

Delta Burke 2015
Round 10

1. The Mansabari system was used in this empire to calculate the paygrade and status of civil and military officers. One ruler of this empire had his army defeated at the battle of Buxar by Henry Munro, who was commanding British East India Company's troops. This empire took Kabul and Kandahar from the Safavid after the death of Tahmasp I. This empire's founder was the victor at the First Battle of Panipat, giving him dominance of the Punjab. Babur was the founder of, for ten points, what empire which had rulers such as Shah Jahan and Akbar.

ANSWER: Mughal Empire [or Mogul Empire; or Gurkani]

2. A painting by this artist features the titular *Man with a Newspaper* in only one of four scenes. Another painting by artist includes a nude female corpse, two men holding a club and a net, and another man near a phonograph. This artist of *The Menaced Assassin* also painted *The Son of Man*, in which an apple obscures the face of a man wearing a bowler hat. Other works by this man depict a locomotive emerging from a fireplace and the phrase "This is not a pipe." For 10 points, name this Belgian surrealist who painted *Time Transfixed* and *The Treachery of Images*.

ANSWER: Rene Magritte

3. This author created a character named Golyadkin, who goes mad after a younger, more congenial doppelganger of himself takes over his life. "Apropos of the Wet Snow" is the second half of a novella by this author of *The Double* in which the prostitute Liza refuses to take a five-ruble note from the nameless protagonist. That novella famously begins with a diary entry reading, "I am a sick man . . . I am a spiteful man." This author of *Notes from Underground* created a protagonist who kills the pawnbroker Alyona. FTP name this creator of Raskolnikov in the novel *Crime and Punishment*.

ANSWER: Fyodor Dostoevsky

4. This city contains a house built in 1885 that has a fourth-story cupola and is an example of Queen Anne-style architecture. This city, which is the oldest American settlement west of the Rockies, is home to the Flavel House and a namesake 125-foot tall column. Members of the Lewis and Clark expedition built Fort Clatsop near this city, which is connected to Megler, Washington by a truss bridge. This city is near the mouth of the Columbia River and was founded in 1811 by its namesake as a fur-trading post. For 10 points, name this Oregon city named for John Jacob Astor.

ANSWER: Astoria

5. This quantity names the landscape proposed by Sewall Wright that contains peaks and valleys. The maximum value of this quantity minus the average value all divided by the maximum value equals the genetic load. Fisher's fundamental theorem of natural selection concerns the rate of increase in this quantity. W. D. Hamilton developed the "inclusive" form of this quantity, which explains self-sacrificing behavior. The relative form of this quantity is zero for sterile animals, even if they are robust. For 10 points, name this quantity from evolutionary biology that is the contribution an individual makes to the next generation's gene pool.

ANSWER: fitness [accept specific types]

6. This man served as the Secretary of State for one year at the end of the John Tyler administration. This man's namesake doctrine assisted in Roger Taney's [TAW-nees] decision in *Dred Scott vs. Sandford*. This man's wife, Floride, led the Cabinet Wives, who were against John Eaton's marriage to Peggy O'Neil. This man is infamous for stating, "The Union, next to our liberty, is most dear" after another man said, "the Union, it must be preserved." Both statements were in response to the Nullification Crisis. For ten points, name this South Carolinian who was Vice President to Andrew Jackson until he resigned in 1832.

ANSWER: John Calhoun

7. Leto earned the surname "Phytia," meaning "to grow," after granting a request for this action to happen to Leucippus, the daughter of Galatea. Poseidon made this happen to Mestra when she requested she not be caught by a slaver who saw her on the beach. Poseidon granted invulnerability and this transformation to a figure who was later pounded into the ground by the Centaurs; that person changed her name from Caenis to Caeneus after undergoing this action. FTP what transformation happened the second time Tiresias hit some copulating snakes with a stick, changing him from a priestess?

