

Valencia Delta Burke Invitational 2013
Round 8

1. Santhara is a specific type of this action that is acceptable for the most extremely devout Jains. One Buddhist scripture suggests this action is acceptable for an arhat who has attained nibanaa, or “consciousness,” but not for the unenlightened, as this action adds to negative karma in the next life. One Hadith has Muhammed state that the method one uses to undertake this action will have to be repeated forever in hell. The Catholic catechism of 1997 states that this action is contrary to the natural inclination to preserve life, though Canon Law no longer denies church burial to those who do it. FTP what is this action undertaken by Judas Iscariot after betraying Jesus?

ANSWER: suicide (accept equivalents like killing yourself)

2. This compound names a reaction discovered by Zimmerman in which 1,4-dienes are rearranged to cyclo-propanes. This compound and water are formed in the Sabatier reaction. The visible clouds on Uranus are composed of this compound. Climate change during the Quaternary period was caused by the release of this compound according to the clathrate gun hypothesis. This compound, along with water, ammonia, and hydrogen, were used in the Miller-Urey experiment. This simplest alkane is also the simplest compound with tetrahedral geometry in VSEPR theory. For 10 points, name this main constituent of natural gas that has formula CH₄.

ANSWER: methane [accept CH₄ or marsh gas before mentioned]

3. One of this author’s characters kills all of the nuns in a convent with poisoned rice and later frames the friar Jacomo for the murder of another friar named Barnardine. The “Baines note” quotes this author as saying that “they who love not tobacco and boys [are] fools.” He wrote about a character who boxes the pope’s ears after giving grapes to the Duchess of Vanholt. One of his characters, the father of Abigail, kills his Turkish servant Ithamore before being tricked into falling into a pot of boiling oil. He also wrote about a scholar who sells his soul to Mephistophilis. For 10 points, name this author of *The Jew of Malta* and *Doctor Faustus*.

ANSWER: Christopher Marlowe

4. One work by this man inspired a copy called the Kaufmann Head, and his own partial works include the Leconfield and Aberdeen heads. This man used Phryne as a model for his work that depicted a nude goddess using her right hand to shield her pelvis. Another sculpture by this man depicted a god leaning against a tree using an arrow to kill a lizard. This sculptor of *Aphrodite of Cnidus* and *Apollo Sauroctonos* also depicted the messenger of the gods carrying a very young god of wine. For 10 points, name this Greek sculptor of *Hermes and the Infant Dionysus*.

ANSWER: Praxiteles

5. Members of this group were attacked in the 1832 book “A Plea for the West” by Lyman Beecher. At an 1884 gathering of Republicans, Samuel Birchard famously linked people of this group in a phrase with “rum” and “rebellion,” a statement which some believe cost James G. Blaine the election. In 1928, Al Smith became the first member of this group to earn a major party nomination for president. A 1960 presidential candidate who was a member of this group emphasized his support for the separation of church and state to the Greater Houston Ministerial Association due to concerns he would take orders from Rome. FTP John F. Kennedy was the only president to be of what Christian denomination?

ANSWER: (Roman) Catholicism (Church)

6. This author portrayed a conversation between a mother and son about an unknown skeleton buried in their cellar in "The Witch of Coös" [co-us]. A "buzz saw" that "snarled and rattled" cuts off the hand of a boy who dies to little fanfare in this author's poem "Out, Out--." The speaker of another of his poems strives to unite his "avocation and [his] vocation" while denying the title characters work in "Two Tramps in Mud Time." The speaker says he'll be describing his choice "with a sigh" ages hence in a poem set in a "yellow wood." FTP who wrote "The Road Not Taken" and "Stopping by Woods on a Snowy Evening"?

ANSWER: Robert Frost

7. A song with this name allegedly shares its title with the card carried by Hamburg, Germany prostitutes that proves the absence of sexually transmitted diseases. A game with this name has an expansion in which Alvin the Alien and Dexter the Dinosaur are characters. In that game with this name, players collect matching train cards in order to acquire railway routes connecting cities. The song with this title ends "My baby don't care" repeated several times. That song with this title begins "I think I'm gonna be sad / I think it's today." For 10 points, name this song from the album *Help!* by the Beatles in which the speaker states "The girl that's driving me mad / Is going away."

