

# Technophobia VIII Round 8

Scrudd A/USC D  
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## 1 Scrudd A/USC D Tossups, Round 88

1. The dwarves Brokk and Eitri made his Gullinbursti-drawn chariot for him, Dvalin made his boat, Skidbladnir, and the Skírnismál tells how he gave his sword to Skirnir to retrieve his wife from Hellheim. Without that sword capable of spreading destruction of its own accord, however, at Ragnarok he will be an easy target of Surt, of whom he will be the first victim. For ten points, name this son of Njörd, the Norse god of peace and fertility, the brother of Freyja.

**Answer:** Freyr or Yngvi or Fricco or Frey

2. He sold his last pair of pants to buy a cigar so that he might be able to work comfortably at home and not be tempted to venture outside. Constantly in dire financial straits, he wrote *The Story of the Life of Lord Palmerston* for the *New York Tribune* to make some extra money. When he did have pants, he was a fixture at the British Museum, where he poured over what would become *A Contribution to the Critique of Political Economy* and *Das Kapital*. For ten points, name this political philosopher dependent on the alms of Friedrich Engels, with whom he wrote *The Communist Manifesto*.

**Answer:** Karl Heinrich Marx

3. Podiatrist Samuel J. Hoffman was the artist used for solos in *Spellbound*, *The Lost Weekend*, *The Road to Rio*, *The Fountainhead*, and *The Day the Earth Stood Still*, and it is perhaps more memorable in Zeppelin's *Whole Lotta Love* and the theme of the original *Star Trek* series. Virtuosos like Clara Rockmore and Lydia Kavina require perfect pitch, something that amateur player Vladimir Lenin lacked. Since it detects changing capacitance above via radio waves, the performer does not actually touch it, instead moving his hands in relation to two antennas, one controlling pitch and the other volume. For ten points, what is this instrument, sometimes called the "Aetherophone" invented in 1917 by Lev Termen?

**Answer:** the theremin or aetherophone before it's mentioned

4. Because he stopped stalking gentiles with Earl after school, he was at home when the fifth game of the 1942 World Series was interrupted by news that candidate Walter Winchell had been assassinated. After President Lindbergh vanishes and anti-Jewish ensue, this nine-year-old protagonist of a fictional biography is left to take care of his mother in Newark. For ten points, name this character who – in our universe – went on to write *The Plot Against America*, *American Pastoral*, and *Portnoy's Complaint*.

**Answer:** Philip Milton Roth

Accept either name

5. The Farnsworth-Hirsch device was an early attempt at producing this process, but is only useful as a neutron source. Decades later, Steven Jones at Brigham Young University reported the release of neutrons from a battery immersed in heavy water that could only be explained by this process, attempting to recreate the work of two other Utah researchers. More prominent research is directed at overcoming the Greenwald limit and achieving ignition temperature and Lawson density inside tokamaks. For ten points, name this physical process, the complement of fission, allegedly achieved by Pons and Fleishman in 1989 at "cold" temperatures.

**Answer:** nuclear fusion, accept "cold fusion," but that's not exactly right

6. It was here that U.S. Army surgeon William Beaumont observed digestion in progress through an open wound of a French-Canadian trapper. It was formerly the "Green Turtle" burial ground, but thanks to its position and imposing Sugar Loaf rocks became a British Fort in 1780, and

later the island became the headquarters of the Astor Fur company. Situated in Lake Huron, for ten points, name this tourist destination, which shares its name with the famous, five-mile long bridge linking Michigan's upper and lower peninsulas.

**Answer:** Mackinac [MACK-i-naw] Island

7. Gaining fame after the success of "Food For Thought" and touring with the Pretenders, this British reggae band bought their first instruments with compensation money Ali Campbell, their lead vocalist, won in a bar fight. Their song "One in Ten" blasted Margaret Thatcher for the UK's high unemployment rate, and the band itself takes its name from a form used to file for unemployment support. For ten points, name this band, whose hits include covers of "Red Red Wine" and "I Can't Help Falling In Love With You" that was featured in the movie *Sliver*.

**Answer:** Unemployment Benefit Form 40

8. This nation's Grand National Party opposes the plan to build a new capital in the Yeongi-Kongju region to reduce overcrowding in its old capital. Prime Minister Lee Hai-chan announced construction will begin in 2007 and continue until 2030; a plank of the Democratic Party's Roh Moo Hyun, the move was largely ignored by the public until the August announcement of the location. For ten points, name this nation seeking to lessen the dominance of Seoul.

