## Technophobia VIII Dolph Round One Jimbo Round Two

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**Note to moderator**: Please remind the teams playing on this packet not to discuss this round until after round two.

## 1 USC A Tossups, Round Alpha

1. This musician, born Chaim Witz in Israel in 1949, at one point in his life considered becoming a rabbi. After immigrating to America, he published his own sci-fi/fantasy magazine, COSMOS, thus beginning his fascination with horror. While teaching English at PS 75 in Spanish Harlem; he chose Spiderman as a reading assignment because the costome gave the character a multiracial appeal. Later, he would employ the same techniques in his music, donning elaborate makeup and evoking the same primal urges through his long tongue, "demon" persona, and spitting blood on stage. For ten points, name member of KISS and author of Sex Money Kiss.

Answer: Gene Simmons

2. As a part of the Manhattan project, he designed the "implosion lens" for compression of plutonium into critical mass. In 1932 he made a precise formulation and proof of the "ergodic hypthesis" of statistical mathematics. He solved a special case of Hilbert's fifth problem, that of compact groups. He is more famous, however for his proof of the minimax theorem, the cornerstone of game theory. For ten points, name this Hungarian-born genius for whom the processor and memory model of computer architecture is named.

Answer: John von Neumann

3. Located on the banks of the Adige River, this city was an important colony in Roman times, as it was the first city on the Italian side of the Lessini foothills, a branch of the Alps. Its location at the "gate" of the Po Valley made it a popular city to conquer after the fall of the Western Roman Empire; Theodoric the Ostrogoth built a castle at the cite of the present Castel San Pietro. Napoleon and the Austrian Empire at one point split, for ten points, what Italian city, most famous for being the origin of two Gentlemen in a Shakespere title.

Answer: Verona

4. He promulgated a policy of *Juche*, or self-reliance, although in reality his regime never has never gone without substantial aid from the Soviet Union, China, or — in the last years of his life — the United States. He ordered a change in the calendar system so that all recorded dates be referenced in accordance with the date of his birth. Originally born Sun Ju, he took the name of a dead anti-Japanese freedom fighter to capitalize on the other man's fame. For ten points, name this "Eternal Leader" and father of current North Korean dictator Kim Jong-II?

Answer: Kim Il-Sung
Prompt on "Kim"

5. This reclusive author published a collection of short stories called "Slow Learner," which is taken to be his most autobiographical and least deliberately obtuse work. One short story inside is *Entropy*, which discusses a "Heat Death," where intellectuall motion would according cease without the intervention of a Maxell's demon, a construct that reemerges in a lalter work. For ten points, name the author of "Vineland," "Gravity's Rainbow," and the book which marks the reappearance of Entropy as a social construct, "The Crying of Lot 49."

Answer: Thomas Pynchon

6. 121,500 men were shipped to Fort Monroe on March 17. "Prince John" Magruder's troops, however, were behind a formidable earthwork along the Warick river. On April 5, the plans for invasion were dashed by two things: Lincoln refused to release the forces under Irwin McDowell in northern Virginia and the Navy didn't want to engage the CSS Virginia. The uneventful battles of Williamsburg and Lee's counteroffinsive of the Seven Day's battles followed, thus saving Richmond. For ten points, name name this 1862 Union attempt to take the Confederate capital via the namesake geographical feature.

Answer: The Peninsular Campaign

7. After discovering the work of Cicero at the age of 16, he went on a spiritual journey that culminated in him becoming bishop of Hippo in 396. His work was centered on reconciling philosophy with Christianity, which he addressed in his *On Christian Doctrine*. For ten points, name this saint and church father, who published his 430 AD masterpiece, *The City of God*.

Answer: St. Augustine of Hippo

8. Their interiors may consist of heavy hyperons or a sea of free quarks. A convection-driven dynamo during the first 10 seconds of one's existence may result in a magnetar. Before the discovery of binary X-ray sources it was generally thought that they couldn't exist in binary systems, since too much mass would be blown away by the requisite supernova. Inverse beta decay generates the degeneracy pressure which supports these objects. For ten pointsname these objects with mass above the Chandrasekhar limit and a radius of about 10 km, whose types include pulsars.

