

**Directions (71-80):** Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.

ABOUT 1.3 billion people use one or other version of Microsoft's Windows operating systems, and well over a billion have downloaded Mozilla's Firefox web browser. Minor variations aside, every copy of these products—like all other mass-market software—has exactly the same bits in it. This makes such software a honeypot for hackers, who can write attack code that will cause precisely the same damage to, say, every copy of Windows 7 it infects. Worse, the bad guys can **hone** their attacks by practising on their own machines, confident that what they see will be what their victims get.

This computing monoculture—which also extends to the widespread use of particular pieces of hardware, such as microprocessors from Intel and ARM—has long been the **bane** of technologists. In the face of a near constant **onslaught** from hackers, antivirus software is frequently several steps behind the foe. Symantec, one of the commercial pioneers of online security, estimates that antivirus software now stops only 45% of attacks. The firm recently declared that this approach was “dead” and a new one was needed.

Michael Franz, a computer scientist at the University of California, Irvine, agrees. And he believes the answer is to learn from nature. Lots of species are composed of individuals which are, the occasional set of identical twins apart, all slightly different genetically from each other. Sexual reproduction ensures this. Indeed, it is probably the reason sex evolved in the first place, for it means that no bacterium or virus can wipe out an entire population, since some are almost certain to be genetically immune to any given pathogen.

Applying the idea of genetic diversity to software is not a new idea. High-security systems, such as the fly-by-wire programs used in aeroplanes, are designed from the outset with code that differs between installations. But this approach is too costly for large-scale use. Some mass-market software companies have instead introduced modest diversity to deter attackers, such as randomly choosing the starting addresses of big blocks of memory, but this is not enough to defeat a determined hacker.

Dr Franz is therefore taking a novel approach by tweaking the programs, called compilers, that convert applications written in languages such as C++ and Java into the machine code employed by a computer's processor. Most compilers are designed to optimise things such as the speed of the resulting machine code. That leads to a single answer. Dr Franz's “multicompiler” trades a bit of this optimality for diversity in the compiled code. This leeway, which diminishes the code's speed of execution by an amount imperceptible to the user, enables a multicompiler to create billions of different, but functionally identical, interpretations of the original program. When a user requests a specific application from a cloud-based “app store”, the appropriate multicompiler in the store



“app store”, the appropriate multicompiler in the store generates a unique version for him, thus making a hacker’s task **nigh** impossible.

71. Which is the most suitable title for the passage?

- (a) Learning from Nature
- (b) Preclusion from Hacking
- (c) Divided we Stand
- (d) Genetic Diversity and Software
- (e) The appropriate Multi compiler

72. What is the author’s tone in the passage?

- (a) Sarcastic                      (b) Impersonal                      (c) Enthusiastic
- (d) Hostile                      (e) Grieving

73. According to the passage, how the Dr.Franz’s multicompiler makes hacker’s task impossible?

- (i) By converting the applications written in languages into the machine code.
- (ii) By creating billions of different interpretations of the original program.
- (iii) By extending the code’s speed of execution.
- (a) Only (i) is true
- (b) Only (ii) is true
- (c) Both (i) and (ii) are true
- (d) Both (ii) and (iii) are true
- (e) All are correct

74. According to the passage, what makes the software easily attacked by hackers?

- (a) Similar coding instructions in all programs.
- (b) Optimization of the speed of resulting machine code.
- (c) The widespread use of particular pieces of hardware.
- (d) The replica of the software containing same bits.
- (e) All of the above

75. Which of the following is false in context of the passage?

- (a) Dr. Franz’s multicompiler approach is productive as it enhances the speed of the code’s execution.
- (b) The firm declared that the antivirus approach to protect the software from hackers is not effective.
- (c) Antivirus software stops only 45% of attacks.
- (d) Sexual reproduction ensures the genetic difference in identical twins of species.
- (e) All are true.

76. Which efforts of software companies are found unsuccessful to secure the software from being hacked?

- (i) Antivirus Symantec is one of the unsuccessful efforts which stop only 45% of the attacks.
- (ii) Randomly choosing the starting addresses of big Block of memory is one such effort.
- (iii) Optimising the things such as speed of resulting machine code.
- (a) Only (i) is true
- (b) Only (ii) is true
- (c) Both (i) and (ii) are true
- (d) Both (ii) and (iii) are true
- (e) All are true

**Directions (77-78):** Choose the word/group of words which is most **opposite** in meaning to the word/group of words printed in bold as used in passage.

77. **Hone**

- (a) wreck (b) whet (c) secure
- (d) practice (e) perfect

78. **Onslaught**

- (a) defense (b) approximate (c) offense
- (d) assault (e) violation

**Directions (79-80):** Choose the word/group of words which is most **similar** in meaning to the word/group of words printed in bold as used in passage.

79. **Bane**

- (a) death (b) scourge (c) boon
- (d) corruption (e) content

80. **Nigh**

- (a) distant (b) clear (c) deserving
- (d) nearly (e) progressing

**Directions (81-90):** Which of the phrases (a), (b), (c) and (d) given below each sentence should replace the phrase printed in **bold** letters to make the sentence grammatically correct? If the sentence is correct as it is, mark (e) i.e., "No correction required" as the answer.