**Answer:** South Korea or Taehan Min'guk

9. Gödel's compactness theorem says that a set of first-order sentences has this property only if every subset does. The Karp-Lipton theorem says that if circuits of polynomial size exist to solve this problem, then the PH collapses to level two. Determining this property of Horn clauses is P-Complete, as is determining this property for DNF and boolean formulas where each clause only has two literals. In 1974, however, Steve Cook showed that determining this for 3CNF formulas was NP-Complete. For ten points, what is this problem of determining whether a logical formula has a true assignment, the first problem proved NP-complete?

**Answer:** *three conjunctive normal form satisfiability*  
or consistency

10. The prelude for this confrontation was a landing at a bay between Pevensey and Bulverhythe, while the opposing commander was focused on a landing at Riccall where Tostig and Harald Hardraade were subsequently defeated at Stamford Bridge. Thus, when Harold II reached the battle, he was too tired to defeat the Norman forces. For ten points, name this 1066 battle that saw the end of the Anglo-Saxon kings of England.

**Answer:** Hastings

11. He was the director of the Kuomintang's Peasant Movement Training Institute and married the actress playing Nora in *A Doll's House* who had at various times the stage names of Li Yun-ho and Lan P'ing. Lin Piao edited and Tian Xiao Guang excerpted his writings into a book of 30 chapters formatted on thin, 125cm high sheets. During the Cultural Revolution, his image was as much a cultural icon as his *Little Red Book*. For ten points, name this first Premier of Communist China.

**Answer:** Mao Zedong

12. It was synthesized in 1838 by Henri Victor Regnault and in 1872 by Eugen Baumann, who had no use for it. In 1912 Fritz Klatte reacted acetylene with hydrochloric acid and accidentally made it, and patented it, but also had difficulty using it. In 1926, Waldo Semon of B.F. Goodrich made it, and decided to make shower curtains. He was smart enough to add plasticizers to make the brittle white material much more useful. Unfortunately, those plasticizers are highly

toxic, which led to Greenpeace trying to get it banned. For ten points, name this polymer, commercially made by radical polymerization of vinyl chloride.

**Answer:** Poly Vinyl Chloride

13. He was fired from his job in Brussels with Carrier-Belleuse, he was rejected thrice from the École des Beaux-Arts, and his *L'Homme au nez cassé* was rejected by the Salon in 1864. His first success came in 1876 with a work originally titled *Le Vaincu* modeled on Auguste Neyt, whom he described as physically perfect, "but in the infancy of comprehension, and beginning to awake to the world's meaning" in his *The Age of Bronze*. For ten points, name this French sculptor of *The Kiss* and *The Thinker*.

**Answer:** Francois-Auguste-René Rodin

14. His wife became the mistress of Roger Mortimer, and the two of them invaded England, executed Hugh le Despenser, and forced him to abdicate in favor of his son. A 21-member baronial council headed by Thomas of Lancaster had earlier drawn up the Ordinances to force the banishment of Piers Gaveston, the newly minted Earl of Cornwall who is alleged to be this king's lover. For ten points, name this English king defeated in 1314 by Robert the Bruce at Bannockburn.

**Answer:** Edward II of Caernarvon

15. This first appeared in Aldus Manutius' 1494 publication of Pietro Bembo's *De Aetna*, but they only became useful when people started programming. It closes word definitions in FortH. In the interactive mode of PROLOG, they tell the program to look for additional solutions. If they are followed by a space in COBOL, they are interchangeable with a comma. In Python, they create a suite of statements that are executed at once, and in LISP they are used to introduce comments. For ten points, identify this punctuation mark that serves a statement terminator in C, C++, and Java.

**Answer:** semicolon

16. On March 9, 1933, the newly-elected president called an Emergency Session of Congress to authorize its creation. The president also named Robert Fechner to the position of National Coordinator and created an Advisory Council composed of representatives of the Secretaries of War, Labor, Agriculture, and Interior. During the program's nine-year lifespan, its members restored 3,980 historical structures, improved 3,462 beaches, and planted three billion trees. The project was very popular, earning the nickname "Roosevelt's Tree Army." For ten points, what is this alliteratively-named New Deal program?

**Answer:** Civilian Conservation Corps

17. Its chapters begin with excerpts from the *Ashley Book of Knots*; these knots are essential to travelers like Nutbeem, who built a Junk by himself, the murderer who secured Bayonet Melville's severed head in a suitcase near Gaze Island, and to the lesbian upholsterer Agnis Hamm. After the protagonist's two daughters were sold as sex slaves by Petal Bear, who dies in a car crash in Florida, Quoye comes to work at Killick-Claw's *The Gammy Bird*. For ten points, name this winner of the 1994 Fiction Pulitzer by Annie Proulx about a "third-rate newspaper man" in Newfoundland who finds himself covering the titular beat.

