

Berkeley 1 Technophobia Questions

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Tossups

1. In it, the title character hears "ancestral voices prophesying war," amid the tumult that arises when a "mighty mountain" is forced from a chasm, while the narrator marvels that there should exist a "sunny" structure with "caves of ice." The poet goes on to say the if he were able to capture the melody of the Abyssynian maid, he would build in air "that sunny dome, those caves of ice," so that all should cry, "Beware, beware! His flashing eyes, his floating hair." FTP, identify this poem in which the title character decrees a stately pleasure dome in Xanadu, written by Samuel Taylor Coleridge.

Answer: Kubla Khan

2. His first job was designing theatrical scenery for his father's company but after a visit to Rome, he turned to painting. Many of his most important clients were English collectors for whom he painted the various series of the views for which he is most famous. He visited England in 1746 and for a time was very successful with his views of London, but he is more famous for his topographically accurate depictions of his home city, including works such as Regatta on the Grand Canal and St. Mark's Basin. FTP, identify this painter of Piazza San Marco, Looking Southeast, and The Stone Masons' Yard, most famous for his depictions of everyday life in Venice.

Answer: Canaletto (Giovanni Antonio Canal)

3. (note to moderator: "Retherford" is not "Rutherford" misspelled; please make sure to pronounce it correctly and emphasize that difference)

Retherford helped demonstrate it with the colleague for whom it is named and Bethe, Feynman, Schwinger, and Tomonaga, among others, explained it by means of the quantization of the electromagnetic field. It comes up as a radiative correction in quantum electrodynamics and can be understood qualitatively through loops in Feynman diagrams. Although it is normally tiny, in the states of zero orbital angular momentum it accounts for about 10% of the fine structure. FTP, identify this eponymous change in the energy of hydrogen which explains why the 2S state of hydrogen is slightly higher in energy than the 2P state.

Answer: Lamb shift

4. Though he was not Greek, much like Acrisius he received a prophecy that he would be killed by his own grandson, and thus locked his daughter Ethlinn in a crystal tower. However, after Cian, son of Dian Cecht, infiltrated the tower and slept with Ethlinn, he threw Ethlinn's son into the ocean, where the child was rescued by Birog and given to Mannanan MacLir to raise. That child was Lugh of the Long Arm, who would lead the Tuatha de Danaan in the second battle of Mag Tuireadh against this man's armies. FTP, identify this evil king of the Fomorians, who was killed when Lugh put out his single eye with his slingshot.

Answer: Balor

5. After it was initially observed Johnson and Bolhuis found two distinct neural pathways that control it. In both the sexual and the filial varieties, it is followed by a finite critical period in which learning is extremely easy, explaining why songbirds learn their songs and human children under the age of 4 are able to pick up languages so easily. The sexual variety explains situations in which geese attempted to mate with people rather than with other geese and it, as well as the filial version were both first observed by Conrad Lorenz when observing a brood of baby geese. FTP name this biological process, in which young animals adopt the first beings they see as their parents.

Answer: Imprinting

6. His first short story is The Pension Grillparzer, about a traveling Austrian family and a unicycling bear. The son of a lobotomized technical sergeant and a proto-feminist nurse, his friends include his sarcastic, well-dressed editor John Wolfe, and Roberta Muldoon, a former tight end for the Philadelphia Eagles turned transsexual. His home life consists primarily of cooking, writing, and chasing after speeding motorists around his neighborhood. This is all, of course, before his assassination at the hands of a tongueless feminist zealot prior to the publication of his 2nd novel. FTP, this describes the life of what man, played by Robin Williams on screen, titular character of a 1980 John Irving Novel?

Answer: T.S. Garp

7. Although it was formally put to use in 1903 in the United States, particularly New York, it had long been used to prevent forgery and sign important documents. It soon entered practical use as the military adopted it for personal identification. Most of the common patterns to look for when doing this process are loops, whorls and arches. Used in dactyloscopy, for 10 points, name this process used to identify a person by matching the namesake objects to the things they've touched at a crime scene.

