

Delta Burke 2015

Round 1

Questions mostly by Chris Borglum, Billy Beyer, and Peter Torres, with much-appreciated help from Zach Foster, Stan Young, and Jihye Shin.

1. A person who works at one of these locations takes German lessons from a former chiropractor named Howard Dunlop. The title character of Vladimir Nabokov's novel *Invitation of a Small Guest* works at one of these places, as does the protagonist of Don DeLillo's novel *White Noise*. A fictional one of these locations called DuPont provides the setting of Tom Wolfe's novel *I Am Charlotte Simmons*. The Colonial-era writers Joel Barlow, John Trumbull, and Timothy Dwight took the name "Connecticut Wits" at one of these places, of which Dwight was later president. FTP what are these locations, another example of which is depicted in F. Scott Fitzgerald's novel *This Side of Paradise*, which follows Amory Blaine's time at Princeton?

ANSWER: college or university

2. Paul Crutzen has suggested injecting this element into the stratosphere to combat climate change. This element, which is one of the oldest known fungicides, comes in a wettable powder that can be used against powdery mildews. In a three tube process, superheated water is used to melt underground deposits of this element and then compressed air is used to force it up to the surface in the Frasch process. This element is uniquely found in the amino acids methionine and cysteine, the latter of which has a thiol side group. The strength of rubber is improved by adding this element in vulcanization. For 10 points, name this element that smells like rotten eggs.

ANSWER: sulfur [or S]

3. Attainment of this status is conferred by a process known by a term derived from the "laying on of hands." That practice of semikha to achieve this status was forbidden by Hadrian after a revolt, though five students were able to attain this role in a mountain pass before spreading out to continue the line. One man in this role, Yehuda, sacrificed himself to allow the others to escape and became one of the ten martyrs of this role. Reconstructionist, Conservative, and Liberal denominations allow women to serve in this role. FTP what term refers to teachers of the Torah who serve as pastors in a synagogue?

ANSWER: rabbi

4. In his adolescence, this monarch was kidnapped during the Ruthven Raid. During his reign, this monarch dealt with the Addled Parliament. This man's favorite George Villiers, Duke of Buckingham, attempted to negotiate a marriage between this man's son and the Infanta Maria in an affair called the Spanish Match. Conspirators attempted to replace this man with his cousin Arabella in the Bye and Main Plots. Another plot against this man was formulated by Robert Catesby, and was foiled when Guy Fawkes was discovered under the House of Lords. That was the Gunpowder Plot. The first Stuart monarch, FTP, name this king who succeeded Elizabeth I and authorized a namesake Bible.

ANSWER: James I of England [or James VI of Scotland; prompt on partial]

5. One scenario posited by Philippa Foot for use in this larger branch of philosophy posits a set of tracks on which five people are tied and at which a trolley is hurtling, but you can pull a lever to divert the trolley to another track on which only one person is tied. G.E. Moore argued for a non-naturalist view of this branch of philosophy in a book titled in Latin for the principles of this branch. A 1677 work titled for this branch of philosophy is organized by numbered propositions and axioms presenting a pantheistic view. FTP what philosophical branch names Baruch Spinoza's masterwork, a term referring to the principles of good conduct?

ANSWER: ethics (anti-prompt (ask for "more GENERAL" on answer of "trolleyology" after first sentence))

6. High-temperature polymorphs of this mineral include tridymite and cristobalite. Despite their name, Herkimer diamonds are actually crystals of this mineral. The composition of igneous rocks is shown on a double triangle diagram named for this mineral, alkali feldspars, plagioclases, and feldspathoids. Located at the bottom of Bowen's reaction series, this mineral is found in between orthoclase and topaz on the Mohs hardness scale. Meteorite impacts cause the "shocked" type of this mineral. The gemstone amethyst is a violet variety of this mineral, and sand is composed of small fragments of it. For 10 points, name this mineral that is a form of silicon dioxide.