ANSWER: changing from woman to man or female to male; we'll accept "changing sex" at DB;
However, do NOT take "changing from man to woman"—that's wrong

8. Despite its title, this state is actually the setting of novel that fictionalizes the Johnson County War and includes the line "When you call me that, smile!" Annie Proulx's [proo's] collection *Close Range* is subtitled for this state, in which she sets the short story "Brokeback Mountain." The title character of Owen Wister's novel *The Virginian* shoots his enemy Trampas in this state's town of Medicine Bow. In Kerouac's *On the Road*, Sal Paradise spends a night at the Wild West Days celebration in this state. FTP what is this western state provides the setting for a play featuring performances of interviews and other stories about the murder of Matthew Shepard, *The Laramie Project*?

ANSWER: Wyoming

9. A disruptive discharge around these materials is called a flashover. The "super" type of these materials were discovered by Vinokur in titanium nitride films, while their "topological" type are caused by time-reversal symmetry. Electron-electron interactions are responsible for a class of these materials named for Mott that are exemplified by some transition metal oxides. These materials usually have a large band gap, and their outer electrons are tightly bound to atoms. These materials are called dielectrics when the storage of charge is their main function. For 10 points, name these materials, exemplified by glass and rubber, which are poor conductors of charge.

ANSWER: insulators [accept specific types]

10. This singer declares "We don't need romance, we only want to dance" in a song whose music video is a role-reversed version of Robert Palmer's "Addicted to Love." This woman wears a leopard-print outfit while hitchhiking in a desert in the music video for a song in which she believes a rocket scientist, Brad Pitt, and a car owner are "alright," but would fail to keep her warm "in the middle of night." For 10 points, name this Canadian country music artist who was married to Mutt Lange, and whose 1997 album *Come On Over* contains the songs "Man! I Feel Like a Woman!" and "That Don't Impress Me Much."

ANSWER: Shania Twain [or Eillean Regina Edwards]

11. This man led the Camarilla, a ring of inner advisors who formed to neutralize the liberal threat to the crown. This man was nearly assassinated by Ferdinand Cohen-Blind, who committed suicide while in the custody of the police. This man disliked the papacy of Pius IX and the dogma of Papal Infallibility, reacting by abolishing the Catholic Department, inaugurating the Kulturkampf. He also helped foment the Franco-Prussian War by ghostwriting the Ems Dispatch. For 10 points, name this Iron Chancellor of Germany.

ANSWER: Otto Von Bismarck, Duke of Lauenburg

12. Coptic Christians venerate this man on the 23rd day of Baramhat. Six cities claim the tomb of this figure, including the ancient city of Susa and Kirkuk. Susannah tells that this figure saved a Jewish girl from two elders who wanted to condemn her to death. This figure was sent east during the reign of Jehioakim with three friends, who were later given the Babylonian names of Meshach, Shadrach, and Abednego. This figure witnesses the writing on the wall during Balthasar's feast. For ten points, name this figure who was thrown into the lion's den for disobeying a statute of King Nebuchadnezzar.

ANSWER: Daniel

13. This composer wrote the music to a song that contains three G eighth notes followed by three higher C eighth notes followed by descending A F C quarter notes. A so-called "Theatre Piece for Singers, Players, and Dancers" by this composer that centers on a Celebrant is *MASS*, whose title is all capitalized. This man, who succeeded Dimitri Mitropoulos as music director of the New York Philharmonic, hosted many Young People's Concerts, which were notably televised. This man composed the *Kaddish Symphony*, which was premiered shortly after JFK's assassination. For 10 points, name this conductor who also composed the music to *West Side Story*.

ANSWER: Leonard Bernstein

14. This author described "desires that are crocodiles" in a poetic meditation on Hanuman called *The Monkey Grammarian* which he wrote while serving as his country's ambassador to India. One of his poems features 584 lines to represent Venus's orbit and refers to a sacrificial Aztec altar. A prose work by this author argues that La Malinche, whom Hernando Cortes took as a consort, is the spiritual mother of his country. FTP name this Mexican winner of the 1990 Nobel Prize, author of *Sun Stone* and *The Labyrinth of Solitude*.

