# English

# T.I.M.

# Final S1

## January 2018

**MCQ part 1:** You are going to read some reading passages, each with 3-5 questions. For each question, choose the answer which you think fits best according to the text.

## Passage 1

Are you setting up a small business? Worried about the costs of renting office space and employing the right people?

Rebus Virtual Office World can help you. With our Basic Office Deal, we can set up a virtual office for you practically overnight.

We will give your business a professional image and our polite, friendly staff will handle your calls and present your business in the best possible way. We can provide you with: a professional business address, a local phone number and we will also handle mail.

For a more personal approach, with the option of forwarding mail and messages to your home address, don't hesitate to ask us about our Premier Office Deals.

1.  Where is the text from?
    a.  A message from a business to a current client
    b.  An advertisement for a new business service
    c.  An email from one business worker to another
    d.  A newspaper article about a new business's success

2.  What does the service provide?
    a.  Off-site staff to perform general office duties
    b.  A site where several businesses can locate their offices
    c.  Advice on how to make your business more professional
    d.  Temporary staff for local businesses

3.  Which of the following is not included in the Basic Office deal?
    a.  A polite receptionist
    b.  A mail-forwarding service
    c.  A professional address
    d.  A telephone-answering service

## Passage 2
**ONLINE AUCTION!!!**

Our Eighth Street offices are closing down and moving uptown. We can't take all that furniture with us, so we are providing you with this special opportunity to acquire good quality office furniture at excellent prices. Take advantage of this special offer that is being made to employees of this company only.
**GOING....GOING...GONE!**
Go to our company website and click on "Auction." You will be able to view all our offerings and put in your bids. Desks, tables, computer stands, file cabinets, lamps, carpets and more are available. You must enter your employee password in order to make a bid.

All bids must be placed between March 16 and March 23. All items are sold as is, and all sales are final. Most items are in good to excellent condition. Some items may be damaged. We have made every attempt to accurately describe the size, color, and condition of each item, but the company is not responsible for any discrepancies between item descriptions and items. There will be no returns and no refunds. Winning bidders will be notified by e-mail by March 30. All items must be paid for and picked up by April 15.

4.  Where might you find this bulletin?
    a.  In the newspaper
    b.  In the employee lounge
    c.  On the website
    d.  On TV

5. How can potential bidders see the items for sale?
   a. They should visit the Eighth Street Offices.
   b. The items are posted on the company's website.
   c. They can request a list by e-mail.
   d. The items are listed on the back of the bulletin.

6. What is the policy on items in imperfect condition
   a. The winning bidders can return the items and get their money back.
   b. The company can repair items.
   c. You cannot view the items before bidding.
   d. The winning bidders must take the items in their current condition.

## Passage 3

## Switch to Energy First

Energy First is one of the UK's most innovative energy suppliers. We were the first energy supplier in the country to offer smart meters free of charge to our customers. These computerized meters submit automatic electricity readings for once an hour and once daily for gas. This information goes directly to the customer's online account, allowing them to view and monitor energy usage. By understanding how much money they are spending on energy, we strongly believe that people can take control of how much energy they use and make significant savings to their monthly bills.

If you want to benefit from our smart meters, all you have to do is make us your energy supplier. Switching is simple. The first step is to click the 'show prices' button below to compare our tariff with that of your current provider.

If you decide to go ahead, apply using our simple online form. We'll handle the rest, and keep you regularly updated with the progress.. There's no need to contact your current supplier.

If, within 7 days of submitting your form, you change your mind about switching energy suppliers, don't worry. We give you a 7-day cooling-off period during which you can cancel your application with no penalty.

It will take approximately 5 weeks for us to complete the process of transferring you to our supply. A week before your supply goes live, we will email you to confirm a start date.

Once you have become a customer, you'll be contacted over the phone by a local installer to arrange a convenient time to fit your smart meters. You will need to be at home when these are fitted. Once they are installed, you can check your energy use online. Until then, you can submit monthly readings online in order to obtain an accurate bill.

7. What is the purpose of smart meters?
   a. to reduce the costs of energy bills
   b. to inform customers which suppliers offer the best rates
   c. to allow customers to pay their bills online
   d. to show customers how much energy they use

8. Customers switching to Energy First do NOT need to:
   a. complete an application form online
   b. inform the company that currently provides their energy
   c. be at home when the meters are installed
   d. allow 6 weeks for the suppliers to be switched

9. What can be inferred from the passage?
   a. Energy First offers cheaper energy rates than other companies.
   b. Customers will have no gas or electricity for 5 weeks while switching suppliers.
   c. You have to pay a fine if you cancel your application after 7 days.
   d. All Energy First customers must have smart meters if they want accurate bills.