ANSWER: Ticket to Ride

8. One test of this theory involved measuring the periastron time of the Hulse-Taylor binary pulsar, and another used gyroscopes to measure the geodetic drift rate. Alternatives to it include Brans-Dicke theory, which adds an extra scalar field. Theodor Kaluza added an extra spatial dimension to this theory, which is built upon ten coupled hyperbolic and elliptic partial differential equations. In addition to frame-dragging, this theory correctly predicted that the presence of matter curves space-time. A principle central to this theory is the equivalence of gravitational and inertial mass. For 10 points, name this theory formulated by Einstein that expanded upon special relativity.

ANSWER: general relativity [prompt on "relativity;" do NOT accept "special relativity"]

9. This action was carried out on the body of Gaspard de Coligny after he was stabbed in the St. Bartholomew's Day Massacre. Abraham Lincoln performed this action to deny Democrats in the Illinois legislature a quorum for a vote in 1840 after Democrats locked the chamber doors. After fire and smoke inhalation, this action led to the deaths of many victims of the Triangle Shirtwaist Fire. Wenceslaus IV legendarily died from shock after one event of this type in 1419, in the same city where four Catholic regents suffered this action but survived due to the fortuitous placement of a manure pile. FTP what are these actions, two famous examples of which occurred in Prague.

ANSWER: defenestrations (accept "jump[ing] out of a window")

10. In this mountain range, the British airliner *Star Dust* disappeared over its Mount Tupungato in 1947. That peak is connected to another more famous peak by the Uspallata Pass, which, though not in Rio, features a notable statue of *Christ the Redeemer* of this mountain range. Due to the Earth's equatorial bulge, a dormant volcano in this range is the spot in the world farthest from the center of the Earth. In addition to Chimborazo, this mountain range features the tallest peak in the western hemisphere, Mount Aconcagua. Running from Venezuela to Chile, for 10 points, name this longest continental mountain range in the world which extends for most of the western coast of South America.

ANSWER: Andes

11. This author collected numerous stories based on creative retellings of crimes and folk tales, such as Hakim, the Masked Dyer of Merv, in the book *A Universal History of Infamy*. An encyclopedia entry about a fictional land of Asia Minor leads the narrator to the discovery of a plan to create a different fictional world in this author's "Tlon, Uqbar, Orbis Tertius," while in another story the universe comprises an infinite series of hexagonal rooms contained with books, "The Library of Babel." FTP what Argentine author also described a point in which one can see all other points in the universe from all angles simultaneously, "The Aleph"?

ANSWER: Jorge Luis Borges

12. The idea of cultural hegemony as the primary tool of enforcing the capitalist state comes from writings done in one of these locations. Besides those "notebooks" written by Antonio Gramsci, another work subtitled for the "birth of" these places begins by describing the gruesome execution of a regicide and then examines the idea of the "panopticon" as a method of surveillance and control in these places. Foucault's *Discipline and Punish* came after a study of the psychological effects of the roles of those in these institutions was cancelled when some student participants became too abusive. FTP what types of institutions are studied by penologists, a replication of which was conducted by Philip Zimbardo at Stanford?

ANSWER: prison

13. One thinker from this country argued that man's inability to be certain of god's existence is one cause of the title condition in the book *The Tragic Sense of Life*. Another author from this country attacked the "mass-men" of this country and called for the "select-man" to assert himself in his book *The Revolt of the Masses*. That same author decried the fragmenting of this country in a book describing it as "Invertebrate" at the dawn of a civil war there in 1937. FTP Miguel de Unamuno was a member of the Generation of '98 in what European nation, home also to Jose Ortega y Gasset?