ANSWER: quartz

7. This man allegedly died fighting the Massagetae near the Oxus River. His father was known as the King of Ashan, while his grandfather Astyages was the King of the Medes. This man's victory at the Opis River led to the collapse of the Babylonian Empire under Nabonidus. Chapar Khaneh was the postal system setup by this man, which used the Royal Road running from Susa to Sardis. He was succeeded by Cambyses, and his daughter married Darius. FTP name this great Persian king who was the founder of the Achaemenid Dynasty.

ANSWER: Cyrus the Great (or Cyrus of Persia)

8. Before moving to the United States, the Harlem Renaissance author Claude McKay lived in this country until age 23, and his first published collection of poetry was named "Songs of [this place]." Ian Fleming wrote most of the James Bond stories while staying at his Goldeneye Estate in this place. The novel that won the 2015 Booker Prize is set here, detailing an assassination attempt against a character only called "the singer," but based on a real 1976 attempt to kill the artist behind songs like "Exodus" and "Buffalo Soldier." FTP Marlon James's novel *A Brief History of Seven Killings* describes a tumultuous period on what Caribbean island home of Bob Marley?

ANSWER: Jamaica

9. This man include a second movement Canzonetta in his *Violin Concerto*, which the critic Eduard Hanslick called a composition "whose stink one can hear." In the third movement of this man's fourth symphony, all the strings only play pizzicato. This composer's last symphony contains a bassoon passage marked *pppppp* in the first movement and a waltz in 5/4 time in the second movement. This composer of the *Pathétique Symphony* wrote the music to a ballet in which Odette is turned into the titular bird. For 10 points, name this Russian composer who used a celesta in "Dance of the Sugar Plum Fairy," which appears in the ballet *The Nutcracker*.

ANSWER: Pyotr Ilyich Tchaikovsky

10. A character in this film has sweat that smells like cinnamon. Several groups in this film compete for a \$42,000 Dave & Buster's gift card. The members of Pentatonix portray Team Canada during a competition in Denmark in this film, which also includes Snoop Dogg wanting to make a Christmas album at a studio where Keegan-Michael Key's character works. Directed by Elizabeth Banks, this film includes Hailee Steinfeld, who plays a legacy. A group from Germany called Das Sound Machine competes against the Bellas in this film. For 10 points, name this 2015 sequel that stars Anna Kendrick and centers on an all-female collegiate a capella singing group.

ANSWER: Pitch Perfect 2 [do NOT accept just "Pitch Perfect"]

11. A signaling network called the UPR reduces stress in this organelle. The enzyme PDI is located in this organelle, which is the first stage of the secretory pathway. Proteins bearing the KDEL sequence return to this organelle, which can be entered through the translocon. Vesicles coated with COPII mediate transport from this organelle to the Golgi apparatus. Ryanodine receptors are found in a special form of this organelle found in some muscle cells that releases calcium ions. This organelle is the site of lipid synthesis as well as drug detoxification. For 10 points, name this organelle divided into "smooth" and "rough" types, the latter of which is studded with ribosomes.

ANSWER: ER [or endoplasmic reticulum; or sarcoplasmic reticulum]

12. The construction and organization of these places in the United States in the mid nineteenth century often followed the Kirkbride plan. Eight people gained secret admission to these places in the Rosenhan experiment, and they title an Erving Goffman book. The journalist Nellie Bly spent ten days on an undercover assignment in one of these places, and Dorothea Dix was an important figure in their founding and expansion. The nickname Bedlam was given to the first English one of them. For 10 points, name these places where the mentally ill receive treatment.

ANSWER: asylums [or psychiatric institutions; or mental hospitals; accept synonyms]

13. A governmentally unauthorized attempt by a citizen to negotiate with this country led to the passage of the 1799 Logan Act. The US supported this country in both the Tangier and Agadir Crises against Germany. The Alien and Sedition Acts were originally passed mostly to punish Americans sympathetic to this country. The US Marine Corps was officially constituted to fight against this country in the undeclared Quasi War. FTP, the XYZ Affair involved diplomats from what country, which gave the US the nice gift of the Statue of Liberty.

