## Technophobia VIII Round One (except Dolph)

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## 1 Berkeley B Tossups, Round One

1. The poet notes of his addressee that "The sea-blooms and the oozy woods which wear/ The sapless foliage of the ocean, know/ Thy voice, and suddenly grow gray with fear,/ And tremble and despoil themselves", yet begs "Make me thy lyre, even as the forest is". Despite images of Maenads, ghosts, and death, it ends with the optimistic thought that "If Winter comes, can Spring be far behind?" For ten points, name this Shelley poem, a lyric on the titular entity, the directionally-named "breath of Autumn's being".

Answer: Ode to the West Wind

2. Curtis Allina proposed the creation of these objects in 1955 in order to market its associated product to children. The first models were of Santa Claus and a Space Trooper; these were quickly followed by, among others, Space Gun, Mickey Mouse, and Psychedelic Eyeball. Knockoff models included Hitler, Pee Wee Herman, and a penis. Each generally contained the lemon, orange, anise, eucalyptus, lime, and chlorophyll flavors of the product, although the peppermint from which the originally Austrian product derived its name was phased out for a time. For ten points, name these kitschy candy delivery systems.

Answer: Pez dispensers prompt on "Pez"

3. When Giant Tiki Barber was asked on sports radio whether a coming change in the team's play-calling duties would make a difference, he said that it would, but that no one should read much into it; he went on to explain this phenomenon and cite relevant studies from his business classes, much to the shock of the hosts. The study that uncovered it was supposed to be only a year long, but was extended to five because of researchers' difficulty in relating physical conditions to worker productivity. First seen by Mayo et al in 1927 at the eponymous plant of Western Electric Co., for ten points name this effect in which workers increase productivity when studied, thus making any change seem positive.

Answer: Hawthorne effect

4. If you remove both blanks from a Scrabble set and draw seven tiles from the remaining 98, the word whose formation is least likely is this plural, which derives from a Polynesian word meaning "cut off." Also called "Mother Hubbards", these often highly colorful garments are simply loose unbelted dresses. On "The Simpsons," Homer, having become highly obese but not wanting to look like a weirdo, opts for one of these over a cape. For ten points, name this word, which requires one s, both m's and all four u's in a Scrabble set.

Answer: muumuus

accept muumuu, since it's a friendly tournament

5. Founded in 1851 on a mud flat, this city was frequently flooded; on one occasion, a young boy drowned in a chuckhole along a main street. When its first sewage system was built, a high tide would block the outflow pipe, causing downtown toilets to explode when flushed. Downtown burned on June 6, 1889, after which city fathers built up the streets to improve drainage. Many storefronts stayed below, accessible by ladder, although 18 people died falling off the street before the sidewalks were covered over, forming the city's Underground. The world's first Skid Row, where logs slid down to the mills, was here. For ten points, name this city, home to Safeco Field and the Space Needle.

Answer: Seattle

6. This man made repeated claims to the throne of Scotland, often wore a kilt and tartan cap, advertised for Scottish bodyguards, and played the bagpipes, having been taught by the pipe major of the King's African Rifles, for whom he was a trainee cook. After reaching power, he thanked his country's former colonial master by getting married in front of a Union Jack; he later asked for the Queen's knickers and requested Princess Anne's hand in marriage. During his eight-year rule, over 300,000 countrymen were killed, mostly by hammer-wielding "Public Safety Unit" members; he himself was accused of eating his Defense Minister. For ten points, name this recently-deceased dictator of Uganda.

Answer: Idi Amin Dada

7. In 1822, as Superintendent of Indian Affairs, he supervised part of the removal of Indian tribes from eastern Kansas. After being governor of the Missouri Territory from 1813-1820, he failed in his bid to become its governor after it became a state. Following his brothers Jonathan's and George Rodgers' footsteps, his military career included serving under General Anthony Wayne and fighting at Fallen Timbers. Co-leader of the "Corps of Discovery," For ten points, what who this explorer forever linked with his friend and colleague, Meriwether Lewis?

Answer: William Clark

- 8. Originally written beginning in December 1989 as a component of the Amoeba OS, its creator described it as a descendant of ABC. One of its most distinctive features was borrowed from the language Occam, that feature being the use of explicit whitespace to denote program blocks. Its most common use is, like Perl, as a scripting language. For ten points, name this computer language created by Guido van Rossum, whose books often feature a snake, even though it was named after a British comedy troop. Answer: Python
- 9. The first performance of this work, at the New Music Hall in Dublin, was successful and raised 400 pounds for charity, but the first London performance raised objections to using a theater and theatrical singers like Catherine Clive and Susannah Cibber for material of its nature. The first recitative is Comfort ye my people, and the final chorus Worthy is the lamb that was slain, but the most famous part of this work is the Hallelujah chorus. For ten points, what is this oratorio by George Frideric Handel?

