Valencia Delta Burke Invitational 2013 Questions by Chris Borglum, Billy Beyer, Paul Kelson, Dallin Kelson, Jihye Shin, Virginia Ruiz, Travis Vitello, and Julio Gonzalez-Zuluaga

Round 1

1. In one poem addressing this place, the speaker asks, "When can I go into the supermarket and buy what I want with my good looks?" Another poem partly titled after this place asks, "Who know why five Israelis was filming the explosion/And cracking they sides at the notion." That Amiri Baraka poem is titled "Somebody Blew Up [this place]. FTP what country titles an Allan Ginsberg poem in which the speaker says he's "putting his queer shoulder to the wheel," lyricized by Katherine Lee Bates as "the Beautiful"?

ANSWER: America

2. One object named for this man was fixed in 1993 with the COSTAR instrument. That object named for this man will be succeeded by one named for James Webb in approximately five years. This man discovered a Cepheid variable in the Andromeda Nebula in the early 1920s and is also the namesake of a tuning-fork diagram used to classify galaxies. His namesake law, which includes a constant that is approximately seventy kilometers per second per megaparsec, gives the relationship between redshift and distance. That law named for this man shows that the universe is expanding. For 10 points, name this astronomer who also names a space telescope.

ANSWER: Edwin Hubble

3. These people were the target of the Myall Creek Massacre, and a dispute over land on the Gove Peninsula led this people to draft the 'bark petitions.' An incident at Skull Creek in which several members of this culture were killed led to the 1946 Pilbara Strike. These people were the subject of the publication *Bringing Them Home*, and in 2007 PM Kevin Rudd officially apologized to this people's Stolen Generation. FTP, name this ethnicity, the indigenous people of Tasmania and Australia.

ANSWER: Australian Aborigines [or Aboriginal Australians before mentioned]

4. This thinker discussed externalization while explaining the alienation of human labor. He called endless finitude "false infinity" and the abolishment of finitude "true infinity" in the "Quality" section of one work. This thinker's idealistic logicalization of the world is often called his "Panlogismus." He called great men "Folk Spirits" who affect the mediation of the weltgeist, or "World Spirit," while lecturing on the philosophy of history. This author of *The Science of Logic* called the progress through thesis, antithesis, and synthesis the dialectic. For 10 points, name this author of *The Phenomenology of Mind*.

ANSWER: G(eorg) W(ilhelm) F(riedrich) Hegel

5. An ancient epithet for this deity is "Foremost of the Westerners," referencing his traditional realm. Certain cults worshiped this deity's soul, Banebdjedet, as a separate entity. Passion plays were reenacted to remind his cult of his transformation during the flooding of the Nile in spring. The eldest son of Geb and Nut, his sister posthumously bore him a son, who offered his father his own eye to restore him. An oxyrhynchus fish ate the phallus of, FTP, what Egyptian deity, brother and husband of Isis?

ANSWER: Osiris

6. Liszt described this work's second movement as "a flower between two chasms." Its first movement, which is marked "adagio sostenuto," should be played, according to its composer, delicately and without dampers. This work begins with the right hand repeating the eighth note triplets G#-C#-E eight times. This work in C-sharp minor was dedicated to Giulietta Guicciardi, and was described by its composer as "quasi una fantasia." Ludwig Rellstab compared this work to being on Lake Lucerne at night. For 10 points, name this piano sonata by Beethoven.

ANSWER: Moonlight Sonata [or Piano Sonata No. 14; or Opus 27, No. 2]

7. The Sudd, in South Sudan, is a large example of one of these areas. Brazil's Pantanal becomes one of these for many weeks in June. George Washington surveyed one of these areas in 1763, forming a company with others to reclaim it. That Great Dismal one of these areas is in North Carolina and Virginia, while another example of one of these areas straddles the Florida-Georgia border and is called Okeefenokee. FTP what are these land areas suffused or submerged under water, featuring woody plants?