ANSWER: Spain

14. As Chancellor of the Exchequer, this politician pushed the "Imperial Preference" tariff that had first been proposed by his father, Joseph. This politician was ousted after declaring, "I have friends in this house," during the Norway Debate, and this man's brother Austen won the Nobel Peace Prize for his part in negotiating the Locarno Treaties. This man's concession of the Sudetenland caused him to proclaim that he had achieved "Peace in our time with honor." Known for signing the Munich Pact with Adolf Hitler, FTP, name this Conservative Prime Minister who was succeeded by Winston Churchill.

ANSWER: Neville Chamberlain

15. These cells are eliminated through activation-induced cell death. A subtype of these cells differentiate in the presence of IL-12 from macrophages. These cells express CD28, which binds to B7 as part of their activation. CD3 is a signal-transduction molecule for their receptors, which recognize cell-bound peptides. These cells are often located in para-cortical areas of lymph nodes. MHC class I molecules interact with their cytotoxic type, and MHC class II molecules interact with their helper type. For 10 points, name these lymphocytes that develop in the thymus.

ANSWER: (helper) T cells or lymphocytes [prompt on partial answer or "white blood cells"]

16. Pelias earned the ire of this goddess for killing his stepmother Sidero while she hid in a temple to this goddess. While posing as an old woman, she caused Jason to lose one sandal in the river Anaurus, inadvertently triggering the quest for the Golden Fleece. In gratitude for being saved from Porphyron during the Gigantomachy she gave her daughter Hebe as a wife to Heracles, though earlier she had sent serpents to kill him as a baby. This goddess cursed Echo, Lamia, and Dionysus's mother Semele while attempting to circumvent her husband's many affairs with mortals. For 10 points, name this Greek goddess of women, the wife of Zeus.

ANSWER: Hera

17. This author wrote a work in which Henry Morley climbs Matterhorn Peak after Japhy Ryder introduces Ray Smith to "Yab-Yum" rituals. A cabin on Bixby Canyon owned by Lorenzo Monsanto is the setting of another of his works in which Cody Pomeray's mistress Billie lives with the narrator, Jack Duluoz. His best-known novel sees the narrator stay in New Orleans with Old Bull Lee after hitch-hiking to Denver to meet up with Carlo Marx and Dean Moriarty. For 10 points, name this author of *The Dharma Bums* and *Big Sur*, who fictionalized himself as Sal Paradise in *On the Road*.

ANSWER: Jack Kerouac

18. This composer of *Rinaldo* got John Gay to write a libretto for his opera in which "No joy shall last" is sung by Polyphemus about *Acis and Galatea*. He included "La Rejouissance" as the 4th movement of a work written to celebrate the Treaty of Aix-la-Chapelle. Another of his works premiered on the River Thames and was commissioned by George I. This composer of *Music for Royal Fireworks* and *Water Music* included the "Hallelujah" chorus in his most famous oratorio. For 10 points, name this composer of *Messiah*.

ANSWER: George Friedric Handel

19. In the exciting world of differential equations, the Laplace transform of this function equals s over the quantity s -squared plus a -squared. The hyperbolic form of this function is found in the equation of a catenary and equals e to the x plus e to the negative x all over two. In calculus, the Maclaurin series for it begins one minus quantity x -squared over two factorial. Its namesake law and the Pythagorean theorem are equivalent when this function is zero. The derivative of this function is negative sine, and its reciprocal is secant. For 10 points, name this trig function that equals the length of the adjacent side over the hypotenuse for an acute angle in a right triangle.

ANSER: cosine [or cos]

20. The presidential election of this year saw Florida senator Bob Graham's only campaign, though he dropped out before the primaries. One Democratic candidate of this year was derided for saying he believed man would someday travel faster than light to space; that candidate was endorsed by Madonna and was retired general Wesley Clark. Some Republicans were criticized for wearing "Purple Heart Band-Aids" at the Republican Convention, mocking the Democratic nominee, whose time in Vietnam was attacked by ads that created the term "swiftboating." For 10 points, in what election did John Kerry lose to incumbent George W. Bush?

ANSWER: 2004

Delta Burke 2013
Round 8 Bonuses

1. Show off your knowledge of the crucial presidency of Chester A. Arthur. FTPE:

[10] In 1882, Arthur signed a ten-year moratorium on the immigration of laborers from this Asian nation, workers from which were derogatorily referred to as “coolies.”