ANSWER: France

14. The speaker of one of this man's poems declares he will have "nine bean rows" and "live alone in the bee-loud glade." This author of "The Lake Isle of Innisfree" described a "shudder in the loins" of the title bird presaging its "indifferent beak" dropping the girl in "Leda and the Swan." More swans, "Nine-and-fifty" of them precisely, swim on a pond belonging to this author's friend Lady Gregory in his poem "The Wild Swans at Coole" [*koo-lay*]. FTP what Irish poet wondered "what rough beast . . . / Slouches toward Bethlehem to be born?" in his poem "The Second Coming"?

ANSWER: William Butler Yeats

15. In Navajo myth the first human was created from the meeting from black and white examples of these entities. According to Norse myth, these entities were created from the brains of Ymir. A nymph of these entities was the mother of Phrixus and Helle and was called Nephele. In some myths Nephele was also the name of one of these entities that was created by Zeus to determine whether a king of the Lapiths desired sex with Hera. FTP Ixion raped what type of sky feature which then gave birth to the first Centaur?

ANSWER: clouds

16. In 1987, Shinji Kazama became the first person to accomplish this feat by motorcycle, and Neil Armstrong and Sir Edmund Hillary simultaneously accomplished this in a small plane. The first successful attempt used Umberto Nobile's airship *Norge*, and was accomplished with the help of Lincoln Ellsworth. That endeavor occurred almost twenty years after a man accompanied by Matthew Henson and four Inuit men claimed to have achieved this feat. Despite the claims of Robert Peary, evidence is in favor of the fact that he was not able to do this. FTP, name this feat that involves reaching a certain point in the Arctic Ocean that was first accomplished by Roald Amundsen.

ANSWER: reaching the North Pole (accept any clear-knowledge equivalents)

17. Elliot Goldenthal's oratorio *Fire Water Paper* was commissioned to commemorate the 20th anniversary of this war's end. Frederick Hart created a statue of three servicemen for a memorial to this war. Malcolm Browne won a Pulitzer Prize for his reporting of this war, which included a photo of a monk setting himself on fire. A helicopter attack is scored to "Ride of the Valkyries" in a film set during this war. A memorial to this war that consists of a V-shaped wall made of black granite containing over 50,000 names was designed by Maya Lin. For 10 points, name this war that was the setting of the movie *Apocalypse Now*.

ANSWER: Vietnam War [or Second Indochina War]

18. One title character created by this author befriends Tom Pinch, who is presented in an illustration playing the organ drawn by this author's sometime collaborator Phiz. In that same novel this author presents Seth Pecksniff, a pious hypocrite who mistreats the title character, who himself weds Mary Graham. That novel satirized the American piracy of an earlier novel by this author in which the title character's club includes Winkle, Tupman, and Snodgrass. This author of *Martin Chuzzlewit* created an orphan who befriends the Artful Dodger and joins Fagin's gang. FTP what wildly popular English author wrote *The Pickwick Papers* and *Oliver Twist*?

ANSWER: Charles Dickens

19. Examples of these devices named Shiva and Nova were used at the Lawrence Livermore National Laboratory to study inertial confinement fusion. Steven Chu won a Nobel Prize for developing methods to cool and trap atoms using these devices. Short pulses of high power are created in these devices using mode-locking. A possible gain medium in these devices is neodymium-doped yttrium aluminum garnet. These devices require more electrons to be in a higher energy state than a lower energy state, which is called population inversion. For 10 points, name these devices that produce a coherent light beam through stimulated emission of radiation.

ANSWER: lasers [or light amplification by stimulated emission of radiation]

20. This state was the origination point of the freight train that exploded in Lac-Mégantic in 2013. Theodore Roosevelt National Park is located in this state, which is home to the center of the North American continent. Garrison Dam is located on the Missouri River in this state, and the city of Grand Forks contains its namesake university. This state is divided from its eastern neighbor by the Red River of the North, and is home to a source of shale oil called the Bakken formation. The capital of this state is named for a former German chancellor. For 10 points, name this state whose cities include Minot, Fargo, and Bismarck.

