

Technophobia VIII

Round 12

Caltech
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November 10, 2003

Note to moderator: make sure that bonus 20 is read after the final tossup of the game.

1 Caltech Tossups, Round Twelve

1. He wore a Santa suit to the annual Christmas party, which was a little odd. He also didn't let his best friend offer him a hug, ostensibly to protect the suit. He bought the same friend a steak the night his best friend lost his virginity and was the confirmation sponsor of his best friend's son, A.J. He reportedly got his nickname because he started out as a cat-burglar, but he later moved into Heroin trafficking. After getting nabbed by the feds, he turned informant to save his family. For ten points, identify this once-best friend to Tony Soprano, killed for betraying the family and whose name could not appear on network television.

Answer: Sal “Big Pussy” Bonpensiero

2. The Fray-Farthing-Chen process developed at Cambridge uses a cathode to purify this element. William J. Kroll, who developed a process to purify the metal, predicted that an electrolytic process would replace it within fifteen years. Although this is the 9th most common metal in the Earth's crust, its use is limited to expensive products like oil-drilling equipment, prosthetic body implants, and jet aircraft. For ten points, identify this expensive silvery-grey element with atomic number 22 and symbol Ti.

Answer: Titanium

3. Tom prebuys the Armgard's crop, has an abscessed molar extracted, and dies soon thereafter. Christian goes insane and gets into a homosexual relationship with Kai and wants to die. Elisabeth painfully dies of pneumonia, and the servants plunder her clothing. Gerda sells the home and family firm, which had been going well under the direction of Tom, thus ending a Lübeck institution. For ten points, identify this family, the subjects of a novel of decay by Thomas Mann.

Answer: Buddenbrooks

4. A force under Minucius was under siege, and unless someone saved his ass, the Sabines would rout the expeditionary force. Instead of turning to Nautius, who was already in Sabine territory, the consuls instead went to Quinctian meadows, where they enlisted this man to defeat the Aequi on Mount Algidus. In order to rally the people behind him, he was given the position of dictator; he went up, rescued Minucius's army, returned to Rome to straighten things out, and then gave up power. For ten points, identify this reluctant dictator for whom a city in southwest Ohio is named.

Answer: Cincinnatus

Accept the Battle of Algidus before it is said

5. Naomi Wolfe in *The Beauty Myth* describes their use in “treating” menstruation during the Victorian period. They are also useful for preventing venous congestion in retransplanted tissue, since although it is fairly easy to reattach arteries via a microscope, there is no easy way to allow blood to drain from the reattached tissue until the veins reform. A derivative chemical, hirudin, is also being used as an anticoagulant. Despite their benefits, they have to be used in conjunction with an antibiotic and can only be obtained from relatively expensive laboratories and not from the wild. For ten points, identify this blood-sucking annelid regaining popularity in the medical community.

Answer: Leeches

Hirudo medicinalis

6. As reported in *Science*, Yoshinori Tokura noted that the resistivity of a crystal made of strontium, ruthenium and oxygen did not change linearly with temperature, as expected, but varied non-monotonically, providing evidence for this phenomenon. The mass of 10^{16} giga-electronvolts predicted by grand-unified-theories makes these impossible to observe through experiment, thus necessitating such indirect observation methods. Their existence was linked to the quantization of electric charge by Dirac, who first put forward the concept in 1931. For ten points identify this as-of-yet unobserved magnetic point charge.

Answer: magnetic monopole

7. In Mexico it collected from the residents of a single city, and in Australia it is derived from only the the state capitals. One of its fundamental problems is that it ignores utility. Even though it is used to make longitudinal comparisons, it assumes the equivalence of goods available through large swaths of time and ignore technological advances. Surveys are used to collect information on what households are purchasing and thus form weights to calculate the relative importance of each household item. These weights are then used to form a weighted average of prices. For ten points, identify this economic measure of how expensive things are to an average purchaser.

Answer: Consumer Price Index

8. Reagan said that it fostered “an endemic hostility toward the institutions of a free society particularly those that protect a free press, free markets and, above all, individual human rights.” A house bill amended by Jim Leach and Tom Lantos ordered the United States to rejoin the organization after a 19-year boycott. On Sept. 25, 2003, Laura Bush posed in front of an American flag and the Eiffel Tower to celebrate the return of the US to this organization. For ten points, name this UN organization responsible for the advancement of culture.