Answer: Fingerprints or Fingerprinting

8. According to legend, it was said to have been dug out by Paul Bunyan in order to float huge logs to a mill. It is also home to many species of whale including gray whales and orcas that migrate here, but their numbers have decreased due to polluted waters. Its chief waterways include the Juan de Fuca Strait and its ports include Port Angeles, and Anacortes. For 10 points, what is the name of the sound located in the Pacific Northwest near Seattle and Tacoma?

Answer: Puget Sound

9. Proposed in 1961 by 2 French scientists, its components include two attachment sites that are located between the regulatory gene and the structural gene. The two remaining components are the repressor proteins and the regulatory metabolite, but their binding

together is determined by whether or not this system is repressible or inducible. For 10 points, name this theory used to explain how cells control the production of enzymes.

Answer: Operon Theory (also accept lac-operon)

10. He dropped out of Ohio State University after 18 months with the lowest GPA in the school's history and moved to New York, where he wrote under numerous pseudonyms, most notably Cordwainer Bird. His collaborations with other authors include "The Song the Zombie Sang" with Robert Silverberg and "The Prowler in the City at the Edge of the World" with Robert Bloch. Among his short story collections are the books "The Beast that Shouted Love at the Heart of the World" and "Alone Against Tomorrow", as well as the collection whose title is shared by his most famous short story. FTP, identify this cranky science fiction author, most famous for the short story "I Have no Mouth and I must Scream".

Answer: Harlan Ellison

11. It can be used to derive the band gap in crystal lattices in the nearly free electron model from the interaction of the electrons and the ions that form the unit cells of the crystals. One of its most straightforward applications is in the Kronig-Penney model, in which the potential is composed of periodic square wells. Derivable from basic Fourier analysis, FTP, identify this eponymous quantum mechanical theorem which states that in a periodic potential, the wave function is a plane wave with a periodically modulated amplitude.

Answer: Bloch's Theorem

12. The Western Army was defending the mountain pass against the advances of the Eastern Army at the village from which this battle takes its name. Both Kobayakawa Hideaki and Wakizaka Yasuharu defected to the Eastern Army, while Shimazu Yoshihiro refused to obey his commander, leading to the Western Army's defeat. The losers had rallied around Toyotomi Hideori but were led by Ishida Mitsunari in, FTP, what October 21, 1600 battle, which saw Tokugawa Ieyasu emerge victorious with the largest army in Japan?

Answer: Sekigahara

13. His son Jordi currently plays for Deportivo Alaves, carrying on a family tradition of playing in Spain. He made his first team debut at just 16 against JAVV Groningen and in 1964 and in the following 10 years he won every major European competition with his first club, Ajax. In 1974, he moved to Barcelona and during his four years there won both the La Liga championship and the European Cup several times. From 1988 to 1996, he managed Barcelona, again leading them to numerous European titles. However, he is most famous as the architect of the famous Clockwork Orange total football style of play.

FTP, identify this Dutch player who led Holland to the 1974 World Cup Finals.

Answer: Hendrik Johannes (Johann) Cruyff

14. When first observed in 1833, they were thought to herald the coming of the apocalypse. This notion was later dispelled by scientists William Temple and Horace Tuttle in the mid-1860's, who correctly identified the comet from which they are emitted. Their parent comet was then again lost until being rediscovered by scientists at the University of Hawaii in 1965. FTP, this describes what series of meteors, which were most recently visible this past week?

Answer: Leonids

15. Once a government official, he was forced to turn into a fugitive after his failed assassination attempt against the tyrant Dong Zhuo. He managed to build up a strong following and defeated his strongest rival at the Battle of Guandu but his military and diplomatic skills failed him when he lost the Battle of Chibi against the forces of the Wu and Shu Kingdoms. For 10 points, name this ruler of Wei, long considered the villain during the 3 kingdoms period.

