# به نام خداوند بخشنده مهربان



# مامعترین بانک تست زبان دکتری

شامل کلیه سوالات و پاسغ تشریمی ۹۳ تا ۱۴۰۴ و تطبیق ۱۰۰ با مهارتهای کتاب زبان عمومی دکتری ماهان

# مشترک کلیه رشتهها

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# آمادكي آزمون دكترى

سرشناسه: پورموسوی، مهدا

عنوان و نام پدیدآور: جامعترین بانک تست دکتری / نویسنده: علی اصغر رحیمی

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کلیه حقوق مادی و معنوی این اثر متعلق به مؤسسه آموزش عالی آزاد ماهان میباشد و هرگونه اقتباس و کپیبرداری از این اثر بدون اخذ مجوز پیگرد قانونی دارد.

مقدمه ناشر

# به نام خدا

ایمان داریم که هر تغییر و تحول بزرگی در مسیر زندگی بدون تحول معرفت و نگرش میسر نخواهد بود. پس بیایید با اندیشه توکل، تفکر، تلاش و تحمل در توسعه دنیای فکریمان برای نیل به آرامش و آسایش توأمان اولین گام را برداریم. چون همگی یقین داریم دانایی، توانایی میآورد.

شاد باشید و دلی را شاد کنید

برادران سیاری

### باسمه تعالى

مجموعهٔ حاضر در واقع workbook یا کتاب کارِ «جامع ترین منبع آزمون دکتری و آزمونهای تولیمو و MSRT و MSRT» است. در آن کتاب مهارتهای گرامر و درک مفاهیم به تفصیل و ترتیب استانداردی که موسسهٔ لانگمن (LONGMAN) تعریف نموده تقدیم عزیزان شده است. می دانیم که آموختن مهارتهای مختلف شرط لازم برای موفقیت در آزمونهای مذکور در عنوان کتاب است اما شرط کافی این است که آموختههای عزیزان در بوتهٔ آزمونهای استاندارد قرار گیرد. پنج سری آزمون تشخیصی با استاندارد جهانی موسسهٔ لانگمن در انتهای کتاب «جامع ترین منبع آزمون دکتری و آزمونهای تولیمو و MSRT و MSRT و MHLE و خریزان در آنها ضعف دارند مشخص می شوند. لازم است عزیزان متقاضی آزمونهای دکتری و تولیمو و MSRT و MHLE و EPT ابتدا از کتاب مذکور، مهارتها را به دقت آموخته و تمرینهای مربوط به آنها را حل نمایند؛ سپس آزمونهای تشخیصی انتهای آن کتاب را حل کرده و بعد این کتاب را شروع نمایند.

تهیه و تدارک تستهای استاندارد جهانی که تا حد امکان در سطح سوالات آزمونهای مذکور باشد وظیفهای است بر دوش ما مدرسان زبان. در این مجموعه پنج سری تست واقعی تافل Paper Test از کتاب Toefl Kit گنجانده شده است که ضمن تعیین سختی سوالات، درصد دقیق پاسخ درست به هر سوال در بین تمامی شرکت کنندگان در این آزمونهای واقعی در کل جهان آمده است و می تواند مبنای درستی برای سنجش تواناییهای عزیزان نسبت به شرکت کنندگان این آزمون در سراسر جهان باشد. سوالات استاندارد دیگری که می تواند محک مناسبی برای سطح آمادگی عزیزان باشد آزمونهای کنکور دکتری از هال نود و سه تا کنون است. متاسفانه گاهی دوستان متقاضی رشتههای زیر مجموعهٔ علوم پایه و فنی مهندسی یا علوم انسانی و هنر در تحلیل سوالات زبان سالهای قبل فقط سوالات مربوط به گروه خود را بررسی می کنند. کلیهٔ داوطلبان عزیز لازم است که تمامی سوالات مربوط به هر دو گروه را به دقت پاسخ داده و بعد از پاسخ، تحلیل و کارشناسی کنند. مطابقت سوالات زبان آزمونهای دکتری با مهارتهای کتاب در پاسخ تشریحی مربوط به هر سوال آمده است. در پایان این کتاب، چند سری آزمونهای تالیفی و شبیهسازی کنکور دکتری آمده است که در طی سالهای قبل به صورت آزمون آزمایشی در موسسهٔ محترم ماهان بر گزار شدهاند.

نکتهٔ مهمی که داوطلبان عزیز باید بدان توجه کنند این است که برای بخش واژگان آزمون دکتری سه راه بیشتر وجود ندارد: راه Vocabulary for the و Essential Words for the Toefl / Ielts و 504 و اژگانی استانداردهای علمی بزرگترین موسسات جهانی تولید محتوا High school Students و 601 و 601 و واژگان GRE است. استانداردهای علمی بزرگترین موسسات جهانی تولید محتوا برای کتابهای آموزش زبان بر این کتابها حاکم است؛ به طوری که واژگان به ترتیب خاصی چیدمان شده و در لابلای متون درسهای بعدی تکرار می شوند. بدیهی است که، علیرغم تمام استانداردهای رعایت شده در این منابع، مطالعهٔ این حجم از منابع واژگانی کاری طاقت فرسا و مستلزم صرف وقت بسیار است. راه دوم اعتماد به منابعی است که واژگان این کتابها را به شکل لیست واژگان درآورده و معمولا با آوردن معنی آن و حداکثر یک جملهٔ مثال آن را آموزش می دهند. متاسفانه این منابع ضمن بر هم زدن استانداردهای موجود در کتابهای اصلی مانند 504 و بقیه، همان کار طاقت فرسا را به شکلی فشرده تر و کاملا غیر علمی بر داوطلبان عزیز تحمیل می کنند. راه سوم و منطقی تر آن است که ضمن مطالعهٔ دو منبع حاضر، چه در تمرینات و سوالات مربوط به گرامر و چه درک مفاهیم، ضمن توجه به معنی واژگان جدید در صدد به خاطر سپردن این واژگان باشیم.

عموم واژگانی که در بخش تستهای واژهٔ آزمون دکتری آمدهاند در متن کتاب « جامعترین منبع آزمون دکتری و آزمونهای تولیمو و MSRT و MHLE و EPT » و کتاب حاضر بودهاند. برای بررسی صحت و سقم این مطلب گزینههای درست بخش واژگان آزمون دکتری سال ۱۳۹۹ علوم انسانی و علوم پایه و فنی و مهندسی با هم بررسی میکنیم:

۱. علوم انسانی: هر واژه با تعداد تکرارش در این دو منبع به شکل زیر بوده است:

Spread 7. sweep 1, taking 50, adroit 2, enhance 4, secure 3, diminish 2, pragmatic 2, realistic 7 بوده و sinister عموما على المنت كله عموما ا

۲. علوم پایه و فنی و مهندسی: هر واژه با تعداد تکرارش در این دو منبع به شکل زیر بوده است:

Multitude 1, decent 2, camouflage 1, impede 2, corruption 2, relentless 1, deterioration 3, premature 1 (mature 2), margin 2, diversity 12.

ده واژه در متن یکی از دو کتاب بوده و واژهٔ destiny هم واژهٔ سطح پایینی بوده است که عموماً شنیدهایم.

به هر روی، انتخاب منابع و رویکردها در اختیار داوطلبان و متقاضیان عزیز است و ما مدرسان فقط واقعیات را بیان میکنیم.