ANSWER: China

[10] Arthur’s introduction of civil service reform angered many in this faction of the Republican Party, of which he was a part. This faction was led by Roscoe Conkling and opposed by the Half-Breeds.

ANSWER: Stalwarts

[10] Charles Guiteau’s assassination of this president allowed for Arthur’s succession to the presidency.

ANSWER: James Garfield

2. In this experiment, which was performed in 1909, a zinc sulfide screen was used to detect the alpha particles that were fired at a very thin sheet of the namesake metal element. FTPE:

[10] Name this scientific experiment that led to the discovery of the atomic nucleus.

ANSWER: Rutherford gold foil experiment [prompt on "Geiger–Marsden" but don't mention]

[10] Although often named for Rutherford, the gold foil experiment was actually performed by Ernest Marsden and this man, whose namesake "counter" is used to measure radioactivity.

ANSWER: Hans Geiger

[10] The alpha particles in the gold foil experiment were generated by the decay of this element. Charcoal canisters can be used to detect this noble gas, which is a cause of indoor air pollution.

ANSWER: radon

3. This figure had a “false” doppelganger who seduced her husband, according to Malory’s *Morte d’Arthur*. FTPE:

[10] What daughter of Leodegrance was the wife of King Arthur?

ANSWER: Guinevere

[10] Guinevere brought the Round Table to Camelot as part of her dowry; what seat at that table was reserved for the knight who found the Holy Grail?

ANSWER: Siege Perilous

[10] Arthur was tricked by his half-sister Morgause into a sexual encounter that produced this bastard, who fatally wounds Arthur before dying at the Battle of Camlann.

ANSWER: Morgause

4. According to one Swiss thinker’s four-stage model of cognitive development, during this stage infants begin apprehending the world. FTPE:

[10] What first stage in this model lasts until significant language acquisition?

ANSWER: sensorimotor stage

[10] This Swiss psychologist created that four-stage model, also including pre-operational, concrete operational, and formal operational.

ANSWER: Jean Piaget

[10] One ability acquired during the sensorimotor stage is this recognition that things don’t cease to exist when they are not visible, like a parent’s face being covered during peek-a-boo games.

ANSWER: object permanence

5. Born Mary Ann Evans, this author took on a male pseudonym so her works could be judged on their own merit. FTPE:

[10] Under what pen name did she publish novels like *Silas Marner* and *Middlemarch* in the 19th century?

ANSWER: George Eliot

[10] This author of *Little Women* used the masculine pen name A.M. Barnard for her early stories.

ANSWER: Louisa May Alcott

[10] Another female who took the name George was Amandine Aurore Dupin (doo-pan), who wrote novels like *Indiana* but may be better known for being the lover of Frederic Chopin.

ANSWER: George Sand

6. Thales thought this substance was the fundamental substance of the universe. FTPE:

[10] What is this substance on which Thales thought the earth floated?

ANSWER: water

[10] Thales was founder of the Milesian School, one of many Greek philosophical movements characterized by this term referring to philosophies prior to the time of the thinker sentenced to death for corrupting the youth of Athens.

ANSWER: pre-Socratic (prompt on "Socrates"—they have to listen!)

[10] Water was one of the four Classical elements put forward by this thinker who apocryphally jumped to his death in Mount Etna.

ANSWER: Empedocles

7. This dynasty, which was divided into Marwanid and Sufyanid periods, was overthrown after its defeat at Zab River. FTPE:

[10] Name this Caliphate that was founded by Muawiyah, and beat Muhammad's grandson Hussein at the Battle of Karbala.

ANSWER: Umayyad Caliphate

[10] The Umayyad Caliphate was ruled from this city, now the capital of modern-day Syria.

ANSWER: Damascus

[10] Umayyad forces under Abd ar-Rahman were defeated by Charles Martel at this 732 battle fought in northern France.