81. In Castle town, Rose met the doctor who wanted to know if Freddie was managing **to keep off** her ankle.

- (a) to keep away (b) to keep of (c) to keep out
- (d) to keep up with (e) No correction required

82. Don't **give it into** despair just because you didn't get into the college that was at the top of your wishlist.

- (a) Give yourself up in (b) Give off in
- (c) give up in (d) give in to
- (e) No correction required

83. It was **dominated** by Franklin Roosevelt, the cunning, determined, good-natured president **called forth by** the crisis of the Depression.

- (a) call forth on (b) called upon by
- (c) called out upon (d) called out by
- (e) No correction required



84. Shah Rukh Khan has expressed his disappointment **for being detained** by US authorities at Los Angeles International Airport.
- (a) at being detained (b) for detaining  
(c) because of detaining (d) owing to be detained  
(e) No correction required
85. The teacher asked the pupils to **get going at** some work quietly as she had to leave the classroom.
- (a) get even with (b) get hold of  
(c) get on with (d) get wind of  
(e) No correction required

86. After our month-long trip, it was time to **get along with** the neighbors and the news around town.
- (a) keep track on (b) get going with  
(c) catch hold of (d) catch up with  
(e) No correction required
87. Good instructors will **look upon** early signs of failure in their students
- (a) look in (b) look out for (c) look for  
(d) look up with (e) No correction required
88. If you **talk towards** someone in authority such as a parent or teacher, you answer them in a rude way
- (a) talk down with (b) talk over with (c) talk back to  
(d) talk around of (e) No correction required
89. Before we **take this farther**, let's consider something the Internet has taught us about ourselves.
- (a) take that farther (b) took it further  
(c) took it farther (d) take that further  
(e) No correction required
90. It was great to **think back of** not just that experience, but on why that film still resonates with people.
- (a) Think back on (b) think about  
(c) think it through (d) think back about  
(e) No correction required



**Directions (91-100):** In the following passage there are blanks, each of which has been numbered and one word has been suggested alongside the blank. These numbers are printed below the passage and against each, five options are given. In four options, one word is suggested in each option. Find out the appropriate word which fits the blank appropriately. If the word written alongside the blank fits the passage, choose option 'e' (No correction required) as the correct choice.

CHINA has long \_\_(91)\_\_[moved] between the urge to \_\_(92)\_\_[enrich] its elite with foreign knowledge and skills, and an opposing instinct to turn inward and rebuff such \_\_(93)\_\_[importance]. In the 1870s the Qing imperial court ended centuries of educational isolation by sending young men to America, only for the Communist regime to shut out the world again a few decades later. Today record numbers of Chinese study abroad: over half a million people left in 2015 alone, many for America. The Communist Party officially endorses international exchanges in education while at the same time preaching the dangers of Western ideas on Chinese campuses.

A new front in this battlefield is \_\_(94)\_\_[emerging], as the government cracks down on international schools catering to Chinese citizens. Only holders of foreign passports used to be allowed to go to international schools in China: children of expat workers or the foreign-born offspring of Chinese returnees. Chinese citizens are still \_\_(95)\_\_[illicit] from attending such outfits, but more recently a new type of school has proliferated on the mainland, \_\_(96)\_\_[proposing] an international curriculum to Chinese nationals planning to study at foreign universities. Their number has more than doubled since 2011, to over 500. Many are clustered on the wealthy eastern seaboard, but even poor interior provinces such as Gansu, Guizhou and Yunnan have them.

Some international schools are \_\_(97)\_\_[privately run], including offshoots of famous foreign institutions such as Dulwich College in Britain or Haileybury in Australia. Even wholly Chinese ventures often \_\_(98)\_\_[taken up] foreign-sounding names to increase their appeal: witness "Etonkids", a

Beijing-based chain which has no link with the illustrious British boarding school. Since 2003 some 90 state schools have \_\_(99)\_\_[enabled] international programmes too, many of them at the top high schools in China, including those \_\_(100)\_\_[acquainted] with Peking.

91. (a) wobbled (b) wavered (c) oscillated  
(d) rotated (e) No correction.



Beijing-based chain which has no link with the illustrious British boarding school. Since 2003 some 90 state schools have \_\_\_\_ (99) \_\_\_\_ [enabled] international programmes too, many of them at the top high schools in China, including those \_\_\_\_ (100) \_\_\_\_ [acquainted] with Peking.

91. (a) wobbled (b) wavered (c) oscillated  
(d) rotated (e) No correction.
92. (a) supply (b) equip (c) endow  
(d) appoint (e) No correction.
93. (a) influences (b) impact (c) prevalence  
(d) instrument (e) No correction.
94. (a) eminent (b) elusive (c) requisite  
(d) obligatory (e) No correction.
95. (a) elicited (b) apprehended (c) prohibit  
(d) Forbidden (e) No correction.
96. (a) providing (b) presenting (c) offering  
(d) contributing (e) No correction.
97. (a) confidentially run (b) distinctly run  
(c) Personally run (d) Publically run  
(e) No correction.
98. (a) adopt (b) select (c) Refrain  
(d) Outcast (e) No correction.
99. (a) conducted (b) extended (c) convoyed  
(d) opened (e) No correction.
100. (a) accorded (b) affiliated (c) provisioned  
(d) conversant (e) No correction