در پایان ذکر دو مطلب ضروری است. نخست آن که از همهٔ عزیزان، اعم از همکاران ارجمندمان و دانشپذیران گرامی، که نقاط ضعف و ایرادات این منبع را به هر طریقی به نویسندگان برسانند پیشاپیش قدردانی میشود. امید گردآورندگان این مجموعه آن است که این اثر در چاپهای بعدی، روی در تکامل و بهبود داشته باشد. دوم آن که نهایت قدردانی و سپاسگزاری نویسندگان این مجموعه تقدیم میشود به همگی دوستان و عزیزانی که شرایطی را فراهم آوردند تا این مجموعه آماده گردد؛ به ویژه همکاران ارجمندمان در موسسهٔ ماهان: برادران سیاری عزیز، جناب آقای دکتر سیفی و خانم دکتر سعیدی. در پایان تشکر ویژه و نهایی از سرکار خانم سمیه بیگی، مسئول محترم و باحوصله و دلسوز موسسهٔ ماهان، به عمل میآید که نهایت لطف و همکاری را در مدت گردآوری این اثر با نویسندگان داشتند.

مرداد نود و نه

نویسندگان: پور موسوی/ رحیمی

# فهرست مطالب

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# بخش اول

# تست های کنکور سراسری از سال ۹۳ تا ۹۴+۱۴

همراه با پاسخ تشریحی



| Part A. Grammar <u>Directions</u> : Select the answer choice (1), in the following questions. Then mark ye  |  | <u>-</u>                      | k  |
|---|--|-------------------------------|----|
| 1- A gifted child might excel in question miserably on spatial reasoning skills in t  | -  |                               | •• |
| 1) then performed   | 2) perform how   | ever                          |    |
| 3) but perform  | 4) although perf   | formed                        |    |
| 2- Neuroscientists have long held that g  | lial cells in the brai   | n, astrocytes ar              | e  |
| one type, support neurons by protecting   | them from invaders   | S.                            |    |
| 1) for them 2) in that  | 3) in which  | 4) of which                   |    |
| 3- Along with several colleagues, I have  | e recently conducted   | l research that offers insigh | t  |
| into why many people end up unhappy .   | their opt  | ions expand.                  |    |
| 1) rather than pleased when   | 2) rather than wh  | nen to please                 |    |
| 3) 10 pleased rather than when  | 4) when please r   | rather than                   |    |
| <ol> <li>Not until the 17th century European nate</li> <li>Not until the 17th century did European</li> <li>European naturalists did not until the 17</li> <li>Until the 17th century European naturalists</li> <li>Only an elite few cells in a tumor seem mass, float through the circulatory system</li> </ol> | naturalists<br>th century<br>ists not<br>n to acquire this abi | •                             |    |
| 1) their being given birth to   | 2) to give birth to  | 0                             |    |
| 3) giving birth to  | 4) that gave birth   | n to them                     |    |
| 6-•A discussion of the sound of sound as a wave with a finite propaga 1) when does an object break what happen 2) what happens when an object breaks 3) when does an object happen to break 4) what it happens to an object when it bre   | s to   | with the physical description | n  |
| 7 a laser to about 700 degreerystalline phase to the amorphous state is played back.  | , which then appears   | •                             |    |
| 1) When heated with   | 2) To heal by  |                               |    |
| 3) Heating with   | 4) Heat it by  |                               |    |



|  |  |                        | lmost become an article of             |
|--|--|------------------------|--|
| ,  | that sleep need is high                        | · ·                    |  |
| 1) is repeated so of                                     |  | 2) so repealed ofter   |  |
| 3) repeated so often                                     | that   | 4) repeats so often    | as                                     |
| Part B. Vocabular  | ·y   |                        |  |
|  | the answer choice (1), enestions. Then mark yo |                        | ld best complete the blank swer sheet. |
|  | dmitted that what he                           | had said was false an  | d that he has                          |
| <ul><li>the whole story.</li><li>1) fabricated</li></ul> | 2) implemented                                 | 3) simulated           | 4) wondered                            |
| 10- Since he failed thing would not ha                   | ,  | s himself in           | his studies so that such a             |
| 1) scattered   | 2) immersed                                    | 3) endeavored          | 4) disseminated                        |
| 11- You may make the consequences.                       | e the decisions you thi                        | nk appropriate, but w  | re hold you all                        |
| 1) rife with   | 2) indifferent to                              | 3) affable to          | 4) accountable for                     |
| 12- Nobody who redangers of driver                       | -  | way can say they have  | en't been warned about the             |
| 1) thrill  | 2) fatigue                                     | 3) evasion             | 4) acceleration                        |
| 13- The prime min the of                                 | _  | with the plan unless   | he first manages to obtain             |
| 1) feasibility   | •  | 3) endorsement         | 4) eminence                            |
| C  |  | • /                    | eadly plagues no longer                |
| _  | segments of the popula                         |                        |  |
| 1) thwarted  | 2) galvanized                                  | 3) exemplified         | 4) decimated                           |
| 15- Because paster juices.                               | urization kills bacteria                       | , it is most           | to offer only pasteurized              |
| 1) potent  | 2) prudent                                     | 3) prevailing          | 4) pacific                             |
|  | •  | al contribution to our | health and and                         |
| to protection of the                                     |  |                        |  |
| 1) legitimacy  | 2) magnitude                                   | 3) prosperity          | 4) recollection                        |
| 17- The youngster  | without a                                      | trace one day and has  | s never been found.                    |
| 1) vanished  | 2) uttered                                     | 3) receded             | 4) overlooked                          |

| 1+ | 14.4 | ۹۳ تا | كنكور | تشريحي | پاسخ | سوالات و |
|----|------|-------|-------|--------|------|----------|
|----|------|-------|-------|--------|------|----------|



| 18- Reginald bought Sharona a new dress to her for the one he'd spilled his |                            |                       |                           |       |  |  |  |
|---|----------------------------|-----------------------|---------------------------|-------|--|--|--|
| ice cream on.   |                            |                       |                           |       |  |  |  |
| 1) conceal  | 2) compensate              | 3) pursue             | 4) salvage                |       |  |  |  |
| 19- Eating more   | e animal foods is one wa   | y of boosting the ca  | loric and de              | nsity |  |  |  |
| of the diet, a shi  | ift that appears to have b | een conducive to hu   | ıman development.         |       |  |  |  |
| 1) nutrient   | 2) adroit                  | 3) rigid              | 4) scarce                 |       |  |  |  |
| 20- Knowing the   | e potential w              | vithin a child prodig | y's world, and how to cou | nter  |  |  |  |
| them, can signif  | icantly improve each gir   | l and boy's chances   | for success with their do | ıble- |  |  |  |
| edged gifts.  |                            |                       |                           |       |  |  |  |
| 1) knacks   | 2) merits                  | 3) notions            | 4) pitfalls               |       |  |  |  |

# Part C. Reading Comprehension

Directions: Read the following two passages and select the best choice (1), (2), (3), or (4) that best answers earth question. Then mark your answer on your answer sheet.

# Passage 1:

From bacteria to baleen whales, our planet is home to tens of millions of different life forms at least; biologists can only guess at the true number of species. The richness and variety of life is referred to as biological diversity, or just biodiversity. In recent years, the subject of biodiversity has been the focus of discussion not only in scientific circles but in the news media and the highest levels of government and international affairs. The reason for this attention, unfortunately, is that the earth's biodiversity is disappearing. Extinction is a natural event that has gone on since life first appeared on earth, but pollution, habitat destruction, overexploitation, and other human folly are now driving, species extinct at a rate unprecedented in the history of life. At the rate things are going, most kinds of living things will disappear forever from the face of the earth, many before we even know they are there.

When it comes to conservation, the emphasis of decision makers, conservation organizations, and the general public has traditionally been on organisms that we find beautiful or emotionally compelling. Bald eagles, whales, and redwood trees evoke strong positive reactions in most people; microscopic worms and bottom-dwelling fungi do not. Worms, fungi, and millions of other seemingly insignificant species are at least as vital to earth's survival-and therefore to our own-as are the larger organisms that we happen to find attractive. There is a growing recognition of the need to protect the earth's biodiversity, to reverse or at least slow the process of mass extinction. What is new about this recent attention is the focus on maintaining the total number species, rather than on saving particular ones.