Answer: Cao Cao

16. In his conquest of Persia, Alexander the Great founded the city of Khudzand on its banks in 329 BC. Rising in the Tien Shan mountains, it forms the northern and eastern boundaries of the Kyzyl Kum desert. Flowing 1380 miles from the Fergana valley to the Aral Sea, this river is not fit for navigation but provides irrigation and hydroelectric power along its length. Formed by the confluence of the Naryn and the Kara Dary rivers FTP, what is this principal river of central Asia which passes through Kazakhstan, Tajikistan, and Uzbekistan?

Answer: Syrdarya

17. The eighth overall pick in the 1985 NBA draft out of Washington, the now defunct hoopstv.com once described this man's haircut as "the bastard offspring of a mullet and a crewcut." Despite this aesthetic handicap, though, he's managed to accumulate two Sixth Man of the year awards, three trips to the All-Star game, and average 13.9 points, 6.2 rebounds, and 3.4 assists over his 17-year career. Other teams he has played for include Dallas, Indiana, and most recently Portland, with whom he retired. FTP, name this NBA player, who at one point was touted as the next Larry Bird, and who would likely have gone down in history as the best German player ever, but will now probably have to settle for being remembered for his haircut, thanks to Dirk Norwitzki.

Answer: Detlef Schrempf

18. His doctoral thesis was titled Tatbestandsdiagnostik, or Facts and Diagnostics, and he completed it under the tutelage of Oswald Kulpe. His last work was titled Productive Thinking. Born April 15, 1880 in Prague, he started studying jurisprudence at the University of Prague in 1898, but would later switch to psychology. After a controversy with Carl Jung about word association techniques, he started working on his most famous theory, a project which would occupy him from 1910 until 1914. FTP, identify this collaborator of Wolfgang Kohler and Kurt Koffka and creator of Gestalt theory.

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Bonuses:

1. Identify these various fortifications and related battles FTPE.

10) This fortification line was a barrier of concrete and steel stretching across France's eastern frontier and its construction took place from 1928 until 1940, when France fell to Germany. It was named after Andre, Minister of War from 1928 to 1932.

Answer: Maginot Line

10) Although the man for whom it is named resigned from military office before it was built, this line built across Finland's border with the Soviet Union was named after the General who first proposed building it in 1918. During the Soviet invasion of Finland, Soviet armies suffered tremendous casualties while trying to breach this defensive line.

Answer: Mannerheim Line

10) The Schlieffen Plan required that German forces sweep through Belgium, but in order to use the Belgian corridor, they had to take this town first. Situated on the Meuse River, the siege of this city lasted from August 4 to 17 in 1914 and heralded the increased importance of fortifications in World War I.

Answer: Liege

2. Identify these literary works FTPE.

10) Told from the point of view of Todd Andrews, this John Barth novel is a biography of Andrews interwoven with his recounting of the day he decided to kill himself. He changes his mind after a visit to the titular showboat.

Answer: The Floating Opera

10) Gunter Grass tells the story of Johann Mahlke, a devoted worshipper of the Virgin Mary growing up in Nazi Germany, through one of Mahlke's friends. A war hero, Mahlke deserts and decides to hide out in a sunken minesweeper and is never seen again.

Answer: Cat and Mouse

10) Milan Kundera tells the story of seven people living in Czechoslovakia under Soviet occupation in the 60s and 70s. In the longest section, Tamina leaves her dreary life in Prague for a fantasy world where she eventually meets her death.

Answer: The Book of Laughter and Forgetting

3. Identify these elementary particles FTPE:

10) Martin Perl was awarded the 1995 Nobel Prize in physics for his discovery of this third lepton in 1975. With a mass of 1.7GeV it is the heaviest of the leptons.

Answer: Tau lepton (accept Tauon)

10) The neutral form of this strange meson demonstrates the only known instance of CP violation. It consists of either a strange/up or a strange/down quark/antiquark pair.

Answer: Kaon (or K meson)

10) Owen Chamberlain and Emilio Segre shared the 1959 Nobel Prize in physics for the discovery of this particle. Recently, the ATHENA experiment at CERN has managed to make antihydrogen with it.