ANSWER: Octavio Paz

15. A chemist from this country names a reaction in which a sulfone is used to transform an aldehyde or ketone into an alkene. Another chemist from this country names the alkyl magnesium halides that are used to make carbon-carbon bonds. Other chemists from this country include a man who names the law of combining volumes as well as a man who discovered the law of conservation of mass. Yet another chemist from this country names the principle that states if a system in equilibrium is disturbed, then the system readjusts itself to counteract the change. For 10 points, name this country home to Antoine Lavoisier and Henry Louis Le Chatelier.

ANSWER: France

16. Ludwig Trepl argued that these entities face a "catastrophic horizon" and denied that these entities should be viewed as "superorganisms" in an ecological model. Barry Wellman wrote that subcultures in these places reacted to change with "Community Lost," "Saved," or "Liberated" models. A 1961 book about how these entities idealizes their "organic" type in which the One World Man could live in harmony with culture, technology, and lots of neighbors; that book discusses these entities "in History" and is by Lewis Mumford. FTP Jane Jacobs wrote about the "Death and Life of Great American" examples of what type of municipality, exemplified by places like Orlando and Philadelphia?

ANSWER: city or cities

17. These people's first recorded encounter with Europeans was with the French traders Radisson and Groseillers in 1659. Three hundred of the Santee branch of these people were sentenced to die for attacks on settlers, but Abraham Lincoln commuted the death sentence of most of the men. A prominent chief of these people, Red Cloud, fought in a namesake war against US forces in both Montana and Wyoming. These people were massacred by the US 7th Cavalry at Wounded Knee Creek. For 10 points, name these people whose chiefs have included Sitting Bull and Crazy Horse.

ANSWER: Sioux [prompt on Oglala, Yankton, and Lakota]

18. Raup and Sepkoski studied the periodic nature of these events. A multi-component explanation of the largest of these events was dubbed by Douglas Erwin the *Murder on the Orient Express* hypothesis. Ones named for Ireviken, Mulde, and Lau occurred during the Silurian period. Evidence for the cause of one of these events includes high levels of iridium and the Chicxulub [*CHIK-shoo-loob*] crater. Another of these events that may have been caused by the eruption of the Siberian traps occurred at the boundary between the Permian and Triassic periods. For 10 points, name these events that have resulted in many organisms dying out.

ANSWER: extinction events [or equivalents, such as mass extinctions]

19. This thinker argued that helping another person achieve autonomy is the only authentic title action in his book *Works of Love*. In another work, this thinker wrote that the titular concept and recollection “are the same movement, only in opposite directions.” This author of *Repetition* wrote a book contending that Christian faith is the only way to oppose despair. This author of *The Sickness Unto Death* exemplified his idea of a “knight of faith” by noting Abraham’s “teleological suspension of the ethical” in his willingness to obey God’s order to kill his son Isaac. FTP what Danish philosopher wrote *Fear and Trembling* and *Either/Or*?

ANSWER: Soren Kierkegaard [prompt on any of his stupid pseudonyms]

20. One of this man’s poems states that the title figure “dwelt among the untrodden ways,” while another poem about the same female rhapsodizes that she “seemed a thing that could not feel/The touch of earthly years.” Those poems by this British writer were mostly composed when he was touring Germany with his sister Dorothy, who accompanied him on a walking tour that brought him to the River Wye. There he wrote a poem noting that five years have passed since he looked on the ruins of Tintern Abbey. FTP what Romantic poet of “The Prelude” collaborated with Samuel Taylor Coleridge on the collection *Lyrical Ballads*?

ANSWER: William Wordsworth

Delta Burke 2015
Round 10 Bonuses

1. The ideal gas law can be expressed in terms of the total number of particles with the equation $PV = NkT$, where k is this constant named for an Austrian physicist. FTPE:

[10] Name this constant equal to the universal gas constant divided by Avogadro's number.

ANSWER: Boltzmann's constant

[10] An important equation from the kinetic theory of gases states the average kinetic energy of a particle in an ideal gas equals three-halves times Boltzmann's constant times this quantity.