### 21- According to the passage, the variety of life on Earth ......

- 1) has attracted people's attention because it is in jeopardy
- 2) has long been the concern of different people
- 3) is discussed in scientific circles only
- 4) is a recent discovery



# 22- Which one of the following statements about extinction is TRUE, according to the passage?

- 1) It is unlikely to affect mankind if it continues at the present rate.
- 2) It began a long time after life flourished on the planet Earth.
- 3) It used to occur more slowly than it does now.
- 4) It is argued to be a recent phenomenon.

# 23- It can be inferred from the passage that there are most probably living things

- 1) not contributing 10 Earth's biodiversity
- 2) not yet known to us
- 3) as conspicuous as trees whose problems of survival go unnoticed
- 4) not sensitive to such factors as pollution. habitat destruction, overexploitation

# 

- 1) are needed for the health and survival of the Earth
- 2) are viewed as attractive by most people but ignored because of being invisible
- 3) are often ignored due to their insignificance
- 4) occupy more space than other organisms

# 

1) laudatory

2) flippant

3) apologetic

4) alarmed

# Passage 2:

One of the most basic assumptions about management is that systematic and careful analysis yields superior choices than <u>those</u> coming from intuitive processes. However, this assumption has recently come under fire (Mintzberg, 1994), Mintzberg (1994), in his hook *The Rise and Fall of Strategic Planning*, concludes that the term "strategic planning" is an oxymoron. He argues that strategy cannot be planned because planning is about analysis and strategy is about synthesis. That is why, he asserts, such a planning approach has failed so often and so dramatically. In a similar vein, Peters and Waterman (1982) viewed "the rational model" as a major reason for the problems United States firms encountered in competing with foreign companies in the 1970s and 1980s.

This is not to say that rational analysis is a futile exercise. Rational analysis is a useful and indispensable tool in strategy-making which even Mintzberg (1994), a strong critic of strategic rationality, concedes. Our stand is that a theory of strategic decision making has to take into account both rational and intuitive processes (Pondy, 1983; Simon, 1987). As Jonas Salk, the discoverer of polio vaccine, noted: "... if we combine our intuition and our reason, we can respond in an evolutionary sound way to our problems ... " (cited in Ray & Myers, 1990:249). To date, scholars have emphasized rational decision making over intuitive decision making. One major reason for such a tendency is that, to many scholars, intuitive processes, perhaps, fall into the realm of irrational or paranormal. As a result, they believe that intuitive processes are beyond the scope of a scientific study. Recent advances in cognitive science and artificial intelligence, however, suggest that there is nothing mystical or magical about intuitive processes and that they are not paranormal or irrational.

### 26- The word "those" in line 2 refers to .................

1) systematic and careful analysis

2) processes

3) choices

4) assumptions



# 

- 1) the fact that the rational model did not turn out to be useful in the United States does not mean that it is futile altogether
- 2) managers who use systematic and careful analysis 10 make decisions have been unduly criticized
- 3) a managerial approach 10 decision-making based on the rational model is unlikely to be fruitful
- 4) there is something contradictory about management that makes it elude a definite definition

# 28- Why does the author quote Jonas Salk in paragraph 2?

- 1) To support the point that rational analysis is not 10 be discarded altogether
- 2) To demonstrate that the scientific approach is the same regardless of the discipline involved
- 3) To stress the point that advances made in one field of study should be disregarded by those in other branches of science
- 4) To substantiate the fact that those who utilize the rational model in their management style are not to be censured as severely as they have been

# 

- 1) intuition varies from person to person
- 2) intuitive processes cannot be subjected to scientific analysis
- 3) intuition-based decisions have most often turned out to be wrong
- 4) the very existence of intuition has yet not been verified by cognitive science

# 30- Which of the following rhetorical techniques has NOT been used in the development of the topic in the passage?

- 1) Appeal to authority
- 2) Cause and effect
- 3) Factual information
- 4) Process time order





# تستهای کنکور سراسری علوم پایه ۹۳

| Part A: Grammar <u>Directions</u> : Select the answer choice (1), (2), (3) in the following questions. Then mark your answer  | · · · · · · · · · · · · · · · · · · ·  |
|---|--|
| 1- In countless shacks and shanties across the wiped their noses, hugged them, so for their rights.   | · · · · · · · · · · · · · · · · · · ·  |
| 1) to be crying 3) cried  | <ul><li>2) when they cried</li><li>4) had cried</li></ul>  |
| 2- Superstitions were not the only Japanese Japanese, whether I liked it or not.  |  |
| 1) to realize 2) realized  3. Payhans the most unusual office is the on   | 3) than I realized 4) to be realized   |
| 3- Perhaps the most unusual office is the on  |  |
| <ul><li>closer to nature by creating an office in a tree</li><li>1) used by David Smith</li><li>3) David Smith used</li></ul>   | 2) which used David Smith 4) is used by David Smith  |
| 4 are rich in a wide variety of spedisputes.  | ecies is well known, something no one ever   |
| <ol> <li>The Earth's some regions</li> <li>What are the regions of the Earth</li> </ol>   | <ul><li>2) There are some regions of the Earth</li><li>4) That some regions of the Earth</li></ul>             |
| 5- A team led by Mark Tuszynski injected brathe entorhinal cortex and the hippocampus, first.  1) in which the parts of the brain where memories 2) they being the parts of the brain where memorial to from and consolidate the parts of the brain 4) the parts of the brain where memories are form | , and where Alzheimer's strikes es are formed and consolidated ries are formed and consolidated where memories |
| 6- I heard the car is the deadliest weapon credeath toll from atomic weapons, guns or bom  1) and the number of lives claimed 2) claims that the number of lives 3) that the number of lives it has claimed 4) it has claimed the number of lives   | · ·  |
| 7- Many top athletes now find mental a performing on race or game day but for gettin 1) only 2) not just  |  |



| _  | se of vision, which he do                       |  | emendous importance he w to the soul and the most         |
|--|---|--|---|
| 1) of all experience 3) ever to experience |   | 2) on which expe<br>4) on that is expe |   |
|  |   |  | best complete the blank in<br>· sheet.                    |
|  | consumption based on been a whale eats the      |  | nts eat their full body<br>dth of its body weight each    |
| 1) absorption                              | 2) equivalent                                   | 3) synonymy                            | 4) shortage   |
|  |   |  | s, known by his distinctive<br>urpose is to induce hearty |
| 1) mercenary                               | 2) unconscious                                  | 3) audacious                           | 4) ludicrous  |
| countless businesses                       | s and jobs.                                     |  | ster in memory destroyed                                  |
| 1) coinciding                              | 2) annihilation                                 | 3) refubishing                         | 4) precluding   |
| 12- Jeff was so him. 1) boisterous         | in his view that in 2) substantial              | t was impossible to ha 3) intransigent | we a rational debate with  4) indulgent                   |
| ,  | so, we asked 2) frugal                          | ,                                      | , 6   |
|  | hen I got the acceptance l                      |  | ty of Tehran that I sprinted                              |
| 1) dexterity                               | 2) improvisation                                | 3) alacrity                            | 4) avarice  |
| 15- Ted a happened.                        | any allegations of his i                        | nvolvement in the ba                   | nk robbery that had just                                  |
| 1) refuted                                 | 2) suspended                                    | 3) confessed                           | 4) deduced  |
| 16- The fact that s nurturing instinct.    | some fish th                                    | eir offspring illustrat                | tes that these fish lack a                                |
| 1) mitigate                                | 2) devour                                       | 3) withdraw                            | 4) pursue   |
|  | npany was forced to re<br>of useless inventory. | call the faulty produc                 | t and stop distribution, it                               |
| 1) a recession                             | 2) a denial                                     | 3) an abundance                        | 4) an aptitude  |
| 18- Walters cannot scene of the crime.     | be sent to jail now; we                         | still have no                          | . proof that he was at the                                |
| 1) demonstrative                           | 2) conclusive                                   | 3) redundant                           | 4) immaterial   |



# 19- Lord Astor's racing horses possess speed but not .....; they consistently lead at the start of a race and fall behind at the end.