10. Once customers' supplies go live, they will soon receive:
    a. a phone call from a meter installer.
    b. a smart meter in the mail.
    c. an energy bill from their previous suppliers.
    d. a meter reading from the new suppliers.

**MCQ part 2:** The following questions are all about the "The Internet? We Built That" article (handed out in class).

11. Who gave the so-called "You didn't build that" speech?
    a. A "Wall Street Journal" writer
    b. George W Bush
    c. Al Gore
    d. Barack Obama

12. According to the article, the idea that the government alone built the Internet is:
    a. an urban legend.
    b. totally false.
    c. totally true.
    d. Not said in the article.

13. Tim Bernes-Lee is notably known as someone who worked:
    a. for DARPA.
    b. for the development of the Arpanet.
    c. on the World Wide Web.
    d. None of the above.

14. The political implications of the origins of the Internet can be summed up as follows:
    a. Believing the government is responsible for the Internet's creation tends to indicate faith in government's ability to innovate and administrate.
    b. Believing that the private sector deserves more credit than the government for the success of the Internet reflects a more entrepreneurial, free enterprise attitude.
    c. Believing the people are behind the creation of the Internet reflects a preference for Communism.
    d. Both A and B

15. In the end, who can take credit for building the Internet?
    a. Government alone
    b. Big Capital alone
    c. Both A and B
    d. None of the above

16. What the author calls "Peer production" is behind the creation of:
    a. UNIX Kernel.
    b. Linux.
    c. Apache software.
    d. All of the above

17. According to the article, the state and the market are now fundamentally dependent on peer networks in ways that would have been unthinkable just 20 years ago.
    a. False
    b. True
    c. Not said in the article

18. According to the author, what do we (Americans in particular) lack as a Society?
    a. Heroic visionary entrepreneurs
    b. Government financed enterprises
    c. Creative collaboration
    d. None of the above

19. The main point of the "you didn't build that" speech is:
    a. Individual initiative is indispensable.
    b. Working together is sometimes the best way to work.
    c. Bureaucracy is not always needed.
    d. All of the above

20. The author concludes the Internet was built by:
    a. the government.
    b. decentralized groups of scientists and programmers.
    c. hobbyists.
    d. All of the above

**MCQ part 3:** The following questions are about the "Communicating Strategically" Mooc.

Lecture 3

21. The main ideas you need to convey that are the substantive part of your major purpose of your presentation are
    a. Discussion points
    b. Talking points
    c. Sub-points
    d. Facilitation points

22. If you are a disorganized speaker, you lose what quality as a speaker?
    a. Reliability
    b. Credibility
    c. Likeability
    d. Believability

23. An organizational framework answers the question(s)
    a. Where are my ideas connected?
    b. What ideas stem from other ideas?
    c. How are my ideas connected?
    d. All of the above

24. Ideas that are organized by importance are organized
    a. Spatially
    b. Temporally
    c. Causally
    d. Hierarchically

Lecture 4

25. What type of framework involves speaking about your topic systematically from one area to another?
    a. Spatially
    b. Chronologically
    c. Systematically
    d. Topically

26. Processes or cycles represent what sort of organizational framework?
    a. Historical
    b. Chronological
    c. Systematic
    d. None of the above

27. Audiences remember things in groups of _____ very easily.
    a. Fives
    b. Fours
    c. Threes
    d. Twos

28. How many talking points are appropriate for a presentation?
    a. Between two and four
    b. Between three and six
    c. Between five and eight
    d. There is no perfectly natural number

29. Which was used as an example of a spurious relationship?
    a. Ice cream sales and crime rates
    b. Crime rates and seasonal change
    c. Ice cream sales and seasonal change
    d. Seasonal change, crime rates, and ice cream sales

Lecture 5

30. Which of the following is/are important to use when simplifying your language?
    a. Simile
    b. Metaphor
    c. Analogy
    d. All of the above

31. It is _____ to repeat important information in various parts of a presentation.
    a. Discouraged
    b. Unnecessary
    c. Encouraged
    d. Prohibited

32. When giving presentations, it is bad to use what kind of language specific to specialized fields?
    a. Analogous
    b. Metaphorical
    c. Simplified
    d. Jargon