ANSWER: temperature

[10] A formula for this quantity, which equals $k \log W$, is found on Ludwig Boltzmann's gravestone. This quantity measures the disorder of a system.

ANSWER: entropy

2. This Frenchman argued that believing in God was rational due to the possible payoff. FTPE:

[10] What philosopher's namesake wager assumes no great loss of fun in living a Christian life?

ANSWER: Blaise Pascal

[10] Pascal put his wager forward in this book, titled as his "thoughts."

ANSWER: Pensees

[10] Pascal's *Pensees* is an example of this type of work, using rational explanations to defend Christianity.

ANSWER: apologetics [or apology]

3. This character has been played by Lee J. Cobb, Brian Dennehy, and Dustin Hoffman on Broadway. FTPE:

[10] What iconic dramatic character believes "selling [is] the greatest career a man could want," despite how much it keeps him away from his wife Linda and his two sons?

ANSWER: Willy Loman (accept either)

[10] Willy Loman is the protagonist of what most famous work of Arthur Miller?

ANSWER: Death of a Salesman

[10] Willy dies in this fashion, with his family assuming it was intentional, a suicide.

ANSWER: car crash (accept obvious equivalents)

4. This psychologist and Barbel Inhelder ran an experiment in which they asked participants to draw a picture of a diorama of a mountain from the point of view of someone inside it. FTPE:

[10] Name this psychologist who pioneered the field of "genetic epistemology" and developed a four-stage model of cognitive development.

ANSWER: Jean Piaget

[10] This is the second stage of Piaget's model, and for most children, lasts from ages two to seven. Children in this stage do not yet understand concrete logic and are unable to see things from another person's point of view.

ANSWER: pre-operational

[10] This other psychologist developed theories of human cultural development, and differentiated between the tasks a person can do unaided and those he can only do with help in his Zone of Proximal Development.

ANSWER: Lev Vygotsky

5. This city-state led the Delian League and developed a type of banishment called ostracism. FTPE:

[10] Name this ancient Greek city-state that lost the Peloponnesian War to Sparta.

ANSWER: Athens

[10] This man, who was responsible for constructing the Parthenon and ostracizing Cimon, gave a notable Funeral Oration after the first year of the Peloponnesian War.

ANSWER: Pericles

[10] A plague that hit Athens during the Peloponnesian War entered through this port, which replaced Phaleron, and was connected to Athens by the Long Walls.

ANSWER: Piraeus

6. Their less common straight-chain form can be represented by Fischer projections, and their much more common cyclic form can be represented by Haworth projections. For 10 points each:

[10] Name these compounds exemplified by glucose, mannose, and galactose.

ANSWER: sugars [or monosaccharides]

[10] Fehling's solution and Benedict's solution are tests for reducing sugars that both contain this element, which is the second most conductive metal.

ANSWER: copper [or Cu]

[10] Reducing sugars react with amino acids in this reaction, named for a Frenchman, which is responsible for the browning of foods, such as meat and bread.

ANSWER: Maillard reaction

7. One man with this surname composed the *Pizzicato Polka* with his brother Josef, and another man with this surname had many of his opera's libretti written by Hugo von Hofmannsthal. FTPE:

[10] Identify this last name shared by the unrelated composers Richard, who included the "Dance of the Seven Veils" in his opera *Salome*, and Johann, who was known as "The Waltz King,"

ANSWER: Strauss

[10] The father of "The Waltz King" composed this march named for an Austrian field marshal. This piece is usually the last played at the Vienna Philharmonic's New Year's Day Concert.

ANSWER: Radetzky March

[10] This tone poem by Richard Strauss begins with the section "Sunrise," in which the trumpets play ascending C-G-C half notes. More importantly, part of this work was Ric Flair's entrance theme.

ANSWER: Also Sprach Zarathustra or Thus Spoke Zarathustra or Thus Spake Zarathustra

8. The odd-numbered chapters of Italo Calvino's *If on a Winter's Night a Traveler* use this narrative technique. FTPE:

[10] What point of view is illustrated by that novel's opening sentence, "You are about to read Italo Calvino's new novel . . . ?"