1) elation

2) boldness

3) proximity

4) stamina

# 20- The regulations ...... that everything has to comply with the relevant safety

1) evoke

2) contribute

3) vow

4) stipulate

# **PART C: Reading Comprehension**

<u>Directions</u>: Read the following two passages and select the best choice (1), (2), (3), or (4). That best answers each question. Then mark your answer on your answer sheet.

### Passage 1:

You can drop cigarettes. Avoid pollution. But there's on toxin you just can't dodge: oxygen. With every gulp of air, oxygen gives you life. Some of it, however, gets converted inside your cells into a radical molecule that can wreak havoc, degrading those same cells and others. A growing number of scientists say this damage is what causes aging. They also think they may one day be able to fend off oxygen's ill effects and help us live a lot longer.

Scientists have long known that oxygen is capricious. As molecules go, it gets around, reacting with all kinds of things. Mostly, that's good. Oxygen combines with fats and carbohydrates, in a part of cells known as the mitochondrion, to churn out the energy that gets you through the day. But the conversion isn't perfect. A small amount of oxygen is regenerated in a nasty form called a free radical, or oxidant the very critter that causes metal to rust. The oxidants careen about, binding to and disrupting.

The membranes, proteins, DNA and other cell structures that make your body work. Over time, this damage adds up, and the result just might be and older, frailer you.

According to one estimate, oxidants bombard the DNA inside every one of our cells roughly 10.000 times a day. Thankfully, most of the <u>assailants</u> are intercepted by a small army of antioxidant chemicals. Proteins also patch up the damage caused by the radicals that do get through. "The house is always getting dirty, and we're always trying to clean it up," remarks John Carney, chief technical officer at Centaur Pharmaceuticals in Sunnyvale, Calif, which is developing drugs to fight various diseases of aging. But eventually, the theory goes, our tired cells get less efficient at repelling free radicals and mopping up oxidative messes, and the damage accumulates. We begin to rust from the inside out.

### 21- What is the subject of the passage?

1) The role of one aging variable

2) Ways to stop aging

3) A misconception about aging

4) The process of aging

# 22- All of the following are FALSE about the scientists mentioned in paragraph 1 EXCEPT that they ............

- 1) think there would come a day that a radical molecule would be discovered to offset oxygen's ill effects.
- 2) believe what is accelerating aging is the havoc wreaked on human cells by the impact of oxygen deficiency caused by smoking and pollution.
- 3) are optimistic about the chances of humans' being able to live a longer life in the future.
- 4) are losing hope about preventing oxygen from doing damage to human cells it does now

### 23- The author states that oxygen is capricious in that it ............

- 1) generates free radicals inside cells that inflict damage
- 2) gets around, reacting whit all kinds of things
- 3) results in the production of more energy than we need for our daily needs
- 4) combines with fats and carbohydrates to produce energy



# 24- The word "assailants" in paragraph 3 refers to ..........

1) estimates

2) cells

3) 10.000 times a day

4) oxidants

# 25- The author has brought in a quotation from John Carney to bolster the fact that we ...........

- 1) are to do everything possible to ascertain that our environment is clean enough to prolong our life
- 2) have some natural defense mechanisms that work to lessen the havoc that oxidants wreak on our cells
- 3) spend more energy than we should to counter the effects of free radicals
- 4) have bodies that are similar to houses and thus are to be clinically examined and replaced

### Passage 2:

So why should we care about how many different kinds of organisms there are, as long as the ones we care about are still around? For one thing, no organism lives in isolation from its environment and the other living things in it. Creatures like whales, pandas, sea turtles, and tigers that capture our imagination cannot survive without countless other species. Organisms are bound together in complex food webs, nutrient cycles, symbioses, and other ecological interactions. The loss of even the "lowliest" of species could have profound effects on many others. Biologists simply do not understand ecosystems well enough to predict what these effects might be.

Another reason to conserve biodiversity is that it represents a hidden treasure trove. Most pharmaceuticals are derived from natural chemicals in organisms, but only a tiny fraction of species have been tested. The wild plants from which our farm plants were derived contain genes for pest resistance, faster growth, and higher quality that could be used to improve our food crops or develop new ones. New materials — a substitute for petroleum, perhaps, or industrial chemicals or better fibers for clothing — also remain undiscovered. There are so many different kinds of organisms, however, that scientists have not had time to even identify most of them, much less evaluate their usefulness. The next species that goes extinct might hold the cure for cancer, a solution to hunger, or maybe just the makings of an elegant new perfume a secret that will be lost forever.

### 26- The question with which the passage opens is ............

- 1) actually what the passage mainly deals with
- 2) intended to display our insufficiency of knowledge
- 3) one that is disputed
- 4) a rhetorical question

### 27- The profound effects cited in paragraph 1 are the effects ............

- 1) come up only when the lowliest of species are neglected
- 2) that are around now but not fully understood by scientists
- 3) the environment has on living creatures
- 4) scientists are not yet able to pinpoint in advance

# 28- What is the function of paragraph 2 in relation to what paragraph 1 is mainly concerned with?

- 1) It yet introduces another reason in support of the main theme of paragraph 1.
- 2) It uses paragraph 1 as a basis to make a prediction about what human nutrition would be like without biodiversity.
- 3) It qualifies the chief claim presented in paragraph 1.



4) It casts doubt on the validity of the main point of paragraph 1..

# 29- The passage provides information that answers which of the following questions?

- 1) Why has a tiny fraction of species been tested for their pharmaceutical value?
- 2) Why did humans first use the wild plants to derive the ones we now grow?
- 3) Why is it that the author contends that biodiversity is actually a hidden treasure trove?
- 4) Why have biologists not yet been able to understand ecosystems well enough?

# 30- The tone of the passage could best be described as ............

- 1) informative and cautionary
- 2) enthusiastic and partial
- 3) scholarly and noncommittal
- 4) skeptical and questioning





# تستهای کنکور سراسری علوم انسانی ۹۶

# Part A. Grammar

| <b><u>Directions</u></b> : Select the answer choice (1), (2). (3), or (4) that could best complete the b | lank |
|--|------|
| in the following questions. Then mark your answer on your answer sheet.                                  |      |

| Directions: Select the answer choice | ce (1), (2). (3), or (4) that could best complete the blank |
|--------------------------------------|---|
|                                      | ark your answer on your answer sheet.                       |
| 1- In about 387 BC Plato             | the Academy as an institute for the systematic pursuit      |
| of philosophical and scientific teac |   |
| 1) founded                           | 2) was founded  |
| 3) who founded                       | 4) who had founded  |
| 2- With its radiant color and plant  | like shape, the sea anemone a flower than                   |
| an animal.                           |   |
| 1) looks the same                    | 2) is looking more like                                     |
| 3) looks more like                   | 4) is looking the same                                      |
| 3- Critics often claim that          | Don Quixote, he would undoubtedly be an obscure             |
| writer in world literature today.    |   |
| 1) if Cervantes did not write        |   |
| 2) Cervantes had not written         |   |
| 3) if Cervantes would not write      |   |
| 4) had Cervantes not written         |   |
| 4- An impressive set of studies dem  | onstrates that cognitive development during the school      |
| years by complex and                 | demanding work without close supervision and by high        |
| teacher expectations.                |   |
| 1) and has enhanced                  | 2) is enhanced  |
| 3) which is enhanced                 | 4) which has been enhanced                                  |
| 5- Neither sympathy nor empath       | y is identical to the "I know how you feel" type of         |
| response that some people offer wl   | nen another's expression of emotion.                        |
| 1) facing to                         | 2) are facing to  |
| 3) faced with                        | 4) they faced with  |
| 6- Despite intensive research into   | causes and treatments, a constant threat                    |
| and topic for discussion for many    | researchers.  |
| 1) cancer remains                    | 2) the cancer remains of                                    |
| 3) but cancer remains of             | 4) but the cancer remains                                   |
| 7- Oil spills can occur on land or   | in rivers and lakes, but the most serious spills tend to    |
| involve tankers the op               | en seas.  |
| 1) when travel                       | 2) that travel  |
| 3) in which travel                   | 4) that they travel   |
|                                      |   |