33. It is important in quasi-scientific explanations that you
    a. Simplify your language
    b. Use figurative language
    c. Use visuals
    d. All of the above

34. Which pattern is NOT suited for quasi-scientific explanations?
    a. Topical
    b. Spatial
    c. Causal
    d. Chronological

Lecture 6

35. The first step to take when explaining a new concept to a particular audience is
    a. Provide a definition of the concept
    b. Provide examples of the concept
    c. List the key terms related to the concept
    d. Provide nonexamples of the concept

Lecture 11

36. Which of the following is/are an example of how apprehension manifests itself?
    a. Decreased heart rate
    b. Trembling hands
    c. Using vocal fillers
    d. B and C

37. One of the things that we know about communication anxiety with absolute certainty is that it is not
    a. normal.
    b. abnormal.
    c. medically treated.
    d. common.

Lecture 12

38. Which of the following are aspects of vocal delivery?
    a. Volume
    b. Emblems
    c. Pitch
    d. A and C

39. When giving a presentation you should dress
    a. more casually than your audience.
    b. at the same level as your audience.
    c. one level better than your audience.
    d. in formal business attire.

40. Which of the following is a benefit of extemporaneous speaking?
    a. Extemporaneous speaking allows you to adapt to your audience as you speak.
    b. Extemporaneous speaking is tied to your memory.
    c. Extemporaneous speaking does not allow you to explain information in multiple ways.
    d. All of the above.

**TURN TO THE NEXT PAGE**

# Hackers Could Commandeer New Planes Through Passenger Wi-Fi

Kim Zetter Security 04.15.15

1. Seven years after the Federal Aviation Administration first warned Boeing that its new Dreamliner aircraft had a Wi-Fi design that made it vulnerable to hacking, a new government report suggests the passenger jets might still be vulnerable.

2. Boeing 787 Dreamliner jets, as well as Airbus A350 and A380 aircraft, have Wi-Fi passenger networks that use the same network as the avionics systems of the planes, raising the possibility that a hacker could hijack the navigation system or commandeer the plane through the in-plane network, according to the US Government Accountability Office, which released a report about the planes today.

3. A hacker would have to first bypass a firewall that separates the Wi-Fi system from the avionics system. But firewalls are not impenetrable, particularly if they are misconfigured. A better design, security experts have warned for years, is to air gap critical systems from non-critical ones—that is, physically separate the networks so that a hacker on the plane can't bridge from one to the other, nor can a remote hacker pass malware through the internet connection to the plane's avionics system. As the report notes, because the Wi-Fi systems in these planes connect to the world outside the plane, it opens the door for malicious actors to also remotely harm the plane's system.

4. "A virus or malware planted in websites visited by passengers could provide an opportunity for a malicious attacker to access the IP-connected onboard information system through their infected machines," according to the report.

5. Members of the House Transportation and Infrastructure Committee requested the report from the GAO out of growing concern that modern transportation systems, including planes, trains and automobiles, are becoming increasingly computerized and therefore susceptible to some of the same vulnerabilities and attacks that have long plagued desktop and laptop systems.

6. Boeing responded to the GAO report with a statement saying that a pilot manual override system would prevent someone from successfully commandeering its planes in this way.

7. This is not the first time the issue of aviation Wi-Fi security has come up for Boeing. In 2008, while Boeing was in the final stages of production on its new Dreamliner line of planes, the Federal Aviation Administration issued a report directing Boeing to address concerns about the passenger Wi-Fi system. The report was a "special conditions" document that the FAA produces whenever it encounters new aircraft designs and technologies that aren't addressed by existing regulations and standards.

8. That report was pointing out the same problem that's getting the company in trouble today. Boeing's design for the Dreamliner's Wi-Fi network, the FAA noted in the document, connected it to the plane's control, navigation and communication systems, thereby establishing "new kinds of passenger connectivity to previously isolated data networks" that are critical to the safe operation of the plane. The FAA called on Boeing at the time to demonstrate that it had resolved this issue before the new line of planes could be put into service.

9. Boeing spokeswoman Lori Gunter told WIRED in 2008 that the company did indeed design a solution to address the FAA concerns. She wouldn't go into detail about how Boeing was tackling the problem but said Boeing was employing a combination of solutions that involved some physical air-gapping of the networks as well as software firewalls. "There are places where the networks are not touching, and there are places where they are," she had said.

10. Gunter added that although data could pass between the networks, "there are protections in place" to ensure that the passenger internet service didn't access the maintenance data or the navigation system "under any circumstance."