ANSWER: second person point of view

[10] Second person point of view is sometimes used to address Mahlke in this author's novel *Cat and Mouse*, part of his Danzig Trilogy which begins with *The Tin Drum*.

ANSWER: Gunter Grass

[10] The short story "December," collected in this Russian author's *Sevastopol Sketches*, also uses second person.

ANSWER: Leo or Lev Tolstoy

9. The man who holds the baby at this ceremony is called the sandek. For 10 points each:

[10] Name this ritual circumcision of Jewish boys.

ANSWER: bris [or brit milah]

[10] According to Genesis 17, a bris occurs this number of days after birth. The holiday Shemini Atzeret [*at-SER-es*] is sometimes known as this numbered day of Sukkot.

ANSWER: eight

[10] This person performs the circumcision and may use his mouth to suck blood from the wound.

ANSWER: mohel [or mohalim; or mohalot]

10. This man served as War Secretary under Van Buren after serving as Minister to Mexico. FTPE:

[10] Name this man who is the namesake of a plant that is ubiquitous around Christmas time.

ANSWER: Joel Roberts Poinsett [do NOT accept "Poinsettia"]

[10] In the 1836 election, Van Buren's Vice President used the slogan "Rumpsey, Dumpsey, Colonel Johnson killed" this Shawnee chieftain, who died in 1813 at the Battle of the Thames.

ANSWER: Tecumseh [or Tekamthi; or Tecumtha]

[10] This man, who commanded American forces at the Battle of the Thames, succeeded Martin Van Buren as President, although he only served for about a month before dying of pneumonia.

ANSWER: William Henry Harrison

11. Most carbon dioxide from catabolism is releasing during this part of respiration. FTPE:

[10] Name this cycle that occurs in between glycolysis and oxidative phosphorylation.

ANSWER: Krebs cycle [or citric acid cycle; or tricarboxylic acid; or TCA]

[10] In eukaryotic cells, the Krebs cycle occurs in this specific part of a certain organelle.

ANSWER: mitochondrial matrix [prompt on partial answer]

[10] Krebs shared a Nobel Prize with Fritz Lipmann, who discovered this compound. As part of the pyruvate dehydrogenase complex, it receives an acetyl group.

ANSWER: Coenzyme A [or CoA; or CoASH; do NOT accept "acetyl co(enzyme) A"]

12. This island contains Herring Cove Park and a famous cottage within an International Park. FTPE:

[10] Name this island located at the entrance to Passamaquoddy [*pas-uh-muh-KWOD-ee*] Bay within the Bay of Fundy, where FDR contracted polio, as depicted in a 1960 film about its "sunrise."

ANSWER: Campobello

[10] Campobello Island belongs to this Canadian province, whose capital is Fredericton, and which is connected to fellow Maritime province Nova Scotia by the Isthmus of Chignecto.

ANSWER: New Brunswick [or Nouveau-Brunswick]

[10] Campobello Island is located near the border between New Brunswick and this state, which is home to Acadia National Park, along with the cities of Portland, Bangor, and Augusta.

ANSWER: Maine

13. British poet Stevie Smith is most famous for a poem in which the speaker is "not waving" but dying in this fashion. FTPE:

[10] What is this way to die that also claims Ophelia in *Hamlet*?

ANSWER: drowning (prompt on "suicide")

[10] Jack Stapleton drowns in a bog in this story in which Sherlock Holmes figures out that Stapleton has painted the title dog with phosphorus to make it look supernatural.

ANSWER: "The Hound of the Baskervilles"

[10] Rosanna Spearman purposely drowns herself in an effort to deflect suspicion for the theft of the title gem in *The Moonstone*, a novel by this Irish author of *The Woman in White*.

ANSWER: Wilkie Collins

14. This man received a Pulitzer Prize in 1954 for a work in which Joseph Stalin is being led to his grave by Death, who says "You Were Always A Great Friend of Mine." For 10 points each:

[10] Name this editorial cartoonist who died in 2001 and was often known by just one name.