| 8- Although Freud    | himself was primari     | ly concerned with res    | search and psychoanalytic              |
|----------------------|-------------------------|--------------------------|--|
| O                    | -                       | •                        | ow today, and                          |
| whether it is consid | lered an effective trea | tment for neurotic dis   | orders.                                |
| 1) how docs psychoa  | analysis stand          | 2) how psychoanal        | ysis stands                            |
| 3) that how psychoa  | nalysis stands          | 4) that how does ps      | ychoanalysis stand                     |
|                      |                         |                          |  |
| Part B. Vocabulary   |                         | (A) (A) (I               |  |
|                      |                         |                          | ld best complete the blank             |
|                      | estions. Then mark yo   | •                        |  |
| _                    | •                       |                          | vidence suggests that this             |
| •                    | narmful to our health   |                          | 1) accumulated                         |
| 1) inundated         | 2) simulated            | 3) duplicated            | 4) accumulated                         |
| 10- Anorexia nerv    | vosa, self-induced sta  | arvation out of an i     | ntense fear of becoming                |
| was fi               | rst described 100 year  | s ago.                   |  |
| 1) obese             | 2) gullible             | 3) maniac                | 4) skeptical                           |
| 11 I anoted between  | or Commonwy and Evan    |                          | of other Francisco meticas             |
|                      | •                       |                          | of other European nations,             |
|                      |                         |                          | waders through history. 4) superiority |
| 1) immunity          | 2) diversity            | 3) proximity             | 4) superiority                         |
| 12- The defense at   | torney was not able     | to find a witness who    | se version of the incident             |
| with th              | nat of the accused.     |                          |  |
| 1) concurred         | 2) contended            | 3) congregated           | 4) contemplated                        |
| 13- The airplane cr  | ash was tragic, killing | many people immedia      | ately and inflicting injuries          |
|                      | ld eventually prove     |                          |  |
| 1) hostile           | 2) stealthy             | 3) cynical               | 4) fatal                               |
| 14- The pioneers w   | ho lived through the f  | irst bitter winters in t | he rugged wilderness must              |
| have had remarkal    | J                       |                          | 88 \( \)                               |
| 1) precision         | 2) magnificence         | 3) stamina               | 4) seclusion                           |
| 15_With              | it is easy to say that  | they should not have     | released the man. I wonder             |
|                      | r trust such a person.  | they should not have i   | reicascu ine man, i wonder             |
| 1) humility          | 2) hindrance            | 3) hindsight             | 4) homogeneity                         |
| 1) Halling           | 2) illiarance           | 3) iiiidsigiit           | i) nomogeneity                         |
| 16- While there are  | e numerous talks and    | courses that focus on j  | presentation techniques,               |
| the best way to      | presentation            | skills is through pract  | tice and experience.                   |
| 1) exploit           | 2) hone                 | 3) divulge               | 4) curtail                             |
| 17- Although no or   | ne was interested in b  | uying Vincent Van G      | ogh's paintings during his             |
| _                    | sell for pr             | •                        |  |
| 1) eccentric         | 2) equivocal            | 3) exuberant             | 4) exorbitant                          |



| 18- The ability of the Wright brothers to analyze a mechanical problem and move tow | varo |
|---|------|
| a solution was apparent from the of their work in aeronautics.                      |      |

- 1) outset
- 2) vigilance
- 3) foresight
- 4) charisma

# 19- Mr. Collins was fast becoming an ...... member of the office, so they had no choice but to offer him a higher salary to stay on.

- 1) inadvertent
- 2) indispensable
- 3) indomitable
- 4) incompatible

# 20- The open-minded minister who disagreed with the monarch's views was inevitably ousted and replaced by someone more ..........

- 1) subservient
- 2) superfluous
- 3) sumptuous
- 4) superficial

# Part C. Reading Comprehension

<u>Directions</u>: Read the following two passages and select the best choice (1), (2), (3), or (4) that best answers earth question. Then mark your answer on your answer sheet.

# Passage 1:

The human ABO blood groups were discovered by Austrian-born American biologist Karl Landsteiner in 1901. Landsteiner found that there are substances in the blood, antigens and antibodies, that induce clumping of red cells when red cells of one type arc added to those of a second type. He recognized three groups-A, B, and O-based on their reactions to each other. A fourth group, AB, was identified a year later by another research team. Red cells of the A group clump with donor blood of the B group; those of the B group clump with blood of the A group; those of the AB group clump with those of the A or the B group because AB cells contain both A and B antigens; and those of the O group do not generally clump with any group, because they do not contain either A or B antigens. The application of knowledge of the ABO system in blood transfusion practice is of enormous importance, since mistakes can have horrible consequences. In 1914 sodium citrate was added to freshly drawn blood to prevent clotting. Blood was occasionally transfused during World War I, but three-quarters of a pint was considered a large amount. These transfusions were given by directly linking the vein of a donor with that of the recipient. The continuous drip method, in which blood flows from a flask, was introduced by Hugh Marriott and Alan Kekwick at the Middlesex Hospital, London, in 1935. The discovery of the Rh system by Landsteiner and Alexander Wiener in 1940 was made because they tested human red cells with antisera (animal or human serum containing antibodies specific for one or more antigens) developed in rabbits and guinea pigs by immunization of the animals with the red cells of the rhesus monkey Macaca mulatta. Other blood groups were identified later, such as Kell, Diego, Lutheran, Duffy, and Kidd. The remaining blood group systems were first described after antibodies were identified in patients. Frequently, such discoveries resulted from the search for the explanation of an unexpected unfavorable reaction in a recipient after a transfusion with formerly compatible blood.

# 21- What is the passage mainly about?

- 1) Blood transfusion in World War I
- 2) Early attempts at blood transfusion
- 3) Great medical achievements in the 20lh century
- 4) Discovery of human blood groups and the Rh system



# 22- Which of the following is NOT true about the AB blood group?

- 1) AB cells carry both A and B antigens.
- 2) It was discovered by Karl Landsteiner.
- 3) It was discovered in the early 20<sup>th</sup> century.
- 4) The red cells of the AB group clump with those of the A or the B group.

# 23- What does "that" in paragraph 1 refer to?

- 1) Vein
- 2) Linking
- 3) Donor
- 4) Recipient

# 24- Which of the following animals does the author NOT mention in the passage?

- 1) Guinea pigs
- 2) Monkeys
- 3) Rats
- 4) Rabbits

# 25- Which of the following can be inferred from the passage?

- 1) Adding sodium citrate to fresh blood to prevent clotting resulted in discovery of the Rh system.
- 2) The continuous dip method was first practiced during World War I to transfuse three-quarters of a pint of blood.
- 3) The Rh system was discovered by Karl Landsteiner and his colleague at the Middlesex Hospital, London.
- 4) Other blood groups were later identified because the outcome of a number of blood transfusions was not successful.