ANSWER: North Dakota

DB 2015
Round 1 Bonuses

1. Show off your knowledge of the Merovingian Dynasty FTPE:

[10] At the 732 Battle of Tours, Merovingian armies defeated an invading force of Spanish Muslims, known by the French by this term.

ANSWER: Moors

[10] This mayor of the palace is considered the hero of Tours; his nickname derives from his hammering of the Moors.

ANSWER: Charles Martel [or Charles the Hammer]

[10] This man united all the Franks two centuries before Charles Martel and converted the Franks to Orthodox Christianity.

ANSWER: Clovis I

2. This mountain was named after a Welsh Geographer who was Surveyor General of India in the 1830's. For 10 points each:

[10] What mountain which lies on the border of Nepal and Tibet is the tallest in the world.

ANSWER: Mount Everest

[10] Tenzing Norgay and this New Zealander were the first to reach Mount Everest's summit.

ANSWER: Sir Edmund Hilary

[10] This two-word term is used to refer to the area over 26,000 feet on Everest, or the other six mountains that qualify, where oxygen is very thin and the chance of outside rescue is remote.

ANSWER: Death Zone

3. One work with this title centers on Dorrigio Evans, who works on a "Death Railway," and another work with this title states "every day is a journey, and the journey itself is home." FTPE:

[10] Name the title shared by a Basho collection of travel writings and a Richard Flanagan novel.

ANSWER: *The Narrow Road to the Deep North*

[10] The poet Basho is best-known for his works in this form of Japanese poetry, which often mention a season of the year and always contain three lines of five, seven, and five syllables.

ANSWER: haikus [or haikai]

[10] Richard Flanagan is from this country, which is also the birthplace of the author of *Schindler's Ark*, Thomas Keneally, and the author of "Waltzing Matilda," Banjo Paterson.

ANSWER: Australia

4. This work, which was painted in 1888, is located in the Yale University Art Gallery, and depicts "a place where one can ruin oneself, go mad, or commit a crime." For 10 points each:

[10] Name this painting that includes four hanging lamps and a green billiard table in its center.

ANSWER: *The Night Cafe* [or *Le café de nuit*]

[10] *The Night Cafe* is by this Dutch post-impressionist, who also painted *The Starry Night*.

ANSWER: Vincent van Gogh

[10] Van Gogh's portrait of this physician shows him resting his head on his right arm on a table.

ANSWER: Paul-Ferdinand Gachet

5. Due to weak crystal field splitting, the d subshells of high-spin complexes have the maximum number of these objects, which are also possessed by paramagnetic materials. For 10 points each:

[10] Name these objects, one of which is possessed by nitric oxide on a Lewis structure.

ANSWER: unpaired electrons [prompt on partial answer]

[10] These highly reactive molecules, which are created by homolysis, contain unpaired electrons. Antioxidants protect the body from the damage caused by these unstable molecules.

ANSWER: free radicals

[10] Molecular orbital theory explains why this molecule, with an even number of valence electrons, is paramagnetic. This molecule is the second most common gas in Earth's atmosphere.

ANSWER: molecular oxygen [or O; or O₂; or dioxygen; or diatomic oxygen]

6. Along with his lesser-known pal Portunus, this deity represented doors and gates. FTPE:

[10] What two-faced god from Roman myth also symbolized transitions, like beginnings and endings?

ANSWER: Janus

[10] The gates to the temple of Janus were opened when Rome was in this type of situation.

ANSWER: at war [accept obvious equivalents]

[10] Roman rites generally first invoked Janus and then this goddess of the hearth and home, whose temples were populated by her namesake “virgins.”

ANSWER: Vesta

7. It's caused by a member of the genus *Vibrio* that colonizes the lining of the small intestine. FTPE:

[10] Name this disease that is often caused by contaminated water and results in diarrhea.

ANSWER: cholera

[10] People with this blood type are twice as likely to develop cholera. People with this blood type are considered universal donors and have neither A nor B antigens on their red blood cells.