**Answer:** The Shipping News

18. One part of its observation is Tashlikh, where individuals walk to running water to "cast off" their sins, while it's customary to greet others with "L'shanah tovah." Taking place during Tishri, 100 notes are blown from ram's horn known as a shofar. For ten points, these are part

of the celebration of what Jewish Holy Day whose name literally means “Head of the Year?”

**Answer:** Rosh Hashanah (accept Jewish New Year until the word “Jewish”)

19. The protagonist meets her husband as he is about to commit suicide. After a whirlwind romance, he proposes to her right before was to depart Monte Carlo with Mrs. Van Hopper. After the honeymoon, she realizes that everyone save Maxim is still in love with the former mistress of Manderlay. For ten points, name this gothic novel by Daphne duMaurier that features Mrs. Danvers, a nameless main character, and the title character, Maxim deWinter’s dead wife.

**Answer:** Rebecca

20. Karl Marx, Mae West, Edgar Allen Poe, Lenny Bruce, Fred Astaire, Aldous Huxley, Bob Dylan, Dylan Thomas, George Bernard Shaw, Lewis Carroll and Shirley Temple are on the cover. “Lovely Rita” and “She’s Leaving Home” are less famous songs on it, while “Lucy in the Sky With Diamonds” and “With a Little Help from my Friends” are better known songs on – for ten points– what 1967 Beatles album?

**Answer:** Sgt. Pepper’s Lonely Hearts Club Band

21. Recognized for his early poem, *The Escorial*, he gave up writing until he read the works of Duns Scotus in 1872 and realized that poetry was not inconsistent with the Jesuit order. He borrowed a metrical device from Langland’s “Piers Plowman” and broke his silence in 1875 with *The Wreck of the Deutschland*. For ten points, name this English author of such “sprung verse” poems as “God’s Grandeur,” “The Windhover,” and “Pied Beauty.”

**Answer:** Gerald Manley Hopkins

22. It follows immediately from Thurston’s Geometrization Conjecture, which is why Grisha Perelman’s proposed proof of the latter, if accepted by the mathematics community, could win him a one million dollar prize from the Clay Mathematics Institute. Stephen Smale proved that it holds for  $n$  greater than four, but its original formulation, that every simply-connected, closed three-manifold is homeomorphic to the three-sphere, remains unproven. For ten points, name this famous open problem in topology, first posed in 1904 by a Frenchman.

**Answer:** Poincaré Conjecture

## 2 Scrupp A/USC D Bonuses, Round 86

1. Given the following function, compute the Lebesgue integral from  $x = 0$  to  $x = 1$  on a 5-10-20-30 basis.

(a)  $f(x) = \frac{1}{2}$  if  $x$  is rational,  $f(x) = 0$  otherwise.

**Answer:** 0

(b)  $f(x) = x$ .

**Answer:**  $\frac{1}{2}$

(c)  $f(x) = 0$  if  $x$  is in the Cantor set and  $f(x) = 1$  otherwise.

**Answer:** 1

(d)  $f(x) = 2$ .

**Answer:** 2

2. It's bordered by Lake Ontario, Etobicoke Creek, and the Rouge River. For the stated number of points, name :

10 This city of Canada for ten points.

**Answer:** Toronto

5 For five, Toronto's most famous landmark, the world's tallest free-standing land structure.

**Answer:** CN Tower

15 For fifteen, the city took its name from this lake, known then as Lake Toronto but later renamed for a 18<sup>th</sup> century Lieutenant-Governor of Upper Canada.

**Answer:** Lake Simcoe

3. In 1840 William Hobson became the Lieutenant-Governor of a colony that didn't exist. For ten points each...

(a) Name the colony created by a treaty signed in James Busby's house with the Maori.

**Answer:** New Zealand

(b) Name that treaty, named for the port in which it was drafted.

**Answer:** Treaty of Waitangi or Te Tiriti O Waitangi

(c) Technically, the colony didn't exist until 1841. Name the colony which it had formerly been attached to, now Australia's most populous state.

**Answer:** New South Wales

4. Answer some questions on anemias on a 5-10-15 basis.

(a) This is named for the misshapen red blood cells of its victims, who tend to be of West African origin.

**Answer:** Sickle cell anemia

(b) This type of anemia is caused by either Vitamin B12 deficiency, or lack of ability to process Vitamin B12. It is a form of megaloblastic anemia.