Answer: antiproton

Answer: Max Wertheimer

19. Arguably the most famous two-odd minutes of the larger composition from which it is taken, it is an excellent example of its composer's style and the style of the countries where he was born and grew up. Composed in 1942 it comes from a ballet set on a collective farm in the cotton-growing district of Armenia, and concerns an Armenian woman who rids the town of her lazy husband and shows the virtues of communism. FTP, identify this excerpt from the ballet Gayane, composed by Khachaturian, that brings to mind swordplay?

Answer: Sabre Dance

20. The name is the same. The first lasted less than 50 years and dated from the fall of Jerusalem in 586 BC until the reconstruction of a new Jewish state in Palestine around 539 BC. The second began with the evacuation of Clement V, and lasted until roughly 70 years, until Gregory XI made the decision to return to the Papal States, resulting in the great schism. FTP, what is this term, describing either a time spent in exile by Jews or the time the papacy spent in Avignon?

Answer: Babylonian Captivity

21. Developed in the mid-1990s by scientists at Salton Foods, Inc. along with the multi-talented genius for whom it is named, it went on to take the cooking world by storm. Equipped with patented grooved design which allows it to cook an average-sized steak dish in less than 5 minutes and helps knock out the fat, it is now available with a number of different colored plastic covers. This describes, FTP, what eponymous cooking implement named for a boxer?

Answer: George Foreman's Lean, Mean, Fat-reducing grillin' Machine

22. Born in Vienna during the 1870s, he caught pneumonia at a young age and vowed to be a doctor to fight such disease. He went on to acquire his M.D. from the University of Vienna and published his first book about the conditions of tailors in 1898 that set the foundation for his school of thought that stressed on looking at man as an entity. For 10 points, name this man who developed the field of a holistic, humanistic outlook on human beings.

Answer: Alfred Adler

4. Identify some things from The Hitchhiker's Guide to the Galaxy books FTPE.

10) In Restaurant at the End of the Universe, Zaphod must get in to see this man, but according to his receptionist, he is too cool to see Zaphod right now. He's on an intergalactic cruise.

Answer: Zarniwoop

10) In Mostly Harmless Arthur and Ford ride through an interdimensional portal on the backs of one of these creatures. The fact that their herds travel through the dimensions suggests that their ordinariness is exaggerated.

Answer: Perfectly Normal Beast

10) In Life, The Universe, and Everything, Marvin strikes up a conversation with a mattress on this planet. The mattress, like all the mattresses on this planet, is named Zem.

Answer: Squornshellous Zeta

5. Identify these mythical objects from various mythos FTPE:

10) In the Kalevala, Ilmarinen forged this wondrous mill which could grind out prosperity or death depending on who was wielding it. Ilmarinen had to retrieve it when it fell into the hands of the rulers of Pohjola.

Answer: Sampo

10) Before his death at the hands of the Saracens, the French hero Roland attempted to shatter this sword, though some legends have him disposing of it in a poisoned stream.

Answer: Durandal

10) This magical fetter of Norse mythology was made of a cat's footfall, a woman's beard, and a fish's breath, among other materials.

Answer: Gleipnir

6. Identify the artists from works FTPE:

10) Among his best known works are St. James Being Led to Martyrdom and The Dead Christ. He invented di sotto in su perspective in his major work Camera degli Sposi

Answer: Andrea Mantegna

10) Though he painted works such as Adam and Eve he is better known for such woodcuts as The Four Horsemen and Melancholia, which contains a depiction of a magic square.

Answer: Albrecht Durer

10) He sculpted such works as Cupid and Psyche as well as sculptures of Napoleon and Pauline Bonaparte and worked on the tombs of two popes, Clements XIV and XIII. He probably best known for his Perseus With the Head of Medusa.