Answer: Messiah

10. In these phonemes, most of the sound is concentrated into high-frequency bands in the 3 to 8 kHz frequency range; these high-frequency bands are caused by the large amount of turbulent air flow produced. In English, they exist in (\*) labiodental, dental, alveolar, alveopalatal, and glottal varieties, and include h [hah], s [es], f [eff], sh [shh], v [vvv], and z [zzz]. For ten points, name these consonants whose name derives from the friction in the air used to produce them.

Answer: <u>fricatives</u> or <u>spirants</u> accept <u>sibilants</u> before (\*)

11. After his father Senzangakona died, this man took over his father's former position. After his mother Nandi died, he ordered the sacrifice of several thousand of his people and a three month fast for the rest, leading to massive starvation. He invented a new weapon, the iKlwa, and trained his warriors, called impis, to crush the enemies of their tribe and of the Mtetwa. Given his chiefdom by Dingiswayo and murdered by his half-brother Dingaan, name, For ten points, this African warrior, king of the

Zulus.

Answer: King Shaka Zulu

12. Cyclosporine is a drug that helps to block the activity of these cells that help contribute to transplant organ rejection. When they encounter non-self cells, they divided into two kind of cells one being the cytotoxic variety. Cytotoxic ones destroy non-self cells that it detects via the presence of MHC markers on the plasma membrane of cells. The helper stimulates the production of B cells and its cytotoxic cousins. For ten points, what is this lymphocyte that is produced in the bone marrow but named for the gland that it matures in?

Answer: T cells

13. Her name means "the essence," and she was often referred to as "First and Last." When Apollo and Poseidon simultaneously proposed to her, she declined both offers, thus averting a possible war between the two gods; in thanks, Zeus declared that her name was always to be invoked first in prayer and that she was to receive the first portion of any sacrifice. She was the keeper of the sacred flame of Delphi that survives today in the Olympic torch. The first Olympian god born to Rhea, she was the last to be vomited up by Cronus – thus her sobriquet. For ten points, name this Greek goddess who gave up her golden throne on Olympus to Dionysus, whose responsibility was the hearth.

Answer: Hestia

14. He wrote in a monograph for the British Film Institute that "The Wizard of Oz was [his] very first literary influence", which makes sense for an author who uses magical realism and who, like Dorothy in Oz, is an exile from his home country. His characters include Rashid, "the Shah of Blah"; Saleem Sinai; and rock singer Vina Aspara. For ten points, name this author of *The Moor's Last Sigh* and *Midnight's Children*, who is no longer under a fatwa.

Answer: Salman Rushdie

15. Despite the fact that this artwork's creator was a founding member of the Society of Independent Artists, when he sent it to its first exhibition, it was refused, because he had not signed it with his own name. The artist acquired it directly from J. L. Mott Iron Works, and the only changes he made were rotating it 90 degrees and signing it "R. Mutt 1917." For ten points, name this work, the first of Marcel Duchamp's "ready-mades," an ordinary urinal made art.

Answer: Fountain

16. In 1985, at the age of 67, he boasted "I can still throw in the 70s. And I can throw it in the 80s if I don't want to comb my hair for a week." Beginning his major league career in 1936, he struck out 15 batters in a single game as a rookie, a then-American League record, and he became the first man to throw an Opening Day no-hitter in 1940. With career statistics of 266 wins, 2,581 strikeouts, and an ERA of 3.25, he was inducted into the Hall of Fame in 1962. For ten points, name this Cleveland Indian pitcher nicknamed "Rapid Robert" for his overpowering fastball.

Answer: Bob Feller

17. The name's the same: a 1991 Atari arcade game which required you to build a castle from Tetris-like pieces, an LAPD scandal in which over 100 drug cases were overturned after officers were accused of planting guns and drugs on suspects, and a broad embankment or mound often surmounted by a parapet. For ten points, name this structure, over which Francis Scott Key watched the flag gallantly streaming.