Answer: United Nations Educational, Scientific and Cultural Organization

9. The name of this period comes from the name of the district Takauji chose to set up the Northern Imperial court, which was possible after the disputed lineage after the death of Go-Saga in 1272. Despite the unrest, it saw the genesis of Noh theater by Kanami and Kanami’s son, Zeami, as well as zen influenced art forms such as Sumi-e, Ikebana, and Sado. Order was restored under the reign of Yoshimitsu for several decades, but Japan plunged back into chaos with the “period of warring states.” For ten points, identify this period between 1338 and 1573 that saw the fractured reign of the Ashikaga shoguns.

Answer: Muromachi Period

Prompt on Ashikaga

10. He divulged his mission to Robert Rogers, who has been observing his movements for several days. A new document by Consider Tiffany, the glassmaker and British sympathizer, explains that he was then invited to Major Robert’s home. The home was quickly surrounded and he was captured. Despite his inept execution of his mission to assess the British strength in Long Island, a statue of him stands outside CIA headquarters in McLean, and he’s considered to be the first American spy. For ten points, identify this man who regretted that he had “but one life to give for his country.”

Answer: Nathan Hale

11. A quotidian version of this rule was first proposed by Genghis Kahn to ensure the quality of Mongol food supplies. Modern sensibilities, however, have shortened the interval specified by the rule, but even the current formulation has shown problems. Jillian Clarke, a researcher at the University of Illinois, demonstrated that bacteria can still transfer to moist substrates. Identify this axiom extolled by a Passat commercial and, for ten points, the primary law concerning dropped foodstuffs.

Answer: Five-Second Rule

12. Passepartout traded his for a Japanese one to help finance their trip to San Francisco. Tom Joad keeps a toad inside one. A fiddle for Hindley is crushed in Mr. Earnshaw's when he brings home Heathcliff. In *Middlemarch*, Rosamond strokes Will's, which incited his ire. Rashkolikov hides a murder weapon in his after stealing an axe from the janitor. Akakii Akakievich had one stolen from him as he was returning from a departmental dinner, and then haunted the streets of St. Petersburg stealing them from the shoulders of passers-by. For ten points, identify this article of clothing named in a title of a short story by Nikolai Gogol.

Answer: Overcoat

13. He started studying aeronautics in Britain in 1908 and conceived of the idea of the idea to place a reaction jet at the tip of each blade of a propeller. His studies of differential equations caused him to investigate the foundations of mathematics, which he investigated further at Cambridge. After a brief stint in the Austrian army, he returned to Britain where he wrote *Logisch-philosophische Abhandlung* [LO-gish FIL-oh-SO-fish-ah ab-HAND-loong]. Throughout all of his writing, he said he was searching for *das erlösende Wort*, the word that untangled the knot of philosophy and reduced the linguistic complexity required to render concepts to human understanding. For ten points, identify this author of Philosophical Investigations.

Answer: Ludwig Wittgenstein

14. Paul von Hindenburg was pulled out of retirement after the shocking news of of Prittwitz's defeat, and developed a plan with Maximilian Hoffman to use Ludendorff's calvary as a screen to prevent the opposing armies under Rennenkampf's forces from pressing the core of the troops. Thus, Aleskander Samsonov and his second army were encircled while his support was recuperating, well away from the Vistula. For ten points, identify this World War I German defeat of the Russian forces in East Prussia.

Answer: Tannenberg

15. Jeb Bush has offered this man asylum, and a movie is in the works starring Kevin James of the series *King of Queens*. A possible place for him to lie low is Pompano Beach, a resort which offered him a free three-month stay. Currently described as in hiding and telecommuting to Hewitt Associates, an international consulting firm in Lincolnshire, Illinois. For ten points, identify this Cubs fan who interfered with a play by Moises Alou, whom Ralph Wiggum might describe as "so 1991."

Answer: Steve Bartman

16. It is the sole exception to the Heawood conjecture because any set of regions on it can be colored using at most six colors. The "figure-8" immersion of it in \mathbb{R}^3 is obtained by rotating a figure eight about an axis while placing a twist in it, but it's more common immersion is slightly more elegant because when cut lengthwise it yields two Möbius strips, which shows off its interesting topological characteristics. For ten points, identify this closed nonorientable surface of Euler characteristic 0 that has no inside or outside and is named for a German mathematician.

Answer: Klein Bottle

Accept Klein-Flasche

17. It was the first language to be described in terms of Backus-Naur form, and although it had many such cool features, it also suffered from "bloat" like having two types of parameter passing: call-by-value and call-by-name, the latter of which later fell into disuse. The Unisys Corporation created an OS called the Master Control Program written in this language. Designed by committee, the ACM and the GAMM disagreed over whether decimals should be represented by a comma or period. For ten

points, identify this programming language which shares its name with the “demon star” but means Algorithmic Language.