### Passage 2:

At the start of his career, Albert Bandura focused on learning. Most of the research at that time was concerned with learning from direct experience. At that time it was widely assumed that learning could only occur by responding to stimuli and experiencing their effects. Bandura felt that this line of theorizing was at odds with informal evidence that virtually all learning resulting from direct experience occurs on a vicarious basis-by observing other people's behavior and its consequences for them. whereas behaviorism tended to emphasize the influence of the environment on behavior, Bandura was interested in the influence of behavior on the environment. In this respect his position is closer to that of Jacob Kantor, whose "interbehaviorism" argues that the organism and stimulus objects surrounding it should be treated as equally important, a position that presaged the emergence of ecological psychology. Bandura referred to his concept of environment-behavior interaction as "reciprocal determinism"-the notion that the environment and a person's behavior cause one other. He developed this idea to a point where he began to consider the interaction between environment, behavior and the person's psychological processes. Once he started to consider a role for mental imagery, he ceased to be a strict behaviorist and became a cognitive psychologist. Indeed, he is often regarded as a "founding father" of cognitive behaviorism. His theoretically ambitious Social Learning Theory (1977) set out to " provide a unified theoretical framework for analyzing human thought and behavior" (p. vi). While his introduction of cognitive concepts into behaviorism marked a clear departure from traditional behaviorism, it also marked a point where Bandura began to consider observational learning (modelling) and self-regulation. This interest led to a program of research on the determinants and mechanisms of observational learning and modelling of rule-governed behavior. He distinguished between three kinds of models: live (e.g. the behavior of a friend); symbolic (e.g. the behavior of an actor on TV); and verbal (e.g. the behavior of someone described in a short story or novel). The enormous



advances in communication technology through the last century (from radio to television and the internet) mean that the symbolic environment plays an increasingly powerful role in shaping values, ideas, attitudes and lifestyles, so Bandura's work is particularly relevant to contemporary developments in the growth of information and communication technology.

## 26- Which of the following is TRUE about Bandura's early research?

- 1) He believed that learning occurs by responding to external stimuli.
- 2) He was interested in collecting informal evidence to prove his learning theories.
- 3) He argued that the organism is much more important than the stimulus objects surrounding it.
- 4) He was interested in studying the mutual relationship between the behavior and the environment.

# 27- Why is Bandura known as a founding father of cognitive behaviorism?

- 1) He was inspired by research findings in ecological psychology.
- 2) He was under the influence of Jacob Kantor's interbehaviorism.
- 3) He shifted his attention to the role of human thought and mental imagery.
- 4) He was an ambitious theoretician who had grown tired of classical behaviorism.

# 28- What does "he ceased to be a strict behaviorist" in line 15 mean?

- 1) He was no more a strong supporter of behaviorism.
- 2) He continued to be a faithful advocate of behaviorism.
- 3) He tried to be a conservative follower of behaviorism.
- 4) He strongly updated his behavioristic views.

# 29- Which of the following can be inferred from the passage?

- 1) Bandura worked on the concepts of model ling and self-regulated learning.
- 2) Though a psychologist, Bandura contributed significantly to information technology.
- 3) Bandura directed a research program that led to the discovery of rule-governed values.
- 4) The importance of Bandura's findings are highlighted by advances in communication technology.

# 30- Which of the following would the paragraph following the passage most probably discuss?

- 1) The values that communication technology cannot aptly address
- 2) The relevance of symbolic behavior to an aspect of communication technology
- 3) The variables that attracted Bandura to directly work in information and communication technology
- 4) The difference between the symbolic environment and the one created by the growth information and communication technology





# Part A. Grammar

| <u>Directions</u> : Select the answer choice (1), (2). (3), or (4) that could best complete the blan | ık |
|--|----|
| in the following questions. Then mark your answer on your answer sheet.                              |    |

|                      | •                     |                           |  |       |  |  |  |
|----------------------|-----------------------|---------------------------|--|-------|--|--|--|
| 1- Women are the     | ought to              | no official role in Rom   | an army activities.                                |       |  |  |  |
| 1) having had        | 2) have               | 3) have had               | 4) be having                                       |       |  |  |  |
| 2- We have to ma     | ke sure               | that we think is right.   |  |       |  |  |  |
| 1) a way that will i |                       | C                         |  |       |  |  |  |
| 2) that machines w   | vill behave in a way  |                           |  |       |  |  |  |
| 3) for the machine   | s a way to behave     |                           |  |       |  |  |  |
| 4) to behave in a w  | vay that machines are |                           |  |       |  |  |  |
| 3- Defaunation h     | as caused numerous    | s geographic range con    | strictions in marine an                            | imal  |  |  |  |
| species,             | them locally exti     | nct in many habitats.     |  |       |  |  |  |
| 1) and has driven    |                       | 2) that are driven        | by   |       |  |  |  |
| 3) which it drives   |                       | 4) driving                |  |       |  |  |  |
| 4- Vaccinated mi     | ce were then challer  | nged with LCMV Clone      | e-13 (CI-13), which caus                           | ses a |  |  |  |
| systemic infection   | 1                     |                           |  |       |  |  |  |
| 1) that lasts for 60 | to 90 days            | 2) of 60 to 90 day        | 2) of 60 to 90 days to last                        |       |  |  |  |
| 3) lasts between 60  | and 90 days           | 4) between 60 to          | 90 days of lasting                                 |       |  |  |  |
|                      |                       | •                         | rain activity associated was with pain linked to y |       |  |  |  |
| 1) the association   |                       | 2) is associated          |  |       |  |  |  |
| 3) that associated   |                       | 4) that of association is |  |       |  |  |  |
| 6 The viewel two     | atmant was as much    | influenced by stylistic   | idaas an what was vis                              |       |  |  |  |
|                      |                       | • •                       | ideas or what was visu<br>factors connected with   | •     |  |  |  |
| structure.           |                       |                           |  |       |  |  |  |
| 1) as it was by      | 2) to be in           | 3) being                  | 4) was an  |       |  |  |  |
| 7 tha                | at can take the place | of monatomic anions.      |  |       |  |  |  |
| 1) That many poly    | atomic anions         |                           |  |       |  |  |  |
| 2) Polyatomic anic   | ons are so many       |                           |  |       |  |  |  |
| 3) As many as poly   | yatomic anions        |                           |  |       |  |  |  |
| 4) There are many    | polyatomic anions     |                           |  |       |  |  |  |
| 8 in                 | our first meeting tha | at I never ever again we  | nt for a second visit.                             |       |  |  |  |
| 1) I found him con   | itentious             | 2) So contentious         | I found him  |       |  |  |  |
| 3) Contentious as I  | I found him           | 4) More contention        | 4) More contentious I found him                    |       |  |  |  |



# Part B. Vocabulary

<u>Directions</u>: Select the answer choice (1), (2), (3), or (4) that could best complete the blank in the following questions. Then mark your answer on your answer sheet.