11. But security experts had warned at the time that software firewalls were still insufficient to separate critical networks from the Wi-Fi network.

12. It's unclear if the authors of the new GAO report tested or examined Boeing's solution and found it was still vulnerable to hacking or if they simply based their report on statements from experts that any design that doesn't involve complete air-gapping of networks is vulnerable to hacking.

13. Boeing responded to the GAO report with a statement saying that "Boeing airplanes have more than one navigational system available to pilots" and that "[n]o changes to the flight plans loaded into the airplane systems can take place without pilot review and approval. In addition, other systems, multiple security measures, and flight deck operating procedures help ensure safe and secure airplane operations."

14. Airbus also released a statement, which said only that it "constantly assesses and revisits the system architecture of our products, with an eye to establishing and maintaining the highest standards of safety and security. Beyond that, we don't discuss design details or safeguards publicly, as such discussion might be counterproductive to security."

# All answers should be written on the answer sheet.

**Part 1:** The following questions are based upon the "**Hackers Could Commandeer New Planes Through Passenger Wi-Fi**" article.

41. A modal verb used when showing that something is or was possible. (between Para 1-3)
42. A verb that implies taking control of a vehicle for military purposes. (between Para 1-3)
43. A verb meaning to go around or avoid something. (between Para 1-3)
44. A word that implies to jump from one thing to another. (between Para 2-4)
45. An adjective that means to be far away from where other people live. (between Para 2-4)
46. A word meaning to position something firmly in place. (between Para 2-4)
47. A verb that implies to cause pain or trouble to somebody or something over a period of time. (between Para 3-5)
48. An informal phrasal verb which is a synonym of happen or appear. (between Para 6-8)
49. A formal verb meaning to meet or discover something, especially something un pleasant. (between Para 6-8)
50. A phrasal verb that implies mentioning something in order to focus on it. (between Para 6-8)
51. A word meaning a topic that people are discussing or arguing about. (between Para 7-9)
52. An adverb used to emphasize a positive statement or answer. (between Para 7-9)
53. An adverb meaning to continue until a particular point in time and not finishing. (between Para 9-11)
54. A noun meaning an agreement or permission for something. (between Para 12-14)
55. A verb that implies making a judgement about the quality of someone or something. (between Para 12-14)

# How the World's First Computer Was Rescued From the Scrap Heap

By BRENDAN I. KOERNER, NOV. 25, 2014

1. Eccentric billionaires are tough to impress, so their minions must always think big when handed vague assignments. Ross Perot's staffers did just that in 2006, when their boss declared that he wanted to decorate his Plano, Texas, headquarters with relics from computing history. Aware that a few measly Apple I's and Altair 880's wouldn't be enough to satisfy a former presidential candidate, Perot's people decided to acquire a more singular prize: a big chunk of ENIAC, the "Electronic Numerical Integrator And Computer." The ENIAC was a 27-ton, 1,800-square-foot bundle of vacuum tubes and diodes that was arguably the world's first true computer. The hardware that Perot's team diligently unearthed and lovingly refurbished is now accessible to the general public for the first time, back at the same Army base where it almost rotted into oblivion.

2. ENIAC was conceived in the thick of World War II, as a tool to help artillerymen calculate the trajectories of shells. Though construction began a year before D-Day, the computer wasn't activated until November 1945, by which time the U.S. Army's guns had fallen silent. But the military still found plenty of use for ENIAC as the Cold War began—the machine's 17,468 vacuum tubes were put to work by the developers of the first hydrogen bomb, who needed a way to test the feasibility of their early designs. The scientists at Los Alamos later declared that they could never have achieved success without ENIAC's awesome computing might: the machine could execute 5,000 instructions per second, a capability that made it a thousand times faster than the electromechanical calculators of the day. (An iPhone 6, by contrast, can zip through 25 billion instructions per second.)

3. When the Army declared ENIAC obsolete in 1955, however, the historic invention was treated with scant respect: its 40 panels, each of which weighed an average of 858 pounds, were divided with little care. Some of the hardware landed in the hands of folks who appreciated its significance—the engineer Arthur Burks, for example, donated his panel to the University of Michigan, and the Smithsonian managed to snag a couple of panels for its collection, too. But as Libby Craft, Perot's director of special projects, found out to her chagrin, much of ENIAC vanished into disorganized warehouses, a bit like the Ark of the Covenant at the end of Raiders of the Lost Ark.