**Answer:** Pernicious anemia or Macrocytic achylic anemia



- (c) This is similar to sickle-cell anemia, but is common in Italians and Greeks, hence the alternative name "Mediterranean Anemia." This anemia, which comes in major, minor, alpha, and beta forms, makes red blood cells extremely fragile.  
**Answer: Thalassemia or Cooley's anemia**
5. FTPE, identify these references from *Family Guy*.
- (a) In the episode "Wasted Talent," Peter's only clue for his *Password* partner and former *Odd Couple* actor to guess the word "flaming" was "you ..."  
**Answer: Tony Randall**
- (b) In the premiere episode, "Death Has a Shadow," Peter is on trial for accepting a \$150,000 welfare check when this beverage mascot from the 80s bursts into the courtroom with his characteristic "Oh Yeahhh!"  
**Answer: Kool-Aid Man, accept equivalents**
- (c) She lands the plane in "Death Lives," as she did in the movie *Airport 75*. This reference is so obscure, even Tom Tucker felt it necessary to note its obscurity during the newscast.  
**Answer: Karen Black**
6. How familiar are you with leaders across the pond? Name these figures in the U.K. government as of November 6, 2004 on a 5-10-20-30 basis.
- (a) Prime Minister  
**Answer: Tony Blair**
- (b) Foreign Secretary  
**Answer: Jack Straw**
- (c) Deputy Prime Minister  
**Answer: John Prescott**
- (d) Chancellor of the Exchequer  
**Answer: Gordon Brown**
7. Recently, the ruling military junta of a southeast Asian nation replaced its dictatorial prime minister because of, among other things, his movements toward establishing a more democratic state. For ten points each:
- (a) Name this country, which was, until October 19, headed by General Khin Nyunt.  
**Answer: Myanmar or Burma**
- (b) From which capital city is the new hard-line general Soe Win governing?  
**Answer: Yangon or Rangoon or Yongon**
- (c) The leader of the opposition to the junta is this Nobel Peace laureate, who has been under house arrest for most of the last fifteen years.  
**Answer: Daw Aung San Suu Kyi [SOOH shee]**
8. For ten points each, name these European mountains.
- (a) This highest peak of the Tatra Mountains is the highest peak in the Carpathian Range and Slovakia.  
**Answer: Mount Gerlachovsky**

- (b) This mountain in the Caucasus mountains is the tallest mountain in Europe.

**Answer: Gora Elbrus**

- (c) The highest mountain in western Europe is located in the French Alps between France and Italy.

**Answer: Mont Blanc or La Dame Blanche or The White Lady**

9. For ten points each, name these novels from their first lines, five if you need the author.

- 10 It was a queer, sultry summer, the summer they electrocuted the Rosenbergs.

5 Sylvia Plath

**Answer: The Bell Jar**

- 10 You better not never tell nobody but God.

5 Alice Walker

**Answer: The Color Purple**

- 10 There was no possibility of taking a walk that day.

5 Charlotte Brontë

**Answer: Jane Eyre**

10. Answer these questions about the death of female monarchs for ten points each.

- (a) This woman took the throne of England for nine days before being locked in the Tower of London, and then executed by her successor.

**Answer: Lady Jane Grey**

- (b) She attempted many failed assassination plots against her cousin, the Queen of England. Eventually, her cousin had her executed in 1587.

**Answer: Mary Queen of Scots or Mary Stuart**

- (c) Her death was relatively unexciting, but after the Settlement Act of 1701, her death in 1714 meant the accession of the house of Hannover.

**Answer: Anne I**

11. Name some nymphs on a 5-10-15 basis.

- (a) She unfortunately talked too much, and was cursed by Hera. She fell for Narcissus, and wasted away as a result.

**Answer: Echo**

- (b) Often described as "silver-footed", she was the mother of Achilles.

**Answer: Thetis**

- (c) She was a sea nymph, with whom Polyphemus fell in love.

**Answer: Galatea**

12. Old, rich white men do more than run for president; they also get to moderate the debates.

- 5,5,5 For five points each, name the three moderators – in order – from PBS, ABC, and CBS.

**Answer: Jim Lehrer, Charles Gibson, and Bob Schieffer**



- 15 For fifteen points, name the token woman and African-American moderator rolled into one, the host of *Washington Week* and the VP debate.

**Answer: Gwen Ifill**

13. Answer these questions about waves FTPE

- (a) Given a tube of length  $L$ , what is the wavelength of the fundamental mode if the tube is clamped at one end.