Answer: Antonio Canova

7. Given the components of a mixed drink, name it FTPE

10) 2 ounces of Southern Comfort, 1 ounce of cranberry juice, _ oz. lime juice

Answer: Scarlett O'Hara

10) 1 Oz. Vodka, _ Oz. Peach Schnapps, 6 oz. orange juice, 1 orange slice, ice

Answer: Fuzzy Navel

10) 1 oz. 151-proof rum, _ oz melon Liqueur, 4 oz orange juice, crushed ice

Answer: Rain Man

8. Answer some questions about celestial motion FTPE:

10) In the rotational motion of the earth, this phenomenon is responsible for the Earth's north and south poles tracing out a wavy circular path. In general, in the presence of an external torque, this term designates a small oscillation superimposed on precession.

Answer: nutation

10) Henri Poincare is considered to be the father of nonlinear mechanics and chaos theory for his studies of this problem. His demonstration of the extreme sensitivity to initial conditions won him a prize in a Norwegian mathematics competition in 1887.

Answer: three body problem (accept N-body problem)

10) In the classical two body problem, when the eccentricity of the orbit exceeds 1, the two bodies no longer orbit each other and this type of orbit is the result.

Answer: hyperbolic orbit

9. Identify these characters from One Hundred Years of Solitude FTPE.

10) He had 17 sons, all of whom were executed for rebellion, and he waged guerilla warfare against the federal government for many years. He also shot himself in the chest and survived. The book opens with his remembrance of how his father once took him to see ice.

Answer: Colonel Aureliano Buendia

10) She is the matriarch of the Buendia family. She lives to be 130 years old, but is blind towards the end of her life. Although in her old age she was fat, in death she shrinks to the size of a small child

Answer: Ursula

10) The daughter of Arcadio and Santa Sofia de la Piedad, she is the most beautiful of all the Buendias and three men die in an attempt to gain her love. One day she is lifted alive up to heaven by angels.

Answer: Remedios the Beauty

10. Name these 1980's One-Hit-Wonders given songs F5PE

5) Too Shy

Ans: Kajagoogoo

5) 867-5309 (Jenny)

Ans: Tommy Tutone

5) Electric Avenue

Ans: Eddy Grant

5) Somebody's Watching Me

Ans: **Rockwell**

5) Der Kommissar

Ans: **After The Fire** (Also accept **Falco**)

5) One Night In Bangkok

Ans: **Murray Head**

11. Identify these rulers of the Ottoman Empire FTPE.

10) This man who ruled from 1520 to 1566 tried to take Vienna in 1526 but was thwarted by the weather. His rule saw a flowering of Ottoman culture, but he was the last of the great Ottoman rulers and following his rule, the empire declined steadily.

Answer: **Suleiman the Magnificent** (or **Suleiman I**)

10) This son of Suleiman succeeded him and ruled from 1566 until 1574, during which time he oversaw the disastrous loss to the Holy League at Lepanto. His frequent drinking earned him the nickname "the Sot".

Answer: **Selim II**

10) Giovanni Bellini traveled to Constantinople in 1479 to paint a portrait of this son of Sultan Murad II. He is most famous for taking Constantinople in 1453, just two years after he came to power. Appropriately enough, he was known as "the Conqueror".

Answer: **Mehmet II** (Accept **Mohammed II**)

12. Identify these phenomena of animal behavior FTPE.

10) This describes conspicuous markings on an animal developed over time to help deter predators. Examples include the bright skin of poison dart tree frogs and the stripes of bees and wasps.

Answer: **Warning** or **Aposematic Coloration**

10) In this relationship, a harmless animal adopts the warning coloration of a poisonous or more dangerous animal in order to protect itself from predators. Examples of such pairs include the monarch and viceroy butterflies.

Answer: **Batesian Mimicry** (prompt on partial answer)

10) In this relationship, groups of harmful animals all develop similar colorations to help deter predators. Examples include the similar colorations of bees, wasps, and hornets.

Answer: **Mullerian Mimicry** (prompt on partial answer)

13. Name some terms related to samurai weaponry for 10 points each.

10) This is the Samurai longbow. Due to the configuration of the grip, it can be used from horseback as easily as on foot.