ANSWER: swamps (prompt on "flood plain"—not really right but understandable)

8. Jean Perrin estimated this value by measuring the rate of decrease of mastic particles placed at different heights in water. The gas constant divided by this value equals the Boltzmann constant, and the elementary charge times this value equals the Faraday constant. The namesake of this value developed a law that states the volume of a gas is proportional to the number of moles of gas present. For 10 points, name this eponymous value that is defined as the number of atoms or molecules in one mole of a substance, and is equal to 6.02 times 10 to the 23rd power.

ANSWER: Avogadro's number or constant

9. One literary character with this characteristic lives in the same apartment building as Johnny Truant's friend Lude and writes a critical study of the film *The Navidson Record*. Besides Zampanó from Mark Z. Danielewski's *House of Leaves*, characters with this attribute include one who tells Creon "the city is sick with your fault" in *Antigone* and claims that he knows the truth but wishes he did not in another play. One character gives himself this attribute after hearing of the suicide of his wife Jocasta and learning that he murdered his father Laius. For 10 points, name this attribute of the prophet Tiresias, which is shared by Oedipus after he puts out his own eyes.

ANSWER: <u>blindness</u> [or "being <u>blind</u>," or answers involving sightlessness]

10. The Pearl Street Station was opened to provide this service in New York City in 1882. 1920 saw the establishment of the FPC, the first governmental regulatory agency for this; that agency was replaced by one abbreviated FERC in the 1950s. In 1935 the New Deal Agency abbreviated REA was created to improve and spread this type of service to rural areas, and the Tennessee Valley Authority helped increase its availability in the South. FTP what type of power was the source of the "War of the Currents" between George Westinghouse and Thomas Edison?

ANSWER: electricity

11. This athlete, who was a college roommate of Buzz Peterson, can be seen in Sam Vincent's card from the 1990-91 Hoops set wearing a #12 jersey. This athlete shares his name with an actor who played shooting victim Oscar Grant III in a recent film. This athlete "Rides the Bus" in a 30 for 30 documentary film, which shows him playing for the Birmingham Barons, a Double-A baseball team. Selected after Sam Bowie in the 1984 Draft, this player hit "The Shot" over Craig Ehlo in the 1989 playoffs. For 10 points, name this majority owner of the Charlotte Bobcats who may be better known for wearing #23 and winning six NBA championships for the Chicago Bulls.

ANSWER: Michael Jordan

12. David McClelland developed a theory of this psychological concept mostly used in work-based managerial contexts. Henry Murray paired this concept with "press," or outside motivations, in his creation of 28 scored ratings for these in the Thematic Apperception Test. Clayton Altdorfer's Existence, Relatedness, and Growth, or ERG, model extends the most famous rubric for analyzing these, which has esteem as the penultimate level. Distinguished from wants by the negative effects of not fulfilling them are, FTP, what psychological motivations classified into a hierarchy by Abraham Maslow?

ANSWER: needs (accept "Hierarchy of Needs")

13. This quantity for an atomic nucleus is determined using Weizscker's [VAHYTS-zek-uhrs] formula. The no hair theorem states black holes are completely characterized by their angular momentum, charge, and this quantity. The oscillation period of a spring equals two pi times the square root of this quantity over the spring constant. The theoretical value of this quantity for gluons is zero. Linear momentum equals this quantity times velocity. For 10 points, name this quantity measured in kilograms.

ANSWER: mass

14. A two-part story by this author sees a recurring character from his work camp and fish near the title river, landing two trout. The unnamed girl explodes, "Will you please, pleas

ANSWER: Ernest Hemingway

15. John Marshall asserted the primacy of the Contract Clause in the majority opinion in an 1810 case overturning the repeal of this state's sale of land to speculators. Along with *Fletcher v. Peck*, another Supreme Court case involving this state established the sovereignty of the Cherokee nation, though it didn't stop their forced removal. A 1972 case involving this state saw the elimination of rape as a capital offense and created an unofficial moratorium on the death penalty until 1976. The *Worcester* and *Furman* cases involved, FTP, what southern state?