Answer: ALGOL 58

18. A work that places ordinary people in the shoes of Cain, Abel, Moses, Jesus, and Mohamed was banned in every Arab nation other than Lebanon. In addition to the *Children of Gebelawi*, a fatwa was declared upon this author for his support of Salman Rushdie, despite his disagreement with Rushdie, whose repression he considered a worse crime than Rushdie’s blasphemy. His books are still mostly unavailable in his native country because of his support for the 1978 peace treaty with Israel. For ten points, identify this 1988 Nobel Laureate, the author of *Miramar*, *The Journey of Ibn Fatouma*, and *The Cairo Trilogy*.

Answer: Naguib Mahfouz

19. His favorite character in *Romeo and Juliet* is Mercutio; he hates it when smart and entertaining people disappear for no reason. This has happened, in a way, to his older brother who, like Ernie the piano player and the Lunts, has sold out and become a phony, but this time in Hollywood. Even though D.B. has sold out, he clutches to the remaining traces of authenticity in his family like his dead brother’s baseball glove or his sister’s Phoebe’s purity. For ten points name this outcast Rambler from J.D. Salinger’s *Catcher in the Rye*.

Answer: Holden Caulfield

Accept either name

20. He is either son of Hermes or the son of Dionysus and Aphrodite. Suetonius says that a statue of him stands in the garden of Cato, thus explaining the bountiful garden. According to one account, he once tried to rape the nymph Lotis, but as he was about to get his groove on, the ass belonging to Silenus brayed, thus betraying his plans. Another account was that he was in a contest with the ass to determine who had a larger member; the ass lost and died for his hubris. For ten points, identify this fertility god associated with the phallus.

Answer: Priapus

2 Caltech Bonuses, Round Twelve

1. Visual bonus. Given a Madonna, give the artist who created it for ten points each.
 - (a) Madonna of the Magnificat
Answer: Sandro Botticelli
 - (b) Madonna of the Long Neck
Answer: Parmigianino
 - (c) Dreyfus Madonna
Answer: Leonardo da Vinci
2. During the Nazi years, many authors' works were banned. Answer the following questions about the only work of a banned author published during the third Reich.
 - (a) What poem called a "folk song" by the Nazis tells the story of a maiden with glittering bejeweled hair perched atop a rock who lures the boatmen of the Rhine to their death?
Answer: Lorelei
 - (b) Because his works were burned by the Nazis at Babelplatz outside Humboldt Universität, a quote from this author adorns the memorial: "Where books are burned, so one day will people be burned as well." Who was this 19th century author of Lorelei?
Answer: Heinrich Heine
 - (c) The poem is sometimes considered a tongue-in-cheek response to what German masterpiece whose final line is "The eternal feminine draws us upward."
Answer: Faust
3. Given a flag which depicts a building, give the owner of the flag for ten points each.
 - (a) Two small horizontal bars lie on either side of a broad horizontal bar. In the red bar is a depiction of Angkor Wat.
Answer: Kingdom of Cambodia
accept Preahreacheanachakr Kampuchea
 - (b) The flag of this overseas territory is a broad white stripe on top of a narrow red horizontal stripe. A red three-towered castle sits in the white stripe. A golden key descends into red stripe, representing the territory's geographical significance.
Answer: Gibraltar
 - (c) The flag of this CIS nation depicts a yellow sun with forty rays representing forty tribes. In the center of the sun is a ring cut by two sets of three lines, which represents the roof of the traditional yurt hut.
Answer: Kyrgyzstan
Accept Kyrgyz Respublikasy
4. Answer the following questions about the Rosenberg spy case.
 - (a) The chain of investigation that nabbed the Rosenbergs was started with the arrest of this German-born, British-naturalized scientist working at Los Alamos?
Answer: Klaus Fuchs
 - (b) What Chief Justice of the Supreme Court ruled that the acts of the Rosenberg case fell under the 1917 espionage laws, and thus warranted execution?
Answer: Fred Vinson

- (c) The Venona intercepts, released in 1995, confirmed the Rosenbergs' guilt and were cracked by the US. Even though the code would have been unbreakable, Soviet agents began reusing what cryptographic technique?

Answer: One Time Pad

5. Peter Agre was awarded half of the 2003 Nobel Prize in Chemistry. Answer the following questions about his work.

- (a) He won for discovering what long hypothesized mechanism for regulating cellular osmotic pressure?