Answer: ramparts

18. The term describing this interaction is neither an axial vector nor an ordinary vector, but rather a characteristic "A+V" term, which is responsible for the maximal parity violation which occurs in this interaction. The Cabbibo-Kobayashi-Maskawa or CKM matrix describes its ability to change flavor, such as in beta decay, when a down quark is transformed into an up quark via this interaction. Carried by the W and Z bosons, for ten points, name this force, which in the 1970s was unified with electromagnetism.

Answer: weak or electroweak force on early

- 19. The doctor who determined its cause did so through experiments called "filth parties", in which the subject would inject or ingest the blood, scabs, feces, or body fluids of patients. Since none of the subjects developed it, Dr. Joseph Goldberger determined that this disease, which affected 3,000,000 Americans and killed 100,000 between 1906 and 1940, was caused not by a germ but by dietary deficiency. The doctor found that daily doses of brewer's yeast cured this disease; it was shown after his death that the yeast contained niacin. For ten points, name this disease, which, to paraphrase Tom Lehrer, might make you scrawny if you go back to the Swanee.

  Answer: pellagra
- 20. This film's soundtrack includes such classic tunes as My Brain is Hanging Upside Down (Bonzo Goes to Bitburg) by the Ramones, Cream's Sunshine of Your Love and Edge of Seventeen by Stevie Nicks to which Rosaline Mullins sings along and the apt Substitute by the Who. Directed by Richard Linklater and written by Mike White, who also appears as Ned Schneebly, it's the story of fake substitute teacher Dewey Finn's quest to win a \$20,000 Battle of the Bands. For ten points, name this 2003 release starring Jack Black.

Answer: School of Rock

21. This name is shared by Lord Henry Wotton's wife in The Picture of Dorian Gray, the Nasar's cook in Chronicle of a Death Foretold, and the black woman who helps birth Catherine in A Death in the Family, and was the first name of the pseudonym under which Sylvia Plath published The Bell Jar. For ten points, give this name, also that of the station where Miss Prism found the handbag containing Jack Worthing in "The Importance of Being Earnest" and the Queen during whose reign that station was built.

Answer: Victoria

## 2 Berkeley B Bonuses, Round One

- 1. Name these common restriction enzymes, for fifteen points from the DNA sequence that they cut on (given the 5-prime to 3-prime direction), or for ten points if you need more information.
  - 15 GAATTC
  - 10 This restriction enzyme is obtained from E. coli, from which it gets its name.

Answer: EcoRI [eco-ARGHH-one]

According to a biologist I asked, the most common way it's mentioned in Bio lab settings (at least in the Caltech Patterson lab) is to say "ARGHH" like a pirate, me harties.

- 15 AAGCTT
- 10 This enzyme is found in a common bacterium which was also the first organism to have its entire genome sequenced.

Answer: HindIII

[haind-3]; the bacterium is H. influenzae

- 2. Answer these questions about music theory for ten points each.
  - (a) This type of minor scale features a raised seventh note both ascending and descending, in contrast to a natural or melodic minor.

Answer: harmonic minor

- (b) In F major, what note do you need to add to C, E, and G to complete a dominant seventh chord? Answer: B-flat
- (c) This type of cadence features a transition from a dominant chord to a sixth chord. For a final ten, name it.

Answer: deceptive cadence

- 3. Answer the following about Yggdrasil, the world-tree from Norse myth, for ten points each.
  - (a) Yggdrasil is this type of tree; the first human male was made from one of these.

Answer: ash

(b) This serpent gnawed at the roots of Yggdrasil.

Answer: Nidhogg

(c) An eagle sat on the top of Yggdrasil, with Vedhrfolnir [vehd-HARFOL-neer], a creature of this species, perched on its beak.

Answer: falcon or hawk

- Suppose the market for widgets is a perfectly competitive one and the market-clearing price is \$5.
   Answer these questions for ten points each.
  - (a) Some consumers would be willing to pay more than \$5 for a widget. This is the term for the gain they get by only having to pay \$5.

Answer: consumer surplus

(b) If instead, the supplier were a monopolist, they could turn all of the consumer surplus into profit using this technique.

Answer: first-degree price discrimination

(c) If a price floor were set at \$7, this would occur, since there would exist consumers who would want to buy at the lower price and sellers willing to sell at that price, but their transaction would not be allowed.