4. "As time went on, new people would come in and the storage records they got probably weren't as good as they should have been," says Craft, who was the person most responsible for tracking down what remained of ENIAC. "And so when they'd need more space, they'd look at this hunk of metal that they didn't know anything about. And they'd go ahead and dispose of it."

5. Craft was on the verge of ending her search when an Army functionary dug up documents indicating that some panels had once been shipped from the Aberdeen (MD) Proving Ground to Oklahoma's Fort Sill, home to the Army's field artillery museum. When Craft contacted Fort Sill to inquire, the museum's curator was stunned to discover that he did, indeed, possess the world's largest trove of ENIAC hardware—nine panels in total, all stored in anonymous wooden crates that hadn't been pried open in years. Fort Sill officials are unclear as to how they ended up with nearly a quarter of ENIAC, pieces of which also came to Oklahoma from the Anniston (AL) Army Depot.

6. Craft struck a deal to borrow eight of Fort Sill's panels in exchange for a promise to restore the hardware to some semblance of its former glory. The restoration project was assigned to Dan Gleason, a video-conferencing engineer at Perot Systems who had zero experience with fixing vintage computers. Gleason realized early on that he couldn't make his portion of ENIAC run actual calculations—such an endeavor would require all 40 panels, not to mention thousands of new components and technical know-how that had long been forgotten.

But he resolved to make the computer at least appear like it was hard at work figuring out the best flight paths for howitzer shells.

7. The first step for Gleason was to address the panels' cosmetic deficiencies; the exterior metal was badly rusted. (One of the eight panels was so water damaged, in fact, that it couldn't be salvaged.) Gleason sandblasted the panels, then coated them with black wrinkle paint that he procured from dozens of auto-body shops. Once the paint dried, Gleason and his son, Jonathan, laboriously soldered 600 new lamp bulbs into place. Those bulbs were then connected to a motion sensor, so they would flash in random order when an observer approaches. Gleason also fabricated a massive steel frame that prevents the panels from tipping over and crushing the vacuum tubes on its sides (not to mention unfortunate passers-by).

8. The revamped ENIAC went on display at Perot's office building in 2007, but relatively few people had the chance to see it; the building is a secure facility that doesn't welcome the general public, though a few computing nerds were able to arrange special tours. But Perot's company, which was purchased by Dell in 2009, recently announced that it will soon be moving to a new location, so the time seemed right to return the panels to Fort Sill. The 6,864-pounds'-worth of computing history, encased in bubble wrap, made its way back to Oklahoma in late September. The toughest part was piecing together Gleason's steel frame, which was more elaborate than museum officials had anticipated.

9. The ENIAC panels went on display at Fort Sill in late October, though some more restoration work remains to be done. The museum is in the process of obtaining a few new vacuum tubes, for example, to give the unit an even more authentic appearance. The panels will never be able to run any bona fide calculations, of course, but that's probably for the best. Even in its heyday, ENIAC required a whopping 30 milliseconds to figure out the square root of a complicated number. Who has the patience for such long waits nowadays?

# All answers should be written on the given answer sheet.

The next three exercises are based upon the **"How the World's First Computer Was Rescued From the Scrap Heap"** article.

**Part 2.** Find the word or phrase in the article that means the same as the following.

56. To find or discover something that is buried. (Para 1)

57. Not very much of something and not as much as there should be. (Para 3)

58. Sent a long distance. (Para 5)

59. Corroded, especially iron when in contact with water. (Para 7)

60. To still be present when the other parts have been removed. (Para 9)

**Part 3.** Indicate whether the following statements about ENIAC, its loss and reconstruction are **"true"**, **"false"** or **"not given"** in the article.

61. A former American President ordered the military to deactivate ENIAC and put it into storage.

62. A research assistant found documents suggesting that ENIAC had been re-purposed in Oklahoma.

63. After it was retired, ENIAC was separated into parts.

64. Employees of a museum were asked to build a collection that represented the history of computing.

65. Negotiations are still in progress to procure the remaining pieces.

**Part 4.** Match each of the following steps in the recovery of ENIAC to the person most responsible for. If none of them were responsible, write **"<u>no one</u>"**:

| Libby Craft | Dan Gleason | Arthur Burks | Jonathan Gleason | Ross Perot |
|---|---|---|---|---|

66. Negotiated with the US army to acquire parts of ENIAC.

67. Was injured while trying to repair ENIAC with his father.

68. Asked his staff to find the various pieces of ENIAC for his museum.

69. Gave his portion of ENIAC to a university.

70. Was put in charge of repairing parts of ENIAC.