1. A work by Apelles [uh-PEL-eez] inspired a painting by this artist in which King Midas sits between Ignorance and Suspicion while Calumny [KAL-uhm-nee] drags along a victim of slander. This artist's only signed work includes an apocalyptic Greek inscription above twelve angels with olive branches dancing in the sky. This artist of *The Mystical Nativity* painted a work in which Mercury and the three Graces are to the left of the central figure, all of whom are in an orange grove. Another painting by this artist from the 1480s depicts the titular Roman goddess naked and standing on a shell. For 10 points, name this Italian painter of *Primavera* and *The Birth of Venus*.

ANSWER: Sandro Botticelli [or Alessandro di Mariano Filipepi]

2. This character teamed up with Pig Killer to blow up a methane refinery, leading to the destruction of Bartertown, in one appearance. In his first appearance he arrives just in time to see his partner Goose die after being set afire in his vehicle, leading him to kill all the Zed Runners, including their leader Toecutter. This film character surnamed Rockatansky befriended the Feral Kid and drove a gas tanker full of sand into a vehicle, killing Humungus. In his most recent appearance, he helped Furiosa kill Immortan Joe. FTP what character appeared in movies subtitled "Beyond Thunderdome," "The Road Warrior," and "Fury Road" and has been played by Tom Hardy and Mel Gibson?

ANSWER: Mad Max Rockatansky

3. This author titled one novel after a fictional daughter of Hamilcar Barca who dies after witnessing the torture of her lover Matho. This author of *Salammbo* wrote a novella about the servant girl Felicite who sees a vision of her parrot as the Holy Ghost at the moment of her death. "A Simple Heart" by this author appeared twenty years after his most famous novel, which prompted a famous Achille Lemot cartoon of this author dissecting the title character who cheats on her doctor husband Charles with Leon and Rodolphe before killing herself in shame and desperation. FTP name this French author of *Madame Bovary*.

ANSWER: Gustave Flaubert

4. Mary Eliza Mahoney was the first African-American woman to be licensed in this profession in the US. A British practitioner of this profession famously said "Patriotism is not enough" before being executed by German soldiers in Belgium for helping Allied prisoners in her care to escape. Edith Cavell worked in this profession, as did an earlier practitioner who introduced hand washing and other sanitary practices to her workplace during the Crimean War, drastically lowering mortality rates and earning her the nickname "The Lady with the Lamp." FTP, modern practice of what profession was instituted by Florence Nightingale?

ANSWER: nursing (accept "nurse")

5. Homo-polymers consisting of this compound were used in the Nirenberg and Matthaei experiment. In rho-independent termination, a hairpin structure is followed by residues of this compound. Colo-rectal cancer can be treated with the 5-fluoro analog of this compound. A pseudo form of its nucleoside is found in the T arm of a "transfer" molecule. This pyrimidine is synthesized from the methylation of thymine or the deamination of cytosine. In a certain single-stranded molecule, it forms base pairs with adenine. For 10 points, name this base found in RNA but usually not DNA.

ANSWER: <u>uracil</u> [or <u>U</u>]

6. According to the Koran, this number of male witnesses is required to substantiate a claim of adultery. The holiday Sukkot includes waving this number of species, and Passover includes the youngest person asking this number of questions. The first in a collection of this number of statements concerns dukkha [DOO-kuh], or suffering. A group of this number mentioned in Revelation includes members such as Death, who rides a certain pale creature. For 10 points, name this number of Noble Truths in Buddhism and Horsemen of the Apocalypse in Christianity.

ANSWER: four

7. This man had his base at Ocracoke Island, and he was pardoned by Charles Eden, who turned a blind eye to his activities. Israel Hands was his first mate, and Pierre Dosset once surrendered to him without a fight. This pirate held Samuel Wragg hostage during a blockade of Charleston, during which he demanded a chest of medicine. Alexander Spotswood, the Lieutenant Governor of Virginia, sent Robert Maynard to stop this captain of the *Queen Anne's Revenge*, who was beheaded during a 1718 battle. For 10 points, name this pirate who had dark facial hair.