ANSWER: Battle of Tours or Poitiers

8. American missionary Kenneth Bae was sentenced to 15 years of labor in this country. FTPE:

[10] Name this Asian country whose "Supreme Leader" is Kim Jong Un.

ANSWER: North Korea [or Democratic People's Republic of Korea; or DPRK]

[10] This man called on "friend for life" Kim Jong Un to "do me a solid and cut Kenneth Bae loose." This former basketball player has made two recent trips to North Korea.

ANSWER: Dennis Rodman

[10] This woman, the host of *The Hot Box* on CNBC, was kidnapped in North Korea on a "Hot Blondes in Weird Places" initiative. Her ex-husband works for the NBC division of Kabletown.

ANSWER: Avery Jessup [accept either]

9. One of these biomes in Africa is home to *Welwitschia* [wel-WICH-ee-ah] *mirabilis*. FTPE:

[10] Name these arid biomes home to plants that conserve water using CAM photosynthesis.

ANSWER: deserts

[10] These plants are adapted to dry climates. They often have wax on the epidermal cells of their leaves to reflect light. Examples of these plants include succulents such as cacti.

ANSWER: xerophytes

[10] These structures in the epidermis of CAM plants are open at night. Surrounded by guard cells, these pores allow carbon dioxide to enter and oxygen to exit.

ANSWER: stomata [or stoma; or stomates]

10. During the final adagio of this symphony, in its original performance, musicians got up one by one when their parts ended, snuffed a candle, and left the stage. FTPE:

[10] What 1772 symphony was meant to suggest to the composer's patron, Prince Esterhazy, that the musicians should be allowed to break to see their families.

ANSWER: "Farewell" Symphony or Symphony No. 45

[10] The Farewell Symphony is a work by this "father of the symphony," composer of the "Drumroll" and "Military" symphonies. His works are arranged in the Hoboken Catalogue.

ANSWER: Franz Josef Haydn

[10] Haydn wrote works nicknamed "Sun," "Prussian," and "Russian" for this type of musical ensemble that often features two violins, a viola, and a cello.

ANSWER: string quartet

11. This dramatic character has a problem with shoplifting, and he works with his brother on the "Florida idea." FTPE:

[10] What brother of Happy steals Bill Oliver's pen and shatters his father's dreams?

ANSWER: Biff Loman

[10] Biff appears in this Arthur Miller play, the title figure of which is his father, Willy.

ANSWER: Death of a Salesman

[10] Joe Keller kills himself at the end of this earlier Miller play due to his guilt in shipping defective airplane parts that led to the deaths of over 20 American pilots in WWII.

ANSWER: All My Sons

12. In this religion, male priests are houngans and female priests are mambos. FTPE:

[10] Name this syncretic religion prominent in Haiti and Louisiana, whose practitioners only rarely stick pins into dolls.

ANSWER: Voodoo

[10] The distant Voodoo god Bondye communicates with mankind through this group of spirits. Members of this group include Papa Legba, Maman Brigitte, and the skeletal Baron Samedi.

ANSWER: Loa

[10] This other syncretized religion borrowed practices from the Yoruba people and combined them with Roman Catholicism. Its Orisha spirits serve as manifestations of the god Olorun.

ANSWER: Santeria

13. This organization was founded in 1908 on the orders of Teddy Roosevelt. FTPE:

[10] What law-enforcement agency was led by J. Edgar Hoover from 1924 to 1972, taking on its current name in 1935?

ANSWER: Federal Bureau of Investigation

[10] Hoover came to prominence in the Bureau due to his efforts during these actions to arrest and deport leftists and labor leaders, named for the Attorney General in 1919.

ANSWER: Palmer Raids

[10] One of the Bureau's first efforts was enforcement of this act prohibiting the transporting of women across state lines for "immoral purposes," at the time also known as the "White Slavery Act."

ANSWER: Mann Act

14. Its inverse is elastance, and it was originally measured in units of "jars." For 10 points each:

[10] Name this quantity, the stored electric charge, which is now measured in farads.

ANSWER: capacitance

[10] These insulating materials are placed between capacitors in order to increase capacitance.