ANSWER: O negative

[10] This man, who is definitely dead, helped end the 1854 outbreak of cholera in London by realizing the locations of deaths were clustered around the Broad Street water pump.

ANSWER: John Snow

8. This poem's reading at the Six Gallery in 1956 caused a ruckus. FTPE:

[10] What free verse classic of the Beat Generation begins, “I saw the best minds of my generation destroyed by madness”?

ANSWER: “Howl”

[10] Allen Ginsberg memorialized his mother Naomi in this poem titled for a Jewish prayer for the dead.

ANSWER: “Kaddish”

[10] Ginsberg wrote a poem about his search for the Wichita Vortex using this Buddhist word for a scriptural writing in the title. He also wrote one about a sunflower.

ANSWER: sutra

9. Answer the following about the non-fiction books of Erik Larson FTPE:

[10] Larson's most recent book *Dead Wake* and is about "The Last Crossing of" this luxury ocean liner, which was sunk by a German submarine off the coast of Ireland in 1915.

ANSWER: RMS Lusitania

[10] Larson's book *Isaac's Storm* is about the hurricane that made landfall in this Texas city in 1900.

ANSWER: Galveston

[10] Larson's most famous book, *The Devil in the White City*, is set in this city, which hosted the 1893 World's Fair, and was home to a "Murder Castle" belonging H. H. Holmes.

ANSWER: Chicago

10. This quantity rises to the right when plotted on a graph with price as the y-axis and quantity as the x-axis. FTPE:

[10] What is this term for the amount of a good produced, which increases as demand increases?

ANSWER: supply

[10] One “product” for which supply curve doesn’t always increase when price increases is the so-called “backward bending” curve for this expenditure of human effort.

ANSWER: labor

[10] A central tenet of supply-side economics is this eponymous curve, which suggests that government revenues will increase if tax rates are reduced, an idea which sets Jeb Bush prancing.

ANSWER: Laffer Curve

11. Philosopher G.E. Moore wrote a “Defense of” this mode of thought. FTPE:

[10] What is this set of supposedly obvious considerations shared by all people, often contrasted by Americans with book learning, which was also venerated by Thomas Reid?

ANSWER: common sense

[10] The common sense philosopher Thomas Reid was from this UK country, as was Adam Smith.

ANSWER: Scotland

[10] Reid’s common sense philosophy was a response to this tendency in David Hume, exemplified by his arguments against cause and effect. Pyrrho of Elis is considered a founder of this tendency, arguing that true knowledge isn’t possible.

ANSWER: Skepticism

12. At angles ten degrees or less, the swinging of these objects is simple harmonic motion. FTPE:

[10] Name these objects in which a bob is attached to a pivot by a cable with negligible mass.

ANSWER: pendulums

[10] At small angles, the angular frequency of a simple pendulum can be determined by taking the square root of the quantity acceleration due to gravity divided by this quantity.

ANSWER: length of the pendulum [accept obvious equivalents]

[10] The rotation of the Earth was demonstrated by this Frenchman's namesake pendulum that had a 67 meter long wire and was set up in the Pantheon in 1851.

ANSWER: Leon Foucault

13. This battle occurred when the Holy League sailed east to relieve the Italian Colony of Famagusta. For 10 points each:

[10] Name this 1571 naval battle fought in the Ionian Sea which saw an Ottoman fleet defeated.

ANSWER: Battle of Lepanto

[10] Famagusta was a colony of this Italian power ruled by the Doges and known for its canals.

ANSWER: The Most Serene Republic of Venice

[10] This other Italian state had forces at Lepanto. The dukes of this state frequently had the surname of Emmanuel, including their last duke and unifier of Italy Victor Emmanuel II.

ANSWER: Duchy of Savoy

14. John Coltrane's fourteen minute version of this song opens and titles one of his records. FTPE:
[10] Name this song from a 1959 musical whose titular items include "Cream colored ponies and crisp apple strudels" along with "Girls in white dresses with blue satin sashes."