Answer: neutron stars

Prompt on pulsar with "less specific"

9. The imperial regents William Slavata and Jaroslav Martinic were not following Rudolf II's "Letter of Majesty," and closed Bohemian Protestant chapels. Angered, the Protestants tried and convicted the regents, culminating in this event. For ten points, what spark of the Thirty Years War resulted in the regents and their secretary, Fabricus, being thrown out of a European city's castle's windows?

Answer: Defenestration of Prague

10. This past summer, this gallery commemorated its 1993 bombing by the Sicilian Mafia with a day of free admission. It houses Raphael's *Pope Julius II*, Da Vinci's *Adoration of the Magi*, and Michelangelo's *Holy Family*, though its most famous work is likely Sandro Botticelli's *The Birth of Venus*. For ten points, name this art museum comissioned by Cosimo de Medici and designed by Giorgio Vasari in Florence.

Answer: The <u>Uffizi</u> La Galleria degli Uffizi

11. The name's the same: Played by Austin Pendleton on screen, the elder, a linguist, learned to count in Menge and translated the story of the Amistad mutineers. His son's thesis on gear design got him the first Yale engineering Ph.D., and his later papers include an electrical theory of light, applications of vector analysis, and a geometric model of thermodynamic phase space. For ten points, name this father and son, the former of whom spent his free energy translating sacred literature and the latter of whom invented the concept of chemical potential.

Answer: J(osiah) Willard Gibbs

12. Timur warns his son not to call out the title character's name. To the surprise of everyone, including the advisors Ping, Pang, and Pong, Calaf succeeds in solving the princesses' riddles. He then challenges her to figure out his name by dawn. She reacts by ordering no one to sleep in the Forbidden City under penalty of death, to which Calaf responds with the beautiful aria, "Nessun Dorma." For ten points, name this opera of Puccini set in China.

Answer: Turandot

13. One definition is P-K4, P-K4, B-B4, B-B4, Q-R5, N-KB3, QxP; the second involves rapid concentration and deployment of mobile units in spearheads controlled by precise coordination and movement. In conjunction with carefully timed air strikes and supported by infantry, what is this tactic that was, for ten points, used with devastating effect by the Nazi armies that sped over the plains of Poland, France, and Russia.

Answer: Blitzkrieg

14. Alanus de Insulus is often considered to be an intellectual source for this novel and is mentioned several times by William of Baskerville; Alanus wrote *Complaint of Nature*, a diatribe against midieval sodomy and *Anticlaudianus*, a work that put learning and the liberal arts above pleasure. The murderer in this work was the blind "Venerable Jorge", who was trying to hide that Aristotle was pro-laughter. For ten points, what is this novel concerning a series of murders in in a remote, medieval monastery by Umberto Eco?

Answer: The Name of the Rose
Accept Il nome della rosa

15. They defeated the Chicago Bulls in the first round of the 1977 playoffs, then beat the Nuggets in six. The Conference Finals were touted as the "Battle of the Century," but Kareem and the pre-Showtime Lakers were swept in four. Their 109-107 Game Six win over the 76ers capped a miracle season fueled by the eponymous "mania" of their fans. For ten points, name this franchise, led by Bill Walton to their only championship, lately known for their players' drug arrests.

Answer: The Portland Trailblazers

Accept either

16. The main character of this novel changes names at a pivotal moment in the novel. As a girl, a rock thrown at her head leaves her near-death for six weeks, and she wakes up to find her mother mad. Eventually she is married off to an Englishman, but her husband begins to see that she is going insane as well. While drunk and raving, Antoinette pleads with her husband to stop calling her "Bertha," and that night is taken out of Jamaica. In England, she is kept under the care of Grace Poole and dreams about setting the house on fire. For ten points, name this novel by Jean Ryhs, a rewriting of Jane Eyre.

Answer: Wide Sargasso Sea

17. The Romberg integration technique uses multiple refinements of this method, also known as the closed 2-point Newton-Cotes formula. It results from dividing up the domain of integration into even intervals and interpolating the function with the 2-point Lagrange polynomials, which are simply line segments connecting the function values at the interval endpoints. For ten pointsname this integral approximation technique which uses quadrilaterals with sloping tops, intermediate in complexity between the midpoint rule and Simpson's rule.

Answer: trapezoidal rule

accept "closed 2-point Newton-Cotes formula" prior to mention in the question

18. The invention of this musical instrument was first heralded by Hector Berlioz in a Parisian journal in 1842, calling it the "ophicleéide à bec." It was however, relegated to military bands thanks to the inventor's ability to offend manufacturers. It made its orchestral debut in Georges Kastern's opera, Last King of Juda, and afterward appeard in a smattering of "respectable" works such as Wagner's Tannhauser, Symphonia Domestica by Strauss, and Bela Bartok's The Wooden Prince. For ten points,

what is this woodwind instrument based on the clarinet and invented by Adolphe Sax? *Answer:* Saxophone

19. The earliest mention of it is in *The Frogs* by Aristophanes, who noted that "[Our city] has fine new gold and ancient silver...yet we never use them." Copernicus, noting the tendencies of hoarders, was the first to propose a reaction to it as official policy, which was never adopted. It's namesake was the advisor to Elizabeth I and demonstrated that the debasing of currency by Henry VIII caused all the gold and silver to be used for trade. For ten points, identify this law which states that "bad money drives out good money."

Answer: Sir Thomas Gresham's Law

20. Derived from an Arabic term referring to a fine-metallic powder used to stain the eyelids, it's definition expanded in 1672 to mean "any subliminated substance." The "pure spirit of anything," this polar class of chemicals has pKa values typically in the range of 16-30 and contains a characteristic hydroxyl group. For ten points, name this class of compounds formed from fermentation of carbohydrates.

Answer: alcohols

## 2 USC A Bonuses, Round Alpha

- 1. Identify some famous landmarks in California for 5-10-15:
  - (a) This national park showcases the tallest trees in the 48 contiguous states.

Answer: Redwood National Park

(b) This is the highest point in the 48 contiguous states, located near Death Valley.

Answer: Mt. Whitney

(c) This is the lowest point in the 48 contiguous states, located in Death Valley.

Answer: Badwater basin

- 2. Supply the following answers that share a mystic connection, for ten points each.
  - (a) This, also known as the UH-1 Iroquois, began arriving in Vietnam in 1963. With more than 9,000 produced, it is the most widely used helicopter in the world.

Answer: Bell Huey

(b) This admiral defeated the Spanish at the Battle of Manila Bay.

Answer: George Dewey

(c) This French king was prevented from fighting off the Mongol invasions because of lack of manpower, but was the driving force behind the ill-fated Seventh and Eighth Crusades.

Answer: Louis IX

- 3. Identify the following well-known individuals who appear in Raphael's School of Athens based on their descriptions for ten points each.
  - (a) He shares the center of the frame, dressed in blue, and has a hand pointing down at the earth, as opposed to his counterpart who points upwards towards the heavens.

Answer: Aristotle

(b) He is in the bottom right corner of the fresco, explaining to onlookers geometrical figures on a small board.

Answer: Euclid

(c) He is standing near Euclid, holding a globe in his hand and is speaking with Zoroaster.

Answer: Ptolmey

- 4. Name these classic arcade videogames from their cheezy exclamations for ten points each or for five if you need a description.
  - 10 "Beware... I live."
  - 5 An evil asteroid with a face is built and tries to eat the player's ship.

Answer: Sinistar

- 10 "Some galactic defender you are, space cadet."
- 5 A multi-stage space shooter that ripped off other games like Space Invaders and Galaxian.

Answer: GORF

- 10 "Get the humanoid! Get the intruder!"
- 5 Your man is trying to escape rooms filled with armed robots and, occasionally, a bouncing, smiling ball called Evil Otto.

Answer: Berzerk

- 5. Name these Korean foods for ten points each:
  - (a) Translating to "fire beef," this dish is basically barbecued ... well beef, obviously.

Answer: bulgogi

(b) Literally meaning "mixed meal," it is a colorful dish with white rice, bits of meat, seasoned vegetables, and egg.

Answer: bibimbap

(c) Requiring a month to ferment, this dish of cabbage, turnip and cucumber spiced with red pepper, onion, and garlic is the most well-known Korean food.

Answer: kimchi

6. FTPE, name these poems from first lines.

(a) "April is the cruellest month"

Answer: The Wasteland by T.S. Eliot

(b) "Turning and turning in the widening gyre"

Answer: The Second Coming by W.B. Yeats

(c) "Of man's first disobedience, and the fruit"

Answer: Paradise Lost by John Milton

- 7. It's a small world after all. Identify these reproductive techniques of microorganisms FTPE:
  - (a) Bacteria reproduce as exually by this cell division process, which yields two identical daughter cells.

Answer: binary fission

(b) Paramecium also reproduce asexually, but under stress they reproduce sexually by this process, which allows two paramecia to fuse together and exchange genetic material.

Answer: conjugation

(c) Yeasts reproduce when the nucleus splits into two, and one nucleus migrates into a small lump on the side of the yeast, which eventually grows and breaks off.

Answer: budding

- 8. Answer the following questions about a certain French dynasty, for ten points each.
  - (a) This dynasty ruled from 476 to 750 and is generally considered the first French dynasty, tracing it's origins to a sea-monster.

Answer: Merovingian

(b) Though not the first Frankish king, this ruler of Gaul from 481 to 511 is considered the kingdom's political and religious founder.

Answer: Clovis I

(c) Childeric III, the last Merovingian, was deposed by Pippin the Short, marking the beginning of this dynasty.

Answer: Carolingian

9. For some reason, spirits often hang in groups of three, and so do the clues in this bonus! Identify each of the following FTPE:

(a) These avenging spirits from Greek mythology hounded Orestes for murdering his mother.

Answer: Furies

(b) These goddesses were the Norse version of the Fates.

Answer: Norns

(c) The three main gods of the Hindu tradition, comprise a group whose name means "having three forms."

Answer: Trimurti

- 10. FTPE, name these terms associated with musical tonality.
  - (a) This term denotes a smooth key change within a single piece of music, via chord progression or melodic progression.

Answer: Modulation

(b) This term describes the organization of keys or tonalities where each consecutive pair is a particular interval apart. The organization is in ascending order for sharp keys or descending order for flat keys.

Answer: Circle of Fifths

(c) This composition technique bases music on a sequence of tones in fixed order, without regard to traditional tonality. It describes, for example, the twelve-tone technique.

Answer: Serial composition

- 11. Death comes to us all. Given a character who dies within, name the famous literary work for ten points each.
  - (a) Valentine Michael Smith

Answer: Stranger in a Strange Land

(b) Nell Trent

Answer: The Old Curiosity Shop

(c) Edna Pontellier

Answer: The Awakening

- 12. Answer the following questions about terrorism in Southeast Asia, for 5-10-15:
  - 5 This past summer, individuals involved in the nightclub bombings in this Indonesian city were arrested.

Answer: Bali

10 This southeast Asian terrorist organization, which is believed to be responsible for the bombings, has heavy ties to Al-Qaeda.

Answer: Jemaah Islamia

accept JI, be lenient on varied pronunciations/spellings of "Jemaah."

15 This purported spiritual leader of Jemaah Islamia and highest ranking non-Arab in Al-Qaeda was also incarcerated, much to the dismay of extreme and even more moderate Muslims.

Answer: Hambali

13. Where there is any at all, the romance in J.R.R. Tolkien's writings tends to be ill-fated. For 10 points each, name these tragic figures from descriptions of their hapless love.

(a) In <u>The Return of the King</u>, this woman seeks death in battle rather than live with her hopeless love for Aragorn. Fortunately, she instead ends up killing the enemy commander and marrying a prince.

Answer: Éowyn

(b) In <u>The Silmarillion</u>, this man married a woman who turned out to be his sister Nienor.

Answer: Túrin Turambar

- (c) He went to visit Fimbrethil, who lived beyond the land of Anduin, but found only a desert there.

  \*\*Answer: Treebeard or Fangorn\*\*
- 14. For ten points each, answer the following questions about the Presidential election of 1860.
  - (a) This future Secretary of State was the front runner going into the Republican convention, but lost the nomination to Lincoln.

Answer: William Seward

(b) This man won 12.5% of the popular vote and the border states for the Constitutional Union Party.

Answer: John Bell

(c) Even though he had gained national fame for his debating skills, this "little giant" only took Missouri and New Jersey.

Answer: Stephen A. Douglas

- 15. Identify these athletes who erred at critical moments for fifteen points each.
  - (a) Even though he hadn't missed a kick all season, this man missed a game-deciding field goal that would have sent the Vikings to the 1998 Super Bowl.

Answer: Gary Anderson
As opposed to Morton

(b) This American tennis pro with an odd name finally defeated Jimmy Connors in 1979 after a 16-match losing streak versus him, saying "Nobody beats me 17 straight."

Answer: Vitas Gerulaitis

- 16. Answer these questions about the Buffy spin-off, Angel, for ten points each:
  - (a) What actor joined the cast of Angel this season, reprising his role as Spike?

Answer: James Marsters

(b) Angel and crew recently took charge of what evil law firm?

Answer: Wolfram & Hart

(c) Because of this odd career move as head of an evil law firm, Angel must now answer to the mysterious "Senior Partners" through this first-name only female messenger?

Answer: Eve

- 17. The plays of Samuel Beckett don't often have a lot of scenery to them, but what does appear is invariably striking in its bleakness. Therefore, can you name the play, for 10 points each, from elements of its (usually only) stage setting?
  - (a) A country road. A tree.

Answer: Waiting for Godot

(b) Two garbage cans. An armchair on casters.

Answer: Endgame

(c) A growing mound of earth.

Answer: Happy Days

- 18. Answer these things relating to organic chemistry.
  - (a) This is the general term for a carbon chain with at least one double bond.

Answer: Alkene or Olefin

(b) This period-two element, when attached to three hydrogens, has an empty p orbital that makes it suitable as an electrophile. It it also part of the second step in a mercuration reaction.

Answer: Boron

(c) You have an asymmetrical alkene with one double bond. You let it it undergo a hydroboration reaction, finishing with hydrogen peroxide and sodium hydroxide. What is added to the more, and less, substituted carbons?

Answer: The more substituted carbon will have a hydrogen added; the less substituted carbon will have a hydroxyl group (or <u>OH</u>) added.

- 19. Those crazy Canadians! Answer some questions about Canadian geography for ten points each:
  - (a) This is Canada's oldest incorporated city; also the capital of New Brunswick.

Answer: Saint John

(b) This city is the eastern most point in the North American continent (excluding Greenland)

Answer: St. John's

do not accept "St. John," no S

Located near Quebec City, this is a small section of town on the eastern side of the island of Ile

D'Orleans
Answer: Saint Jean

- 20. Identify the number on a 30-20-10 basis.
  - 30 It is the number of aphorisms in Tractatus Logico-Philosophicus.
  - 20 It is the number of bridges in the Königsberg bridge problem.
  - 10 The first prime happy number, it is the number of "Millennium Prize Problems" presented by the Clay Mathematics institute.

Answer: 7