ANSWER: Georgia

16. The wearing of Tefillin usually begins after this ritual, though some Orthodox sects insist on practicing it up to three months prior. This ritual usually presents the initiate with his first effort at aliyah. A tzedekah, or act of charity, is often expected of those preparing for this ritual. Gifts of savings bonds or gift cards in multiples of 18 dollars are often given, as that number is considered lucky. It signifies the initiate's responsibility to follow Halakha, or religious law, and gives him the right to read publicly from the Torah. FTP what is this coming-of-age ritual for boys in Judaism?

ANSWER: <u>bar mitzvah</u> (accept "bat mitzvah" before "boys" is read at end)

17. Richard Lenski has studied long-term evolution in this organism. The disease hemolytic uremic syndrome occurs after an infection with this organism. In another experiment, this organism was used to prove that DNA undergoes semi-conservative replication. A strain of this organism, 0157:H7, produces Shiga-like toxins that damage the lining of blood vessels in the intestine. For 10 points, name this bacterium that can be acquired by consuming undercooked ground beef.

ANSWER: <u>E. coli</u> [or <u>Escherichia coli</u>]

18. This man and his family are depicted as Roman gods in a Jean Nocret painting. Moliere and this man are shown dining at court in a Jean-Leon Gerome painting. Jean-Baptiste Colbert's admonitions not to show his hairline went unheeded by the artist of a sculptural bust of this man, whose court painter was Charles Le Brun. This subject of portraits by Gian Lorenzo Bernini and Hyacinth Rigaud was famously depicted in poncey stocking and draped in fleur de lis embroidered robes. FTP, name this French monarch nicknamed the Sun King.

ANSWER: Louis XIV

19. One ruler with this name had his army ambushed and defeated by the Bulgarian Vinekh at Rishki Pass. In addition to that ruler with the sobriquet "the Dung-Named," another ruler with this name saw his enemy cut off his trade routes by building the Rumelihisari and smash the walls of his capital with guns constructed by the Hungarian Orban. Another ruler with this name defeated Maxentius at Milvian Bridge, after seeing a cross in the sky and the words, "In this sign conquer." Possessed by rulers with epithets "Dragases" and "the Great", FTP, give this name shared by the last Byzantine emperor and a Roman emperor who converted to Christianity.

ANSWER: Constantine (accept answers with following epithets like "the Great")

20. One character created by this author runs his office by the motto, "Strictness, strictness, and again strictness!" Mrs. Podtochin is accused of witchcraft in another story by this man that opens with Ivan Yakovlevich finding an object that belongs to Major Kovalyov in a loaf of bread. He also wrote a story in which the Very Important Person is attacked by a ghost after the death of Akaky Akakievich. For 10 points, name this author of "Nevsky Prospect," "The Overcoat," and "The Nose."

ANSWER: Nikolai Gogol

Valencia Delta Burke 2013

Round 1 Bonuses

- 1. Baptized members of this religion are known as the Khalsa, and most male followers of this religion are given the last name Singh. FTPE:
- [10] Name this Indian religion whose adherents carry a dagger and a small wooden comb as part of the Five Ks.

ANSWER: Sikhism

[10] Sikhism was founded by this guru whose life is recorded in the Janamsakhis. He famously declared, "There is neither Hindu nor Muslim."

ANSWER: Guru Nanak

[10] This city in the state of Punjab is central to Sikhism. In 1984, Indira Gandhi ordered Operation Blue Star, which attempted to remove Sikh protesters from this city's Golden Temple and resulted in a massacre.

ANSWER: Amritsar

- 2. Han van Meegeren forged works by this artist and even sold one to Hermann Goering. FTPE:
- [10] Name this seventeenth century Dutch artist who depicted his birthplace in *View of Delft*, and whose other paintings include *The Music Lesson*, *The Milkmaid* and *Girl with a Pearl Earring*.