|   | ige between will conduct a third t                     |  | st and second experiment,                                     |
|---|--|--|---|
| 1) moderation                             | 2) controversy   |  | 4) corruption   |
|   | by one of those prese                                  | ent, and presumably o                                  | fected by an unexplained directed against the vice 4) tedious |
| ,   | · •  |  |   |
|   | _  | e trying to fix it, you c<br>ble for all the repair co | ould possibly   |
| 1) elude                                  | 2) nullify   | -  |   |
| 12- A true scientist                      | is not expected to let h                               | is compro  | mise his scientific work.                                     |
| 1) recognitions                           | 2) argumentations                                      | 3) initiations   | 4) preconceptions   |
| •   | st his license to practic<br>te to keep his clients or |  | red he often took steps to                                    |
| 1) fabricate                              | <b>a</b> \ .   |  | 4) intimidate   |
| 14- If there was an a complaining about s |  | , my aunt would  | win because she is always                                     |
| 1) benevolent                             | _  | 3) fanatical   | 4) querulous  |
| 15- Because educati not attend school.    | on is noti   | n all countries, there a                               | re many children who do                                       |
| 1) autonomous                             | 2) flexible  | 3) compulsory  | 4) authentic  |
|   | mals' rapidance to see one in the v                    |  | id not actually think she                                     |
| 1) execution                              |  |  | 4) alienation   |
| <b>17- He</b> 1) construed                | her blank stare as bore<br>2) detested                 | edom and stopped telli<br>3) scrutinized               | ng her about his new job. 4) regretted                        |
| 18- The                                   | value of a college d                                   | egree is worth more t                                  | han the financial cost of                                     |
| obtaining a higher e                      |  |  |   |
| 1) arbitrary                              | 2) intrinsic   | 3) complementary                                       | 4) innovative   |
| _   |  | rated by their inabili                                 | ty to useful  |
| information from h                        |  | 3) artand  | 1) cnaculato  |
| 1) elicit                                 | 2) augment   | 3) extend  | 4) speculate  |



20- He has got such a ...... memory that even now, at the age or seventy, he can recall the formulae he had studied in his school days.

1) vigilant

2) deft

3) prodigious.

4) feasible

# **Part C: Reading Comprehension**

Directions: Read the following two passages and select the best choice (1), (2), (3), or (4) that best answers earth question. Then mark your answer on your answer sheet.

### Passage 1:

These days the popular mantras for stimulating creativity frequently extol the virtues of thinking outside the box: "There are no wrong answers." "Consider all options." "Break the boundaries that prevent you from innovating." But not all boundaries should be broken. Some are real and need to be respected. Sometimes it is best to know how to think creatively inside the box.

If you identify constraints that any solution to a specific problem must obey, you can channel your search into more productive directions. Eventually you must always figure out which of your possible solutions are workable and which are not. By imposing constraints on your solution search--in effect, understanding what box they will ultimately have to fit into--you can filter out unworkable ideas before they take shape and sec the real solutions more easily.

Becoming aware of the relevant constraints can be powerfully liberating. Filtering out your thoughts this way may at first seem as though it would censor potentially good ideas. But, on the contrary, identifying the underlying attributes of real solutions can actually help generate ideas.

When you are faced with a difficult problem, it's all too easy to get caught up in what you don't know. So instead begin by figuring out what you do know about the solution, even if it is incomplete. Identify all the attributes that will be a necessary part of any

workable solution. These <u>necessary attributes</u> are the principles (mathematicians call them axioms) that will serve as problem-solving catalysts. A great advantage of this principle-centered approach is that it helps to focus your search by preventing you from having to start from scratch every time you run into a roadblock.

### 21- What is the best title for the passage?

- 1) How to Be Creative
- 2) Principled Problem Solving
- 3) Virtues of Brainstorming
- 4) Thinking Outside the Box: Pros and Cons

# 22- Which of the following best describes the author's attitude towards the quoted statements in paragraph 1?

1) Pointed opposition

2) Reproachful and disturbed

3) Skeptical but resigned

4) Partial endorsement



- 1) come up with a number of workable and unworkable phans between which you cannot make a distinction
- 2) never be able to extricate yourself from popular. non-academic approaches to problem solving
- 3) beat more about the bush due to not having channeled your search already
- 4) find yourself imprisoned within a hypothetical box of limited viable options

# 24- Which of the following statements is the author more likely to agree with?

- 1) Letting constraints filter and guide your thinking can often be the best way to reach truly creative solutions.
- 2) Becoming aware of the relevant constraints may adversely affect the generation of certain pragmatic solutions.
- 3) When faced with a difficult problem, getting caught up in a web of relevant and irrelevant constraints is inevitable.
- 4) When solving problems. make no use of that part of your background knowledge that is part of folk culture.

# 25- According to the passage, the "necessary attributes" mentioned in paragraph 4

- 1) can be the end result of work in mathematics
- 2) may at limes prove to be too difficult to identify in the first place
- 3) can help accelerate the search for the right solution to a problem
- 4) are organic to the integrity of not only mathematics but also chemistry

### Passage 2:

The world's honeybees appear to be dying off in horrifying numbers, and now consensus is starling to emerge on the reason why: it seems there is no one cause. Infections, lack of food, pesticides and breeding- none catastrophic on their own-are having a synergistic effect, pushing bee survival to a lethal tipping point. A somewhat anti-climactic conclusion it may be, but appreciating this complexity-and realizing there will be no magic bullet-may be the key to saving the insects.

A third of our food relies on bees for pollination. Both the US and UK report losing a third of their bees last year. Other European countries have seen major die-offs too: Italy, for example, said it lost nearly half its bees last year. The deaths are now spreading to Asia, with reports in India and Suspected cases in China.

But while individual "sub-lethal stresses" such as infections are implicated, we know little about how they add together. The situation should become dearer in the next few years as the US government, the EU and others are pouring money ill to bee research. The UK, for example, has doubled its annual research budget, allocating £400,000 a year for the next five years.

On top of that, the UK National Bee Unit will get £2.3 million to map the problem. This money is urgently needed, says Peter Neumann of the Swiss Bee Research Centre in Berne, who runs COLLOSS, a network of researchers studying colony loss in 36 countries. "We don't have the data to assess the situation in Europe. Never mind the world," he says.

The main stress facing bees is the varroa mite, a parasite from Siberia that has now spread everywhere but Australia. Mite infestations steeply reduce bees' resistance to viral infection.



Worryingly, the mites are developing resistance to the pesticides used to control them, forcing beekeepers to use methods that are often less effective.

French and German beekeepers blame their losses on insecticides called neonicotinoids but France banned them 10 years ago and its bees are still dying. Neumann suspects a wider problem, citing experiments showing that agricultural chemicals that are safe for bees when used alone are lethal in combination, "Farmers increasingly combine sprays," he says, They also leave few flowering weeds, depriving bees of essential nutrients from different kinds of pollen, he adds.

# 26- Which of the following best describes "this complexity" as it is used in paragraph I?

- 1) Honeybee's survival being uncertain
- 2) Honeybees' being attacked on many fronts
- 3) The unpromising prospect for saving honeybees
- 4) The intricate relationship between saving all insects and saving honeybees

# 27- What is the function of paragraph 2 in relation to paragraph I?

- 1) It qualifies the conclusion made in paragraph I.
- 2) It provides specific information lending support to the problem portrayed in paragraph 1.
- 3) It questions the possibility of finding a solution to the problem described in paragraph 1.
- 4) It brings in facts and figures disproving the claim made in paragraph I to the effect that honeybees are actually being pushed to a lethal tipping point.