ANSWER: dielectrics

[10] This value for a circuit consisting of a capacitor and resistor in series is equal to resistance times capacitance, or R times C. This value represented by tau is the number of seconds required to charge a capacitor 63.2% of its maximum voltage or to discharge it 36.8% of its final voltage.

ANSWER: time constant

15. This author's early novel *Poor Folk* is told in letters. FTPE:

[10] What Russian novelist portrayed a man who says his "liver is diseased" in *Notes from Underground* and the naïve Prince Myshkin in *The Idiot*?

ANSWER: Fyodor Dostoevsky

[10] Novels like *Poor Folk* which are told through letters are described by this ten-letter adjective.

ANSWER: epistolary

[10] Notably not an epistolary novel is this Dostoevsky work in which Porfiry Petrovich pursues Raskolnikov.

ANSWER: *Crime and Punishment*

16. One work by this artist was lampooned as an "explosion in a shingle factory," and another work was the ready-made *Fountain*, which was signed R. Mutt and was actually just a urinal. FTPE:

[10] Name this Frenchman who painted *Nude Descending a Staircase, No. 2*.

ANSWER: Marcel Duchamp

[10] Marcel Duchamp notably painted a mustache on a reproduction of this Leonardo da Vinci portrait that is located in the Louvre, and depicts the wife of Francesco del Giocondo.

ANSWER: *Mona Lisa*

[10] The "readymade" art work by Duchamp titled "In Advance of the Broken Arm" was simply one of these objects.

ANSWER: shovel

17. This man's meeting with Simon Bolivar at the Guayaquil Conference led to him being named Protector of Peru. FTPE:

[10] Name this Argentine general who defeated Rafael Maroto at the Battle of Chacabuco.

ANSWER: Jose de San Martin

[10] The Battles of Chacabuco and Maipu came after San Martin crossed the Andes to fight for the independence of this nation, now with capital Santiago.

ANSWER: Chile

[10] San Martin was aided by this Chilean general of Irish descent, who became famous for his charge breaking through the Spanish forces at the Battle of Rancagua.

ANSWER: Bernardo O'Higgins

18. Name these states given some Native American archaeological sites, for 10 points each.

[10] In this state, Monks Mound is the largest of the numerous man-made earthen structures at Cahokia Mounds Historic Site, which is located across the Mississippi River from St. Louis.

ANSWER: Illinois

[10] Bird effigy mounds made of quartz in this state include Rock Eagle and Rock Hawk, which are administrated by this state's flagship university in Athens.

ANSWER: Georgia

[10] This state was home to the 60 mile long Great Hopewell Road, which was a set of walls that connected two Hopewell cultural centers. This state is also home to the Great Serpent Mound.

ANSWER: Ohio

19. Annie Proulx's [proo's] novella *Brokeback Mountain* examines a homosexual relationship between men who fit this description. FTPE:

[10] What American archetypal profession actually names a character contrasted with the "Easterner" Mr. Blanc in the short story "The Blue Hotel"?

ANSWER: cowboy

[10] *Heart of the West* is a collection of cowboy stories by this American who also wrote "The Gift of the Magi" and "The Ransom of Red Chief."

ANSWER: O. Henry (or William Sydney Porter—as if!)

[10] The sentimental irony of "The Gift of the Magi" comes from Della Dillingham's elimination of this aspect of her beauty in order to get the money to buy her husband a watch fob.

ANSWER: hair

20. This phenomenon is rated by the Beaufort scale, on which zero indicates calm conditions. FTPE:

[10] Name this motion of air whose speed is measured by anemometers [*an-uh-MOM-ih-ters*].

ANSWER: wind

[10] The so-called "solar wind" is the stream of particles emitted from this region of the sun. Located outside the chromosphere, this region is also home to some namesake mass ejections.

ANSWER: corona

[10] This specific example of a foehn [*FEYN*] wind, which is warm and dry, blows down the eastern slopes of the Rocky Mountains, and shares its name with a large type of salmon.

ANSWER: chinook [*shi-NOOK*]