six of the works in the show are owned or partially owned by the Tate. This includes two "still lives" which flicker between poignancy and irony: "Away from the Flock" (1994), a white sheep suspended in a tank of formaldehyde, and "Mother and Child Divided" (1993), a cow and calf split between four tanks. Of the 67 pieces borrowed for the show, only three have come from public institutions. The rest are on loan from dealers and a range of private collectors, including Miuccia Prada, Bernard Arnault and Steve Cohen. Luckily for them, works that have been anointed by the Tate command more credibility and a premium upon resale. Yet the number-one lender to the Hirst retrospective is the artist himself. In addition to some early pieces, a breezy spin painting and a six-tonne bronze sculpture of an anatomical model, he has lent "A Thousand Years" (1991), a glass box that bears witness to the life cycle of flies. It was one of a dozen early works that the artist purchased back from his first patron, Charles Saatchi, in 2003. Mr. Hirst suspects the sculpture is his most exciting piece.

Many collectors of Mr. Hirst's work hope that this show will **reinvalidate** his market. According to artnet, a firm that tracks the art market, in 2011 one in four Hirst works that came up for auction failed to sell, and his highest price was \$1.7m, down from \$19m in 2007. Last year total auction turnover in Hirst works was a mere \$29.6m, placing him well behind artists such as Gerhard Richter, whose work earned almost \$200m in auction sales, and Zeng Fanzhi, a Chinese painter who is probably the richest artist in the world.

41. Which of the following statements about Damien Hirst is NOT true?
- (A) Many modern-art museums have held a series of retrospectives for him.
  - (B) He is an innovative sculptor as well as an opportunistic painter.
  - (C) Most of the works in the show held by the Tate are on loan from Hirst himself.
  - (D) Mr. Hirst's ability to transform dry conceptual art into witty, emotionally engaging work is amazing to viewers.
42. Why are dealers and a range of private collectors willing to loan works they stand seized of to the Tate?
- (A) If they refuse to do so, the Tate will imperil them.
  - (B) They do care for Damien Hirst's works.
  - (C) After displayed in the Tate, the works are more likable for buyers.
  - (D) Damien Hirst remains their heartthrob.
43. Which of the following conclusions about Damien Hirst can best be drawn from this passage?
- (A) No other museum will have a retrospective for him.
  - (B) Viewers will find it difficult to take his works as engaging.
  - (C) He will have a place in history.
  - (D) He will purchase more works back.
44. The word reinvigorate could best be replaced by which of the following?
- (A) buffet                      (B) reanimate                      (C) preclude                      (D) assuage
45. Which of the following statements would the author of this passage most probably agree with?
- (A) Nothing witty can be found in Mr. Hirst's works.
  - (B) Public institutions would love to purchase more works from the Tate.
  - (C) The art market overcapitalizes Mr. Hirst's works.
  - (D) If nothing else, Mr. Hirst is likely to be remembered for his unusual aptitude in blurring the line between the sacred and profane.

Not every stellar wannabe has what it takes to fire up an internal nuclear reactor—some gassy balls are just too puny to fuse hydrogen into helium in their cores. These failed stars, or brown dwarfs, inhabit a peculiar gray area between large planets and small stars, and their split personalities are providing scientists with new ways to learn about both kinds of objects.

In April an international team announced that it had found a brown dwarf just nine light-years away, the closest one ever detected. That dwarf is also the coolest starlike body ever observed, with a temperature of just 350 degrees Fahrenheit, more suitable for baking cookies than fusing hydrogen. Caltech astronomer Davy Kirkpatrick, who works on related research, says that brown dwarfs like this one seem to have compositions similar to those of the giant planets detected orbiting

faraway stars. Such planets are difficult to study directly, so data from dwarfs might serve as a stand-in, helping astronomers model planet formation. “It’s hard to observe exoplanets because there’s a star in the way,” he says, “but brown dwarfs are very similar, and you can see them in isolation.”

Penn State astronomer Kevin Luhman has already unearthed some surprises in his observations of brown dwarf systems. In May his team spotted a planet-size object (its exact classification is still uncertain) orbiting a brown dwarf that is only a million years old; in contrast, Earth needed at least 10 million years to coalesce, suggesting that “nature has two very different ways of making small companions to stars,” Luhman says. Whereas Earth is thought to have formed by the gradual gravitational accretion of material long after the sun formed, the brown dwarf and its **consort** may have formed almost simultaneously. Other astronomers are examining the smallest known brown dwarfs—which are around 10 times as massive as Jupiter—to determine the minimum mass needed for gravity to pull a pocket of gas and dust together to form a star. Nearly 1,000 brown dwarfs have been spotted so far, and a survey by the recently launched WISE (Wide-field Infrared Survey Explorer) satellite should soon give astronomers thousands more such objects to study.

46. What is the passage mainly about?
- (A) The alternative means of detecting failed stars.
  - (B) The dominant elements in the formation of the universe.
  - (C) The gray area in which brown dwarfs are located.
  - (D) The newfound methods to study planets and stars.
47. What is NOT true about brown dwarfs?
- (A) Their size is between large planets and small stars.
  - (B) Scientists study them to learn about giant planets.
  - (C) The object orbiting them could be as large as a planet.
  - (D) They don’t have nuclear fusion in the core.
48. The word “**consort**” in the third paragraph is closest in meaning to \_\_\_\_.
- (A) gravity
  - (B) composition
  - (C) companion
  - (D) formation
49. We can infer that some brown dwarfs are unable to have hydrogen fused in their cores because \_\_\_\_.
- (A) they are not hot enough
  - (B) they usually exist in isolation
  - (C) they are too young
  - (D) they are too far away from the Earth

50. According to the passage, brown dwarfs bear close similarity to \_\_\_\_\_.

- (A) a satellite
- (B) a meteor
- (C) a giant exoplanet
- (D) a nuclear reactor