ANSWER: "My Favorite Things"

[10] "My Favorite Things" is sung by this protagonist of *The Sound of Music*, whose fellow nuns sing a song in which they wonder how to solve a problem like her.

ANSWER: Maria Rainer

[10] *The Sound of Music* included music by Richard Rodgers and lyrics by this frequent collaborator, who also worked with Rodgers on the musicals *Oklahoma!* and *Show Boat*.

ANSWER: Oscar Hammerstein

15. The first winner of the Nobel Prize in literature from this country was Selma Lagerlof in 1909. FTPE:

[10] What country also produced Astrid Lindgren, author of the Pippi Longstocking stories?

ANSWER: Sweden

[10] This intense Swedish playwright wrote intense plays like *The Ghost Sonata* and *Miss Julie*.

ANSWER: August Strindberg

[10] Par Lagerkvist won the 1951 Nobel partly for this novel about the thief who was released from crucifixion in Jesus's place, but who is later crucified in Rome. Lame!

ANSWER: Barabbas

16. The beginning of an essay by this man centers on Clyde Ross, who joins the Contract Buyers League after moving to the North Lawndale neighborhood of Chicago. For 10 points each:

[10] Name this man who wrote letters to his son in the recent book *Between the World and Me*.

ANSWER: Ta-Nehisi Coates

[10] Ta-Nehisi Coates may be best known for a 2014 essay in *The Atlantic* called "The Case for" these payments for the descendants of slaves.

ANSWER: reparations

[10] Ta-Nehisi Coates was born in this city, where protests occurred after Freddie Gray's death. Martin O'Malley served as mayor of this city for eight years.

ANSWER: Baltimore

17. This religion is noted for some of the higher class adherents to pay for people to sweep the streets in front of them. This is because of a doctrine to not kill living things, one of the Five Vows.

[10] Name this religion that includes figures such as the Mahavira and Rishaba

Answer: Jainism (Jain Dharma)

[10] Most Jains live in this Asian country. It includes states such as Uttar Pradesh and Gujarat

Answer: India

[10] Sikhism, another minority religion in India, is found in this region of India. It was split between Pakistan and India in the Partition of 1947

Answer: Punjab

18. A 1944 speech named for one of these animals denied it had been left behind in the Aleutian Islands.
FTPE:

[10] Fala was what kind of animal, another of which is the Portuguese Water Dog Bo.

ANSWER: Presidential dogs (prompt on "pets," but accept equivalents for "presidential")

[10] Officially eventually a vice-presidential dog, this Cocker Spaniel lends his name to a treacly speech given by Richard Nixon in 1952 defending accusations of illegal acceptance of gifts.

ANSWER: Checkers

[10] Barbara Bush presumably ghost-wrote a book attributed to this Springer Spaniel.

ANSWER: Millie

19. This type of text is often written using an Integrated Development Environment such as Eclipse or Visual Studio. For 10 points each:

[10] Name this type of text that a programmer might write in a language such as Python or C++.

ANSWER: source code

[10] These programs transform source code into machine code. Examples of them include GCC.

ANSWER: compilers

[10] This language, which is often interpreted rather than compiled, powers Node server applications and is used to asynchronously access the DOM of XML in the AJAX paradigm.

ANSWER: Javascript [or ECMAScript; do NOT accept or prompt on "Java"]

20. This poem begins "Sexual intercourse began / In nineteen sixty-three / (which was rather late for me) / Between the end of the "Chatterley" ban / And the Beatles' first LP." For 10 points each:

[10] Name this Philip Larkin poem whose title is Latin for "wonderful year."

ANSWER: "Annus Mirabilis" [*muh-RAB-uh-lis*]

[10] "Annus Mirabilis" also titles a poem about the year 1666 by this man, who represented the Catholic Church and the Church of England by the titular animals in *The Hind and the Panther*.

ANSWER: John Dryden

[10] Dryden's poem "Annus Mirabilis" detailed this event that started in Pudding Lane, which was also written about by Samuel Pepys [*PEEPS*] in his diary.

ANSWER: Great Fire of London [accept equivalents]