ANSWER: Jan Vermeer [or Johannes Vermeer]

[10] Jan Vermeer may have created the paintings *View of Delft* and *The Milkmaid* using this box-like device, whose two-word name is Latin for "dark chamber."

ANSWER: camera obscura

[10] Jan Vermeer's painting *The Music Lesson* depicts a man watching a lady play this keyboard instrument, which may have obtained its name because it was often played by young ladies.

ANSWER: virginal [or virginals]

- 3. This term is used to describe September 24, 1869, when the price of gold plummeted after an attempt by Fisk and Gould to corner the market. FTPE:
- [10] What two-word term also describes the day in November which has been the busiest shopping day in the US for the last eight years?

ANSWER: Black Friday

[10] The 1869 Black Friday was one of many scandals that took place during the presidency of this former commander-in-chief of Union forces.

ANSWER: Ulysses S. Grant

[10] Another scandal under Grant, the Whiskey Ring, was investigated and prosecuted by this man, Grant's Attorney General.

ANSWER: Benjamin Bristow

- 4. Aristotle wrote that this early Greek was the first to play a character on the stage. FTPE:
- [10] An adjectival form of what Greek's name thus is used to formally describe actors?

ANSWER: Thespis

[10] A couple centuries after Thespis came this third of the great Greek tragedians, author of *Hippolytus* and *The Trojan Women*. This playwright is judged not as good as Aeschylus in Aristophanes' play *The Frogs*.

ANSWER: Euripides

[10] Euripides also wrote a play about this title woman, who kills her own children from her liaison with Jason because he has left her to marry Glauce.

ANSWER: Medea

5. Answer the following about books concerning biology, for 10 points each.

[10] Observations aboard the HMS *Beagle* and a similar work by Alfred Russel Wallace led Charles Darwin to publish this book, which was partly subtitled "By Means of Natural Selection."

ANSWER: The <u>Origin of Species</u> [or <u>On the Origin of Species</u>]

[10] Rachel Carson argued that toxic chemical pesticides were polluting the environment in this 1962 book, which led to a ban on the domestic production of the so-called "biocide" DDT.

ANSWER: Silent Spring

[10] Rebecca Skloot wrote a 2010 book entitled *The Immortal Life* of this woman. The term HeLa [*hee-lah*] refers to the immortal cells grown from her cervix without her knowledge.

ANSWER: Henrietta Lacks

6. In this woman's response to President Obama's 2011 State of the Union address for the Tea Party Express, she often looked off to the side instead of into the camera. For 10 points each:

[10] Name this female Republican who quit her 2012 run for president after the Iowa caucus.

ANSWER: Michele Bachmann

[10] Michele Bachmann is a member of the US House of Representatives from this state's sixth district. Jesse Ventura and Tim Pawlenty are recent former governors of this Midwestern state.

ANSWER: Minnesota

[10] Huma Abedin [*AB-uh-deen*], the wife of this former Jewish Congressman, was accused by Michele Bachman of having three family members connected to the Muslim Brotherhood.

ANSWER: Anthony Weiner

7. This state's so-called "boot heel" comprises its most southeasterly territory. FTPE:

[10] What state's boot heel cuts into northeast Arkansas?

ANSWER: Missouri

[10] Missouri's boot heel includes a county with this name, the same name given to the large fault line that runs through it.

ANSWER: New Madrid (actually pronounced "mad-rid")

[10] The eastern part of Missouri's boot heel abuts this body of water that separates it from Tennessee. ANSWER: Mississippi River

- 8. 20th century rulers of this country have included Miklos Horthy and Imre Nagy. FTPE:
- [10] Name this country with capital Budapest that was once briefly ruled by the Nazi-loving Arrow Cross Party.

ANSWER: <u>Hungary</u>

[10] Saint Stephen of Hungary belonged to this dynasty that ruled Hungary until 1301 and was named after the first head of a unified Hungarian tribe.

ANSWER: Arpad Dynasty

[10] Andrew II of Hungary issued a "Golden" type of this edict that outlined the rights of nobility and clergy in Hungary. Papal decrees given this name have included the *Unam Sanctum*.

ANSWER: bulls (accept Golden Bull or papal bull)

9. The net external torque equals the product of this quantity and angular acceleration. FTPE:

[10] Name this quantity that is subject to the stretch rule, and is the rotational analog of mass.

ANSWER: (mass) moment of inertia [or rotational inertia; or angular mass]

[10] Pencil and paper ready. A five kilogram hoop of negligible thickness has a radius of three meters. Calculate the hoop's moment of inertia about its central axis.

ANSWER: 45 kilograms meters squared [moment of inertia equals mass times (radius squared)] [10] Steiner's theorem relates the moment of inertia about an axis through the center of mass to the moment of inertia about an axis with this property. Two vectors have this property if their cross product equals zero, and Euclid's fifth postulate is sometimes named for this property.

ANSWER: parallel

- 10. Rufus Griswold tried to ruin this author's posthumous reputation by characterizing him as a drunken, drug-besotted nut. FTPE:
- [10] What 19th-century American wrote poems like "Ulalume" (oo-la-loom) and "Annabel Lee," as well as stories like "The Tell-Tale Heart"?

ANSWER: Edgar Allan Poe

[10] Poe's only completed novel is the "narrative of" this title character's journey toward Antarctica, which ends abruptly before landing on that continent.

ANSWER: Arthur Gordon Pym

[10] This only recurring Poe character is a French detective who uses his "ratiocination" to solve crimes like "The Murders in the Rue Morgue."

ANSWER: C. Auguste **Dupin**

- 11. The "hyper" form of this phenomenon has been experienced in places like Weimar Germany and Zimbabwe. For 10 points each:
- [10] Give this name for the persistent and relatively large increase in the general price level of good and services. In the United States, it is measured by the Consumer Price Index.

ANSWER: inflation

[10] This curve, named after its New Zealand-born formulator, describes an inverse relationship between inflation and unemployment.

ANSWER: Phillips curve

[10] In the 1970s, the United States experienced both high unemployment and high inflation, a phenomenon referred to by this term. This term is a portmanteau of inflation and another word.

ANSWER: stagflation

- 12. Early versions of this object used the heraldic star, though the molet star became dominant by the 1780s. FTPE:
- [10] What patriotic symbol's five-pointed star is traced to the influence of the many of them sewn by Betsy Ross, though it's only legend that she sewed the first one.

ANSWER: <u>U.S. flag</u> (accept <u>American</u> flag or other equivalents)

[10] An early flag with 12 stars arranged in a circle around a single star is named for this Revolutionary War battle, at which Nathanael Greene defeated Banastre Tarleton near a town known for its slaughterhouses.

ANSWER: Cowpens Flag

[10] The lines that became "The Star-Spangled Banner" by Francis Scott Key were written during the defense of this military fortification in Baltimore.

ANSWER: Fort McHenry

- 13. Amaterasu was captured after being distracted by one of these after leaving her cave in one story. FTPE:
- [10] Amaterasu was fascinated by her reflection in one of these objects.

ANSWER: mirror

[10] This Aztec deity was known as the "smoking mirror" as his right foot was replaced with one of those.

ANSWER: <u>Tezcatlipoca</u>

[10] It is customary to cover all mirrors during this seven-day period of mourning in Judaism.

ANSWER: shiva

- 14. A combustion chamber is used in the "bomb" type of these devices, and a constant pressure type often used in general chemistry labs consists of two Styrofoam coffee cups. For 10 points each:
- [10] Name these devices that can be used to determine specific heat capacity.

ANSWER: calorimeters

[10] This doubly-eponymous law, which can be derived from the equipartition theorem, states that the heat capacity of a solid is equal to three times the gas constant.