ANSWER: Herblock [or Herbert Lawrence Block]

[10] Herblock was also known for cartoons depicting this Senator from Wisconsin, who believed that Communists had infiltrated the United States federal government.

ANSWER: Joseph McCarthy

[10] Herblock worked for this newspaper for over fifty years. Bob Woodward and Carl Bernstein helped this newspaper win a Pulitzer Prize in 1973 for its Watergate investigation.

ANSWER: The Washington Post

15. Claes Oldenburg's sculpture *Free Stamp* is located in Willard Park in this city. For 10 points each:

[10] Name this city home to the St. Theodosius Orthodox Cathedral, the Playhouse Square, and one of the "Big Five" orchestras, along with New York, Chicago, Boston, and Philadelphia.

ANSWER: Cleveland

[10] Cleveland is also home to the Rock and Roll Hall of Fame that was designed by this Chinese-born architect, who also designed the glass pyramid located at the entrance to the Louvre.

ANSWER: I. M. Pei

[10] Gustavo Dudamel succeeded Esa-Pekka Salonen as music director for an orchestra that is based in this city and often performs at the Frank Gehry designed Walt Disney Concert Hall.

ANSWER: Los Angeles

16. During a test of this project in New Zealand, an object was mistaken for a crashing plane. FTPE:

[10] Name this Google project that uses balloons in the stratosphere to provide Internet access.

ANSWER: Project Loon

[10] Project Loon will provide this entire country with Internet access. Sinhalese is one of the official languages of this island nation, which is located off the southeast coast of India.

ANSWER: Sri Lanka

[10] Indian Prime Minister Rajiv Gandhi was killed in a suicide bombing carried out by a female member of this secessionist group that was defeated in the Sri Lankan Civil War.

ANSWER: Tamil Tigers [or Liberation Tigers of Tamil Eelam; or LTTE]

17. Pencil and paper ready. Answer the following about matrices, for 10 points each.

[10] A two by two matrix whose entries are 1, 2, 3, 4 has this value for its determinant.

ANSWER: -2 [or negative two]

[10] A three by three matrix whose entries are 1, 2, 3, 4, 5, 6, 7, 8, 9 has this value for its trace.

ANSWER: fifteen

[10] The determinant of a square matrix gives the product of these quantities, whose sum is given by the trace. These values are also given by the roots of the characteristic polynomial.

ANSWER: eigenvalues [prompt on "characteristic values" or "latent roots"]

18. One of these items inscribed “for the fairest” ruined a wedding and led to the Trojan War. FTPE:
[10] The goddess of discord, Eris, rolled what type of fruit into that wedding, the same fruit used by Hippomenes to slow down Atalanta in a race?

ANSWER: apple

[5 each] These parents of Achilles had their wedding ruined by the apple of discord.

ANSWER: Peleus and Thetis

[10] This goddess of youth and wife of Bragi in Norse myth was the keeper of apples that are associated with fertility.

ANSWER: Idunn

19. Radius and Marius are described by this term in a 1920 science fiction play. FTPE:

[10] What word was first used in that Karl Capek [*CHAH-pek*] play to describe these man-made workers?

ANSWER: robots

[10] This is the play in which Capek coined the term “robot.”

ANSWER: R.U.R.

[10] Another Capek play describes a war with intelligent versions of these amphibians.

ANSWER: Newts

20. Answer the following about radical attempts at socio-economic transformation that ended awfully FTPE:

[10] This Chinese effort to change its giant agricultural economy into a more focused industrialized society with collectivized farms led to widespread famine.

ANSWER: Great Leap Forward

[10] This social movement was meant to impose true communist ideology on the Chinese, as Chairman Mao stated bourgeois ideals had infiltrated Chinese society. It saw large numbers of urban intellectuals sent to till the soil badly in rural areas.

ANSWER: Cultural Revolution

[10] Under Pol Pot, this Cambodian regime’s efforts to force agricultural collectivization included the creation of “killing fields.”

ANSWER: Khmer Rouge