Answer: Water Channel

Accept clear knowledge equivalents that talk about water going in and out of the cell

- (b) The function of water channels are thought to be especially important in the function of glomeruli, which function as water sieves, in what organ?

Answer: Kidney

- (c) It is thought that what hormone controls the function of water channels in the kidney and thus regulates the reabsorption of water from urine?

Answer: vasopressin

Accept Antidiuretic hormone

6. Given a robot, give the city in where it became operational.

- (a) Bender Bending Rodriguez

Answer: Tijuana, Mexico

- (b) HAL 9000

Answer: Urbana, Illinois

- (c) Robocop

Answer: Detroit, Michigan

7. Given a character from a work of Thomas Hardy, give the person the character marries first for ten points each.

- (a) Jude Fawley

Answer: Arabella Donn

Accept either name

- (b) Clem Yeobright

Answer: Eustacia Vye

Accept either name

- (c) Bathsheba Everdene

Answer: Sergeant Francis Troy

Accept either name

8. "If you will be advised, you will get them bowdlerized," said Lady Psyche in the Gilbert and Sullivan operetta *Princess Ida*. For ten points each, name the Gilbert and Sullivan operas based upon the sanitizing or politically correct changes made to them.

- (a) One of the Savoy operas was briefly banned to avoid offending a visiting Japanese dignitary, and still causes controversy today. Which Gilbert and Sullivan opera is still generally altered to remove an offensive reference to minstrel singers?

Answer: The Mikado

- (b) This opera raised a controversy with its seemingly vulgar title, and, for once, Gilbert deferred to public opinion, changing the spelling to something less bloody. Which Gilbert and Sullivan title is now usually spelled with an “i,” rather than its original “y”?

Answer: Ruddigore

- (c) In at least one case, Gilbert practiced self-censorship without outside pressure. Whether this was due to the controversy or the mediocrity of the removed material is uncertain. Which opera about a fairy gaining a seat in parliament briefly featured the confrontationally political, and soon cut, song “Fold Your Flapping Wings”?

Answer: Iolanthe

9. Answer the following related questions about Italy, France, Austria, and diplomatic dealings.

- (a) This treaty between France and Austria in 1797 ceded to France the low countries and all of the land east of the Rhine and dissolved the nation of Venetia.

Answer: Treaty of Campo Formio

- (b) This republic, created by the treaty was formed from Transpadane, Cispadane, and parts of the now defunct Venetia, was later broken up by the Congress of Vienna.

Answer: Cisalpine Republic

Grudgingly accept “Transalpine,” which appears different from another orientation.

- (c) What royal line was given control of a united Naples and Sicily to balance the Hapsburgs in the North?

Answer: Bourbon

10. Identify the following Japanese writers for ten pointeach.

- (a) His mother insane and his father a failure, he was adopted by his uncle. Despite moderate success, he committed suicide by overdosing on sleeping pills. His name, however lives on — thanks to the endowment of Kikuchi Kan — in one of Japan’s highest literary prizes.

Answer: Akutagawa Ryunosuke

- (b) What short story by Akutagawa concerns the difficulty of a Buddhist monk with an oversized organ.

Answer: The Nose

Accept Hana

- (c) Akutagawa is most famous, however, for what innovative collection of stories that included *Yabu no Naka*, or *In a Grove*, a depiction of a crime from different points of view developed into a Akira Kurosawa film.

Answer: Rashomon

11. Answer the following questions about Geological features of Yellowstone Park for the stated number of pointeach.

- (a) The tallest mountain in Yellowstone also is the name of what mountain range that extends through Yellowstone?

Answer: Washburn

- (b) A sedimentary rock found on the slopes of Mt. Washburn and similar to conglomerate, its component rock fragments are sharp and angular and are fused together by silica, calcite, and iron oxides.

Answer: breccia

- (c) The reflective quality of the mountain is provided large amounts of what hard, glassy volcanic rock composed of silicon dioxide?

Answer: Obsidian

12. Answer the following questions about the Champions League in European football (that is, soccer) for ten points each.

- (a) For ten, what nation, the home of Juventus and two other teams involved, is hosting the tournament.

Answer: Italy

- (b) Which Spanish team has won the Champions League twice in the last four years? It is the team that David Beckham currently plays for.

Answer: Real Madrid

Prompt on Madrid

- (c) Which team won the Champions League in 2001? Oliver Kahn, the MVP of the 2002 World Cup, plays for this team.