Answer: **Daikyu**

10) This is the long sword used by samurai. It usually had a curved blade that extended 4 feet with one edge to it.

Answer: **Katana**

10) A shorter blade than the katana, this samurai short sword's blade length of 18 inches made it a good sword to use when fighting opponents indoors.

Answer: Wakizashi

14. Name some random facts pertaining to whales FTP each.

What is the scientific suborder that covers toothed whales?

Answer: Odontoceti

This largest member of the suborder Odontoceti can dive farther than any known mammal on earth in order to hunt giant squid.

Answer: Sperm Whale

Because sperm whales cannot digest the squid's beak, the intestine secretes a cholesterol derivative known by this name.

Answer: Ambergris

15. Identify these athletes from Northwest Ohio FTSNOPE.

5) Named Ohio Mr. Football while at Fremont Ross, he later went on to win the Heisman while at Michigan and currently plays cornerback for the Oakland Raiders.

Answer: Charles Woodson

10) He plays every year in the pro-ams at his eponymous LPGA event. However, he is better known as Corporal Klingler.

Answer: Jamie Farr

15) He graduated from the now defunct Toledo Macomber in 1989. After which he averaged 19.2 points per game for Ohio State and was selected 4th overall by the Dallas Mavericks in the 1992 NBA Draft.

Answer: Jim Jackson

16. Identify the work given a list of the characters, 30-20-10.

30) Thomas Perez, Emmanuel, Masson

20) Salamano, Raymond Sintes, Celeste

10) Marie Cardona, Meursault

Answer: The Stranger (or L'etranger)

17. 30-20-10 identify the body of water

30) It's deepest point is 2,000 ft. in the Bear Island Trench.

20) It covers 542,000 square miles and is surrounded by Norway, Russia, and the Greenland Sea.

10) It is named after a Dutch explorer who died trying to find the Northeast passage.

Answer: Barents Sea

18. Identify the art movement from prominent members FTPE.

10) Maurice de Vlaminck, Pierre Marquet, Henri Matisse

Answer: Fauvism

10) Jean-Honore Fragonard, Maurice La Tour, Jean-Antoine Watteau

Answer: Rococo

10) William Glackens, Everett Shinn, Maurice Prendergast

Answer: Ash Can

19. Give the highest mountain in the following mountain ranges for 10 points each.

10) Ural Mountains

Answer: Naroda

10) Alps

Answer: Mt. Blanc

10) Sierra Nevada

Answer: Mt. Whitney

20. 5-10-15 identify the Pixar Films from clues.

5) This animated short film won a 2001 Oscar for a story about birds sitting on a wire.

Answer: For the Birds

10) This animated short film won the 1997 Oscar for a story about an old man who cheats at chess.

Answer: Geri's Game

15) This animated short film won the 1986 Oscar for the story of a young lamp playing with a ball.

Answer: Luxo Jr.

21. Name the contemporary authors given works FTPE

10) *Glamorama*, *Less Than Zero*, *American Psycho*

Answer: Bret Easton Ellis

10) *Survivor*, *Invisible Monsters*, *Lullaby*

Answer: Chuck Palahniuk

10) *Riven Rock*, *The Tortilla Curtain*, *Stories*, *The Road to Wellville*

Answer: T. Coraghessan Boyle

22. Name the NBA team, given players on their 2002-2003 roster FTPE, or for 5 if you need better-known players.

10) Greg Buckner, Brian Skinner, Derrick Coleman

5) Eric Snow, Aaron McKie, Allen Iverson

Ans: Philadelphia 76ers (accept one or both)

10) Robert "Tractor" Traylor, Stacey Augmon, Courtney Alexander

5) David Wesley, Jamal Mashburn, Baron Davis

Ans: New Orleans Hornets (accept one or both, but not Charlotte)

10) Eric Piatkowski, Sean Rooks, Keyon Dooling

5) Corey Maggette, Andre Miller, Michael Olowokandi

Ans: Los Angeles Clippers (prompt on Los Angeles)