**Answer:  $4L$**

- (b) Defined as  $dw/dq$  (READ: D W over D Q), this is the speed at which a wavepacket travels.

**Answer: group velocity**

- (c) A medium in which the phase velocity is the same for all of the vibrational modes.

**Answer: non dispersive**

14. Answer the following related CS questions for ten points each.

- (a) Lamport is best known outside the CS community for extending the TeX [TEHK] into this typesetting system.

**Answer: L<sup>A</sup>T<sub>E</sub>X**

- (b) This Stanford Computer Scientist created TeX while writing *The Art of Computer Programming*.

**Answer: Don Knuth**

- (c) In 1977 Knuth, collaborating with Morris and Pratt, published a linear algorithm to solve this problem using finite automata.

**Answer: Fast pattern matching in strings  
or string search**

15. Name these World Series MVPs, given their years and positions, for the stated number of points.

- 10 1963 and 1965, Pitcher

**Answer: Sandy Koufax**

- 10 1999, Closing Pitcher

**Answer: Mariano Rivera**

- 5,5 Two answers: 2001, Pitchers

**Answer: Curt Schilling, Randy Johnson**

16. Identify these literary works about the struggle of laborers to lose their chains for ten points each.

- (a) This Steinbeck novel tells of the travails when workers led by Jim and Mac try to strike against the Growers association.

**Answer: In Dubious Battle**

- (b) Jurgis becomes a scab at Durham's in this Upton Sinclair novel.

**Answer: The Jungle**

- (c) This Clifford Odets play takes place during a cab strike.

**Answer: Waiting for Leftie**

17. Answer these questions about state songs on a 5-10-20-30 basis.

- (a) The chorus of this state's song spells out the name of the state.

**Answer: Mississippi**

- (b) The praise of this state's song of "fields of tasseled corn" is set to the music of *O Tannenbaum*.

**Answer: Iowa**

- (c) This state apparently has five state songs including a namesake waltz and "Rocky Top"

**Answer: Tennessee**

- (d) This state changed the third line in its state song from "largest and grandest" to "boldest and grandest" in 1959.

**Answer: Texas**

18. Identify these composers who have characters named Claudio in their operas for ten points each. If you need other works, you'll only get five.

- 10 Isabella's tenor brother in *Das Liebesverbot*.

5 *Die Walküren* and *Tristan und Isolde*

**Answer: Richard Wagner**

- 10 The bass role of the Roman Emperor in *Agrippina*

5 Royal Fireworks

**Answer: Georg Friedrich Handel**

- 10 The baritone in love with Heró in *Béatrice et Bénédict*.

5 *The Damnation of Faust*

**Answer: Hector Berlioz**

19. Answer these questions about Obsessive-Compulsive Disorder for ten points each.

- (a) This condition, also called "Pure O," is obsessive behavior without the compulsions. The sufferer cannot stop going over the same thoughts again and again.

**Answer: Rumination**

- (b) OCD is classified under this more general category of mental disorders, along with most phobias and post-traumatic stress disorder.

**Answer: Anxiety disorders**

- (c) This type of therapy developed in part by Donald Meichenbaum incorporates exposure to obsession-producing situations has been found to often alleviate OCD.

**Answer: Cognitive Behavioral Therapy**

20. Identify these wicked women from the Old Testament, for the stated number of points.

- 5 She tricks Samson into revealing the secret of his strength.

**Answer: Delilah**

10 The Israelite queen known as the “harlot of Sidon,” who worships Baal is killed by Jehu.

**Answer: Jezebel**

15 The daughter of Jezebel who succeeds in murdering every member the House of David except Jehoash, and becomes Queen of Judah.

**Answer: Athaliah**

21. Name the poem given lines, for ten points each.

(a) “This shaking keeps me steady. I should know./What falls away is always. And is near”

**Answer: The Waking**

**by Theodore Roethke**

(b) “Old age should burn and rave at close of day”

**Answer: Do Not Go Gentle Into That Good Night**

(c) “The Waking” and “Do Not Go Gentle Into That Good Night” are examples of what poetic form of seven-syllable lines in five tercets and a quatrain?

**Answer: Villanelle**

22. Name the play from clues, 30-20-10.

30 In the first scene, Officer Klein takes over the beat of Officer Brophy, who comes to pick up old toys they’re refurbishing for poor kids on Christmas.

20 One of the characters is a theater critic planning his wedding to the girl next door, a minister’s daughter.

10 Two characters perform the charitable act of killing lonely old men with poisoned mulberry wine and then burying them in the cellar in this Kesselring play.

**Answer: Arsenic and Old Lace**