# 28- The passage provides sufficient information to answer which of the following questions?

- 1) Why did Italy lose fewer honeybees than the US and the UK?
- 2) Why does the author stale that each single cause of honeybee die-offs is not catastrophic on its own?
- 3) Why is Siberia a good place for the growth of a parasite that is said to be the main culprit for honeybees' dying off across the world?
- 4) Why is it that the author claims that the synergistic effect of various causes of honey bee losses would be clearer in the near future?

| 29- The word "them" | ' in paragraph 5 refer | s to            |         |
|---------------------|------------------------|-----------------|---------|
| 1) mites            | 2) pesticides          | 3) infestations | 4) bees |

# 30- Why does the author mention "France" in the last paragraph of the passage?

- 1) To emphasize the inefficacy of current anti-parasite strategies
- 2) To refer to the length of the existence of a persistent problem
- 3) To introduce a country with a novel solution
- 4) To refute an earlier assertion





1) and crimes rate do too

3) crime rates do rise as well

# تستهای کنکور سراسری علوم انسانی ۹۵

|                         |  | 1), (2). (3), or (4) that co | ould best complete the blank  |  |  |  |
|-------------------------|--|------------------------------|-------------------------------|--|--|--|
| 1 all                   | rock flour would                             | be suitable for use as       | fertilizer. Certain chemical  |  |  |  |
| elements, such as l     | ead and cadmium,                             | are poisonous to human       | ns.                           |  |  |  |
| 1) Not                  | 2) No  | 3) None                      | 4) Neither                    |  |  |  |
| 2- Diverse mamma        | als, hun                                     | nans, have been found        | to carry distinct genomes in  |  |  |  |
| their cells.            |  |                              |                               |  |  |  |
| 1) that includes        | 2) include                                   | 3) including                 | 4) by including               |  |  |  |
| 3- From universa        | al to specific assay                         | ys, biochemical to cell      | l-based, no one gives you     |  |  |  |
| to reso                 | earch enzymatic tar                          | gets in epigenetics than     | Cisbio.                       |  |  |  |
| 1) tools as broad       | ·  | 2) a broader range           | e of tools                    |  |  |  |
| 3) tools with a broa    | d range                                      | 4) a broad range of          | of tools                      |  |  |  |
|                         | e experiment or one<br>ou one step closer to |                              | o we know your passion for    |  |  |  |
| 1) Performing from      | L  | 2) When you perf             | orm                           |  |  |  |
| 3) By performing        |  | 4) Whether you p             | 4) Whether you perform        |  |  |  |
| 5- Over the centur      | ries the company mo                          | oved its business base c     | onsiderably through entries   |  |  |  |
|                         |  | ess roots in copper mini     | •                             |  |  |  |
| 1) that eventually m    | noved  | 2) and to move ev            | ventually                     |  |  |  |
| 3) and eventually moved |  | 4) then moved even           | 4) then moved eventually      |  |  |  |
| 6- Since around 50      | 0 percent of all star                        | 's their live                | es with masses greater than   |  |  |  |
|                         | -  | of every two stars would     | _                             |  |  |  |
| 1) are believed to be   | -  | 2) which are belie           | •                             |  |  |  |
| 3) we believe they l    | began  | 4) are believed in           | beginning                     |  |  |  |
| 7- A new sensibilit     | tv, which viewed an                          | imals and wild nature        | and preserved,                |  |  |  |
|                         | lversarial relationsh                        |                              | •                             |  |  |  |
| 1) being respected      |  | 2) respected                 |                               |  |  |  |
| 3) to be respected the  | hings  | 4) as things to be           | respected                     |  |  |  |
|                         | s rise,,<br>he coming decades.               | suggesting climate cha       | ange will lead to millions of |  |  |  |

2) so do crime rates

4) as well as crime rates



# Part B. Vocabulary

| <b>Directions:</b> Select the answer choice (1), (2), (3), or (4) that could best complete the blank |
|--|
| in the following questions. Then mark your answer on your answer sheet.                              |

| 9- Mr. Shwarz has              | turned hundred toda      | v. and the secret of hi   | s is regular                                       |
|--------------------------------|--------------------------|---------------------------|--|
| exercise and well ba           |                          | i, in the secret of in    | 5 15 1 <b>- G</b> uini                             |
| 1) longevity                   |                          | 2) revival                |  |
| 3) persistence                 |                          | 4) permenance             |  |
| 10- He did not cons            | sider the journalist's q | uestion was               | to the main issue of the                           |
| -                              | nd chose to ignore it.   |                           |  |
| 1) attentive                   | 2) sensitive             | 3) peripheral             | 4) pertinent                                       |
| 11- The balcony of demolished. | f his new home           | his neighbor's l          | and and thus had to be                             |
| 1) imposed on                  | 2) infiltrated into      | 3) deprived of            | 4) encroached on                                   |
| 12- Our neighbor's             | house has merely         | beauty and is             | rather dirty from within.                          |
| 1) tender                      |                          | 3) aesthetic              | 3) decorous  |
| 13- We were imprestatue.       | essed by the             | with which the scu        | alptor carved out the ice                          |
| 1) dexterity                   | 2) aggression            | 3) implementation         | 4) abruptness                                      |
| 14- The public soon            |                          | s Machiavellian tactics   | to win the election, and                           |
| 1) threatened                  |                          | 3) condemned              | 4) overlooked                                      |
|                                | eater who manag          | es to find faults in food | cooked even by the finest                          |
| of chefs. 1) crucial           | 2) daunting              | 3) superfluous            | 3) fastidious                                      |
| _                              | •                        | · -                       | nt the occupation of her                           |
|                                | nstead about the gadge   | •                         | A) 11 1  |
| 1) deflected                   | 2) exposed               | 3) accused                | 4) retaliated                                      |
| eggs as hens' eggs             | and birds' eggs—that     | ,                         | d told her that seeds are<br>her eggs warm and dry |
| until the little chick         | as come out.             |                           |  |
| 1) generalization              | 2) distinction           | 3) equilibrium            | 4) analogy   |
| _                              | _                        |                           | eeping; we had to spend                            |
| _                              |                          | at could drive away the   | -  |
| 1) avoided                     | 2) prevented             | 3) withdrew               | 3) withheld  |



| 19  | - The way he | dresses u | p and spen | ds money | <b>lavishly</b> | clearly | indicates | his |  |
|-----|--------------|-----------|------------|----------|-----------------|---------|-----------|-----|--|
| faı | mily backgro | und.      |            |          |                 |         |           |     |  |

1) opulent

2) influential

3) benevolent

4) frugal

20- I am desperately looking for a late evening, part-time job to ...... my meager earnings from the job I have now.

1) prolong

2) amalgamate

3) augment

4) release

# **Part C: Reading Comprehension**

Directions: Read the following two passages and select the best choice (1), (2), (3), or (4) that best answers earth question. Then mark your answer on your answer sheet.

# Passage 1:

Terman was a proponent of the view that gifted children are globally gifted—evenly talented in all academic areas. Indeed, some special children have exceptional verbal skills as well as strong spatial, numerical and logical skills that enable them to excel in mathematics. The occasional child who completes college as an early teen—or even as a preteen—is likely to be globally gifted. Such children are easy to spot: they are all around high achievers. But many children exhibit gifts in one area of study and are unremarkable or even learning disabled in others. These may be creative children who are difficult in school and who are not immediately recognized as gifted. Are difficult in school and who are not immediately recognized as gifted. Unevenness in gifted children is quite common. A recent survey of more than 1,000 highly academically gifted adolescents revealed that more than 95 percent show a strong disparity between mathematical and verbal interests. Extraordinarily strong mathematical and spatial abilities often accompany average or even deficient verbal abilities. Julian Stanley of Johns Hopkins University has found that many gifted children selected for special summer programs in advanced math have enormous discrepancies between their math and verbal skills. One such eight-year-old scored 760 out of a perfect score of 800 on the math part of the Scholastic Assessment Test (SAT) but only 290 out of 800 on the verbal part.

In a retrospective analysis of 20 world-class mathematicians, psychologist Benjamin S. Bloom reported that none of his subjects had learned to read before attending school (yet most academically gifted children do read before school) and that six had had trouble learning to read. And a retrospective study of inventors (who presumably exhibit high mechanical and spatial aptitude) showed that as children these individuals struggled with reading and writing.

## 21- What is the best title for the passage?

1)Gifted Children: A Fallacy

2) Verbal Skills in Gifted Kids

3) The Unevenly Gifted

4) Giftedness in Teens

# 22- The word "others" in paragraph 1 refers to ................

gifts

2) learning

3) high achievers

3) areas of study