ANSWER: <u>Dulong-Petit</u> law

[10] Along with Laplace, this chemist developed the first calorimeter. His other contributions to chemistry include disproving phlogiston theory and formulating the law of conservation of mass.

ANSWER: Antoine <u>Lavoisier</u> [la-vwa-ZYEY]

- 15. "Dormi, amor mio," an aria from *Madame Butterfly*, is a work of this type. FTPE:
- [10] Cio-Cio San sings this type of musical work to her baby Sorrow to try to get him to sleep. ANSWER: lullaby
- [10] Probably the best known lullaby is Opus 49, Number 4, of 1868 by this German composer.

ANSWER: Johannes Brahms

[10] This seven-movement Brahms work uses German language and the Luther Bible for text, unlike most works of this type that use the Latin Mass.

ANSWER: A German Requiem

- 16. The protagonist of this novel, who moves from Kellynch Hall to Uppercross Cottage, is initially convinced by family advisor Lady Russell to end her engagement to a naval officer. FTPE:
- [10] Name this novel that ends with the re-engagement of Captain Wentworth and Anne Elliott.

ANSWER: Persuasion

[10] *Persuasion* is a novel by this female English novelist, who also wrote *Sense and Sensibility*.

ANSWER: Jane Austen

[10] This character from Jane Austen's novel *Pride and Prejudice* marries Elizabeth despite initially being rejected by her due to interfering with Charles Bingley's courtship of Jane.

ANSWER: Fitzwilliam Darcy [accept either]

- 17. This author of *Why I Am Not a Christian* wrote another work concerning the problem of denoting phrases, such as "The present King of France is bald." For 10 points each:
- [10] Name this British philosopher who also wrote *A History of Western Philosophy*, and whose namesake paradox involves the set of all sets that are not members of themselves.

ANSWER: Bertrand Russell

[10] Bertrand Russell and Alfred North Whitehead wrote this three-volume work in formal logic.

ANSWER: *Principia Mathematica*

[10] Principia Mathematica inspired the formulation of this man's incompleteness theorem.

ANSWER: Kurt Godel [GUR-dl]

- 18. This man lost power following the 30 September Movement due to his favoritism of the PKI. FTPE:
- [10] Name this man who, along with Mohammed Hatta, declared independence of a certain country in August 1945 and drafted a constitution based on the Pancasila, or five principles.

ANSWER: Sukarno

[10] Sukarno was president of this archipelagic Southeast Asian nation whose islands include Jakarta and Bali, and is currently led by Susilo Yudhoyono.

ANSWER: Indonesia

[10] While president, Sukarno introduced what he called a "guided" form of this type of government. This form of government originated in the Greek city-state of Athens.

ANSWER: Democracy

- 19. This author's novel *Queer* is a follow-up to his also-controversial novel *Junkie*. FTPE:
- [10] Who was this author best known for his oft-banned novel *Naked Lunch*?

ANSWER: William S. Burroughs

[10] Burroughs is considered part of this group of post-World War II authors which included his friends Jack Kerouac and Allen Ginsberg.

ANSWER: Beat Generation

[10] Another writer who frankly tackled gay themes was this author of *Myra Breckenridge* and massive historical novels like *Burr* and *Lincoln*.

ANSWER: Gore Vidal

- 20. It is apocryphal that the fifth century BC historian Herodotus used this term to describe a geological feature that sometimes resembles a capital Greek letter. For 10 points each:
- [10] Name this deposit of sediment that may be found at the mouth of a river.

ANSWER: delta

[10] This protein, also named for a Greek letter, helps assemble microtubules, but is defective in patients with Alzheimer's disease. This letter also names a third generation type of lepton.

ANSWER: tau

[10] This letter names the type of radiation with the lowest wavelength on the electromagnetic spectrum. In math, its namesake function is an extension of the factorial function.

ANSWER: gamma