Answer: deadweight loss

- 5. Answer the following related questions for ten points each.
  - (a) This folk musician, who sang A Better Place to Be, Cat's in the Cradle, and Thirty Thousand Pounds of Bananas died in a 1981 auto accident. Answer: Harry Chapin
  - (b) This director of "Sophie's Choice" and "To Kill a Mockingbird" died in a 1998 auto accident. Answer: Alan Pakula
  - (c) The deaths of both Chapin and Pakula are mentioned in this 2001 Michael Cuesta-directed film, whose title names the dangerous road where both Chapin and Pakula died. Answer: L.I.E

Long Island Expressway

- 6. Identify these things related to fast-traveling stuff, for the stated number of points.
  - (a) For five, if this number is greater than one, it indicates that an object is traveling faster than the speed of sound in the medium.

Answer: Mach number

(b) For ten, suppose an object is traveling at a Mach number of 2. What is the opening angle (that is, the angle between the axis and the side) of the Mach cone?

Answer: 30 degrees or pi/6

(inverse sine of 1/2)

(c) For five, this kind of radiation is produced when an object travels faster than the speed of light in a medium.

Answer: Cherenkov radiation

(d) For ten, how fast must an object travel in ordinary water in order to produce Cherenkov radia-

**Answer:**  $\frac{3}{4}c$  or  $\frac{.75c}{.75c}$  or  $\frac{2.25 * 10^8 \frac{m}{s}}{s}$  or equivalents (n=4/3 for water)

- 7. Much of what I know about the Bible comes from "Joseph and the Amazing Technicolor Dreamcoat". Answer the following for the stated number of points.
  - (a) The story of Joseph can be found in this book of the Bible.

Answer: Genesis

- (b) Joseph was sold into slavery by his brothers, but rose to become overseer of the house of this powerful Egyptian. After his wife tried to jump Joseph's bones, he had Joseph thrown into jail. Answer: Potiphar
- (c) While in jail, Joseph interpreted the dreams of two servants of Pharaoh; name their occupations for five points each.

Answer: butler/cupbearer, baker

8. Name these Hugo-winning science fiction authors who have written stories in which the Sun goes kablooey for ten points each.

(a) This author of Neutron Star also wrote Inconstant Moon, in which L.A. inhabitants see a massive solar eruption reflected in the light of the moon and realize the other hemisphere has been sterilized.

Answer: Larry Niven

(b) This author of *The Forever War* also wrote *For White Hill*, which recounts the last days of the Solar System before an alien weapon destroys the Sun.

Answer: Joe Haldeman

(c) This author of *The Ghost from the Grand Banks* also wrote *The Songs of Distant Earth* in which the deficit of solar neutrinos portends the Sun's explosion in 3617.

Answer: Arthur C. Clarke

- Answer these questions about the last Anglo-Saxon king of England, Harold II, for the stated number of points.
  - (a) For five, this predecessor of Harold allegedly promised Harold the throne on his deathbed. Answer: Saint Edward the Confessor
  - (b) For another five, is man also believed he had a claim to the throne, and acquired it by defeating Harold at Hastings.

Answer: William I or William the Conqueror

(c) For ten, Harold was weakened at Hastings by this prior battle, which he fought against yet another royal claimant, Harald III Hardraade, king of Norway.

Answer: Stamford Bridge

(d) For ten, this brother of Harold II fought against his brother at Stamford Bridge after logsing his earldom in a rebellion.

Answer: Tostig

- 10. Identify these pitchers who suddenly lost the ability to throw strikes for ten points each.
  - (a) This winner of Game Seven of the 1971 World Series suddenly and permanently lost his control in 1973, walking an astounding 84 in 88 innings. His name is now given to the "disease" of suddenly losing one's control.

Answer: Steve Blass

(b) This star Braves reliever of the mid-nineties gave up a crucial home run to Jim Leyritz in Game Four of the 1996 World Series, then couldn't find the plate the next year; he has achieved some limited success since.

Answer: Mark Wohlers

- (c) This much-heralded Cardinal had a terrific rookie season in 2000, but melted down in the playoffs, throwing multiple balls to the backstop. Wildness and injury have limited his performance since. Answer: Rick Ankiel
- 11. Name these terms associated with animal behavior for ten points each from descriptions.
  - (a) It is an innate behavior that is typically carried to completion despite being unable to fulfill the goal. An example is the graylag goose executing a series of neck motions to return a stray egg and does so all the way back to the nest despite the egg rolling away.

Answer: fixed action pattern

prompt on FAP

(b) Discovered by Konrad Lorenz, this innate programming occurs during the critical period of an animal's life that becomes a permanent irreversible behavior. The classic example is the birthing and return of salmon to rivers.