Answer: Bayern München/Munich

13. Answer the following about a biblical king for ten pointseach.

- (a) Although the bible claims he is the son of Nebuchadrezzar [NEB-uh-ka-DREZ-har], Babylonian accounts say he was the eldest son of Nabonidus, who went into 550 BC and left his son regent. He died after the Persians entered the city in 539 BC.

Answer: Belshazzar

Don't be picky about pronunciation

- (b) All or nothing: what Aramaic words appeared on Belshazzar's wall and later appeared as the refrain of a Heinrich Heine poem?

Answer: mene, mene, tekel, upharsin

- (c) For a final ten points, what old testament figure was called in to interpret the "writing on the wall," perhaps better remembered for his time spent in a den of lions?

Answer: Daniel

14. Identify these ambassadors to Russia.

- (a) He won the national book award for *Soviet-American Relations* and the Pulitzer for his memoirs. Recalled to service after his retirement to be appointed ambassador to Yugoslavia in 1961, his time there influenced his theory of "containment."

Answer: George Frost Kennan

- (b) He was appointed as ambassador to Russia to stop a conflict in the Democratic party between him and George Dallas, when he returned in 1834, he was elected as a senator from Pennsylvania.

Answer: James Buchanan

- (c) Madison appointed him as America's first Minister to Russia, where he reported on Napoleon's retreat from Moscow, and served as Monroe's Secretary of State after being recalled after 1817. Despite serving adeptly as Jackson's Secretary of State, he ran against Jackson in the 1924 election.

Answer: John Quincy Adams

15. Given a skyscraper, identify the city for five each. A bonus five for all correct.

- (a) Jin Mao Building

Answer: Shanghai

- (b) Chicago Beach Tower Hotel
Answer: Dubai
 - (c) Chrysler Building
Answer: New York
 - (d) Ryugyong Hotel
Answer: Pyongyang
 - (e) Petronas Towers
Answer: Kuala Lumpur
16. Chandragupta conquered the Magadha kingdom and gained control of northern India. Answer the following questions for ten points each.
- (a) So began which dynasty of India?
Answer: Mauryan Dynasty
 - (b) Chandragupta defeated what successor of Alexander who wanted to regain the lost Indian conquests?
Answer: Seleucus I Nicator
 - (c) What grandson of Chandragupta denounced violence after slaying all of the other possible claimants to the throne?
Answer: Asoka
17. You will be given five statements. Given each statement, determine whether it implies $P = NP$, $P \neq NP$, or does not resolve the equality. Five points for each correct and a bonus five for all correct.
- (a) There exists an algorithm for CLIQUE in P .
Answer: \equiv
 - (b) A unary language is NP-complete
Answer: \equiv
 - (c) There exists no polynomial time algorithm for solving GENERALIZED GEOGRAPHY.
Answer: Does not resolve the equality
 - (d) There exists no polynomial time algorithm for solving SUBSET SUM.
Answer: \neq
 - (e) The decision problem of whether an integer is prime is in P .
Answer: Does not resolve the equality
18. Given the a baseball team, give the player from that team with the most home runs for the 2003 season for five points each.
- (a) Cubs
Answer: Sammy Sosa
 - (b) Yankees
Answer: Jason Giambi
 - (c) Philies
Answer: Jim Thome
 - (d) Braves
Answer: Javy Lopez

- (e) Giants
Answer: Barry Bonds

- (f) Brewers
Answer: Richie Sexson

19. Answer the following questions about writers who were granted Roman citizenship.

- (a) Captured by Vespasian, he prophesized that Vespasian would become emperor. In return, he was granted roman citizenship and protection, which might have influenced his account of the destruction of Herod's temple.

Answer: Flavius Josephus

- (b) This author of Menaechmi took — as was custom — three names when granted citizenship; the middle name he chose means “clown.”

Answer: Titus Maccius Plautus

- (c) This author of “literary letters” was the son of a freed slave in Rome and served in Brutus's Army, but nevertheless was rehabilitated through the support of Maecenas, an advisor to Octavian, who helped this poet receive citizenship and retire to the country.

Answer: Horace

Accept Quintus Horatius Flaccus

20. Given a line from a Arnold TV spot, give the line that immediatley follows it for ten pointseach.

- (a) All the other major candidates take their money and pander to them ...

Answer: I don't play that game.

- (b) If you're happy with the way things are, then keep your current leaders. If you want to change this state, then ...

Answer: join me.

- (c) Special interests have a stranglehold on Sacramento. Here's how it works: money comes in, favors go out, the people loose. We need to send a message ...

Answer: game over



Figure 1:



Figure 2:



Figure 3: