You may take this test with you afterwards, but you must turn in your bubble form answer sheet.

This test has the following sections:
   I. True/False .................... 64 points; (32 questions, 2 points each)
   II. Multiple Choice ............... 36 points; ( 6 questions, 6 points each)

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  100 points total

This test is worth 5% of your final grade. You must put your answers on the bubble form. This test is open book and open notes, however you may not use any electronic resources or confer with anyone else.

For the multiple choice problems, select the best answer for each one and select the appropriate letter on your answer sheet. Be careful - more than one answer may seem to be correct. Some questions are tricky.

True/False: (2 points each) On your bubble form fill out A for true and B for false.

   T F 1. A computer operating system is what is used in medical applications for surgical software.

   T F 2. The relationship between the activity where we counted the number of students in the room and the Twizzler-cutting activity was that in both of them the outcomes were based on powers of two.

   T F 3. An algorithm is a set of precise steps to be used in solving a problem.

   T F 4. In the web-site analysis activity we concluded that the Martin Luther King Jr. web site was in fact reputable.

   T F 5. In the class activity where we analyzed a picture of a room and all the objects in the room we had enough evidence to agree that the person shown in the room was female.

   T F 6. For the food happiness data analysis exercise it was necessary to edit some of the data to put it into the same format as the other data.

   T F 7. The main point of the Apple-Ranch sandwich activity in class was to show that there are many different ways to do the same thing.

   T F 8. The 20Q program demonstrated in class was an intelligence test used to determine the intelligence category of the human user.

   T F 9. The video clip shown in class of the game Jeopardy depicted human expert Jeopardy players playing against Watson, a computer opponent who beat the human experts on every single turn.

   T F 10. The paper-and-pencil computer (0/1 guessing) was developed in class by groups of ~4 students, and the "computer" managed to beat every group of students every time.
The following 3 questions refer to Chapter 1 of the book "Blown to Bits"

T  F   11. Phone records were used to help convict Tanya Rider's husband of attempting to murder her.

T  F   12. Moore's Law predicts that computer circuit density will double every couple of years.

T  F   13. In the example given of exponential growth applied to the spread of an epidemic, half the population gets infected on the second-to-last day.

T  F   14. Megan Meier committed suicide when an online virtual friend named Josh turned against her.

The following 10 questions to Chapter 2 of the book "Blown to Bits." As we did in class, for each of these choose A (for True) if the statement/example/topic was covered in the chapter, B (for False) if the statement/example/topic was not covered in the chapter.

T  F   15. Gender, zip code and date of birth are all it takes to identify 87% of the U.S. population.

T  F   16. Many color printers secretly encode the printer serial number, date and geographical location on every page printed.

T  F   17. Many, if not most cars in America have an “Event Data Recorder” which captures information on how fast your car is going.

T  F   18. Highway toll transponder records have been introduced into divorce and child custody cases.

T  F   19. Customers at a grocery store pay a “privacy tax” when they don’t use their customer loyalty card.

The following 4 questions to Chapter 3 of the book "Blown to Bits." As we did in class, for each of these choose A (for True) if the statement/example/topic was covered in the chapter, B (for False) if the statement/example/topic was not covered in the chapter.

T  F   20. The mp3 file format is an example of a lossy compression method.

T  F   21. The text includes an image of a coffee mug, along with a caption reading "This is a Mug."

T  F   22. Massachusetts attempted to follow the lead of the European Union in adopting a open document format for government documents.
The following 4 questions refer to Microsoft Excel.

T F 23. When sorting a range of data on first name within last name, it is necessary to first do one sort and then the other.

T F 24. To make a cell reference absolute, you must put a dollar sign in front of the part of the address that is absolute.

T F 25. When trying to sort a range of data (such as the food happiness data from our class) on day of the week, using the `average-if` function is recommended.

T F 26. When entering numbers it is important to type in the right number of decimal places so that data is uniform and lines up correctly.

The following 3 questions refer to the short story "Light of Other Days".

T F 27. The story described a scenedow, which allows an observer to look through to a live transmitted video feed from a different location.

T F 28. The story described how the more expensive scenedows also emitted sound by capturing the vibrations.

T F 29. The story described how only those with a government permit could purchase a scenedow.

The following 3 questions refer to the short story "And Mimsey were the Borogoves".

T F 30. The “cube” described in the story gave scenarios that kept changing.

T F 31. The “abacus” described in the story would inflict pain when mistakes were made.

T F 32. At the end of the story the children start to disappear but are brought back when their parents grab ahold of them.
Multiple Choice (6 points each)

33. The Turing Test is:
   a) A computer skills competency test named after Alan Turing
   b) A conversational test to determine if a computer is indistinguishable from a human
   c) An IQ test for computer programs
   d) A set of minimum performance standards a computer must meet if it is to perform intelligently
   e) None of the above

34. As seen in a video shown in class, Watson was:
   a) A computer detective that could solve problems
   b) A computer personality that could hold conversations
   c) A computer program used to control household energy use
   d) A computer program used to compete on a game show
   e) None of the above

35. The initials representing the steps of Polya's General Problem Solving Strategy are:
   a) IUPE
   b) UMIR
   c) SUPR
   d) UWIR
   e) None of the above

36. What is the following binary number in decimal? 101110
   a) 29
   b) 32
   c) 43
   d) 46
   e) None of the above

37. What is the following binary number in decimal? 101011
   a) 29
   b) 32
   c) 43
   d) 46
   e) None of the above

38. How would you represent the decimal (base 10) value 37 in binary?
   a) 101101
   b) 100101
   c) 110001
   d) 101110
   e) None of the above