Answer: imprinting

(c) A form of associated learning, it is also called trial-and-error learning. This type of conditioning is where an acquired behavior is associated to an environmental response like B.F. Skinner's experiment with providing food for pressing the right lever and shocks for the wrong ones.

Answer: operant conditioning

- 12. Given a character of questionable morality, name the Shakespeare play in which he or she appears, for ten points each. You'll only get 5 if you need another character.
  - 10 Don John
  - 5 Benedick

Answer: Much Ado about Nothing

- 10 Regan
- 5 Cordelia

Answer: King Lear

- 10 Iachimo
- 5 Imogen

Answer: Cymbeline

- 13. Name the authors of each of the following historical works, for ten points each.
  - (a) History of the Peloponnesian War

Answer: Thucydides

(b) The Civilization of the Renaissance in Italy

Answer: Jakob Burckhardt

(c) The Frontier in American History

Answer: Frederick Jackson Turner

- 14. Given some operatic roles, name their vocal ranges, for ten points each.
  - (a) Azucena in Il trovatore, Carmen

Answer: mezzo soprano

DO NOT prompt on or accept "soprano"

(b) Wotan in the Ring Cycle, Sarastro in The Magic Flute

Answer: bass

(c) Erda in Das Rheingold, Mama Lucia in Cavelleria Rusticana

Answer: contralto or alto

- 15. Answer these question regarding the United States and WWI for ten points each.
  - (a) The interception of this message was the catalyst the finally forced the U.S. to declare war on Germany, when Wilhelm II sought to seek an alliance with Mexico.

Answer: Zimmerman Telegram

- (b) The United States army was not nearly large enough thus this law was passed in May 1917 to expand the military force from 200,000 men to nearly 4 million by the end of the conflict. Answer: Selective Service Act
- (c) The following month, this commanding general led the American Expeditionary Army into France for its defense and the later counter-offensive against the German invasion. Answer: John Pershing
- 16. Answer these questions about a certain poet, for the stated number of points.
  - (a) Which poem contains the lines: "When I behold, upon the night's starr'd face, Huge cloudy symbols of a high romance, And think that I may never live to trace Their shadows, with the magic hand of chance..."

Answer: When I Have Fears That I May Cease to Be

- (b) Name the author of this poem, written in 1818, who died less than three years later. Answer: John Keats
- (c) For five points each, name the other great Romantic poet who drowned the following year, and the elegy he wrote to mourn Keats' passing. Answer: Percy Bysshe Shelley

Adonais

- 17. Given some members, name the literary movement, for ten points each.
  - (a) John Wain, Leslie Allen Paul, Kingsley Amis, John Osborne Answer: Angry Young Men
  - (b) Theodore de Banville, Francois Coppee, Rene Francois Armande Sully-Prudhomme, Paul Verlaine Answer: <u>Parnassians</u>
  - (c) Leopold Sedar Senghor, Leon Damas, and Aime Cesaire Answer: negritude
- 18. Identify these concepts from fluid mechanics for ten points each:
  - (a) This principle, first published a year after its discoverer's death, states that the pressure in a static fluid is constant; it's the basis of hydraulics.

Answer: Pascal's principle

(b) This effect, a product of Bernoulli's principle and the asymmetric formation of boundary layers, occurs when the flight of a rotating object is deflected at right angles to the windstream; Barry Zito exploits it frequently.

Answer: the Magnus effect or Robin's effect

- (c) In this effect, a moving fluid will adhere to an adjacent wall; if the wall is sufficiently flimsy, it will adhere to the fluid, which explains why your shower curtain blows inward.
  Answer: the Coanda effect
- 19. Identify the player who scored a touchdown on each of the following plays for ten points each. You'll only get five if you need his team and position.
  - 10 The Catch, January 1982
  - 5 wide receiver, San Francisco 49ers *Answer:* Dwight <u>Clark</u>

- 10 The Immaculate Reception, December 1972
- 5 running back, Pittsburgh Steelers
  Answer: Franco Harris
- 10 Music City Miracle, January 2000
- 5 wide receiver, Tennessee Titans
  Answer: Kevin Dyson
- 20. Name the great thinker from quotes, 30-20-10.
  - 10 "I don't want yes men around me. I want everyone to tell the truth, even if it costs them their jobs."
  - 20 "That's the trouble with directors. Always biting the hand that lays the golden egg."
  - 10 "An oral contract isn't worth the paper it's written on." Answer: Samuel Goldwin

born Schmuel Gelbfisz; a.k.a. Samuel Goldfish