ANSWER: Blackbeard [or Edward Teach or Edward Thack or Edward Thatch]

8. This compound is made using Coenzyme F420 by microorganisms. A body of water on the moon Titan named Ligeia Mare is composed of this compound. The planet Neptune appears blue because of the presence of this gas in its upper atmosphere. The nickname "Fire Ice" was given to a clathrate in which this hydrocarbon is trapped by crystallized water. The primary gas released during a mud volcano is this simplest alkane. Although less common in Earth's atmosphere than CO2, this greenhouse gas is more efficient at trapping radiation. For 10 points, name this compound that has chemical formula CH4, and is released by cows when they fart.

ANSWER: methane [accept CH4 until mentioned]

9. This author wrote that "the world is shrinking" and argued that the size of the brain has nothing to do with intelligence in the 1947 pamphlet "The Races of Mankind." This author described how worshippers of Apollo emphasize order using the Nietzschean opposites of "Apollonian" and "Dionysian" in her first book. She studied one culture through its literature and newspaper clippings, leading to a comparison of "guilt" and "shame" cultures. For ten points, name this anthropologist who wrote *Patterns of Culture* and *The Chrysanthemum and the Sword*.

ANSWER: Ruth Benedict

10. This word appears twice in the title of a story in which Paul daydreams about the arrival of a postman while in Miss Buell's class. A novel in which the protagonist is an exiled poet and journalist who returns home to Turkey puns on the Turkish word for this substance. The poet Ka visits the town of Kars in that novel by Orhan Pamuk which is titled for this natural substance. At the end of James Joyce's story "The Dead," Gabriel Conroy watches this substance "fall faintly... upon all the living and the dead" as it piles "in drifts" on headstones. FTP, what form of winter precipitation precedes the word *Country* in the name of a Kawabata novel?

ANSWER: snow

11. The closing of what is now this waterway in the Miocene Epoch led to desiccation in a nearby sea known as the Messinian Salinity Crisis. The foothills of the Baetic Cordillera lie on the northern shore of this waterway and include El Estrecho Natural Park. Its southern shore includes an exclave belonging to the nation the lies across it, one of only two locations where the EU has a land border with Africa. Ceuta (thee-oota) abuts Morocco on the southern shore of what narrow body of water, FTP, a strait separating Africa from Spain.

ANSWER: Strait of Gibraltar

12. A person with this last name had a relationship with Daisy Suckley and resigned as Assistant Secretary of the Navy in the midst of the Newport sex scandal. The most well-known people with this last name were members of either the Oyster Bay or Hyde Park branches of their family. The newspaper column "My Day" was written by a person with this last name who resigned from the DAR after they refused to let Marian Anderson perform. One person with this surname won a Nobel Peace Prize for negotiating an end to the Russo-Japanese War, and another gave a series of fireside chats. For 10 points, identify this last name of presidents Teddy and Franklin Delano.

ANSWER: Roosevelt

13. Carl Binder compiled the overture to this work, in which a female character sings a duet with another character who can only buzz since he is disguised as a beautiful fly with golden wings. Another character in this work, who sings about formerly being the King of Boeotia [bee-OH-shuh], is the appropriately named John Styx, who looks after another character. In this work, the character of Public Opinion forces the titular character to travel to the titular location in order to bring Eurydice [yoo-RID-uh-see] back. For 10 points, name this Jacques Offenbach operetta that includes a tune called the "Infernal Galop," to which the can-can is often performed.

ANSWER: Orpheus in the Underworld [or Orphee aux enfers]

14. The theory of these objects began with a 1909 paper by A. K. Erlang concerning telephone calls. M/G/1 is an example of the notation developed by David Kendeall to describe these objects. Unlike a depth-first search, a breadth-first search uses one of these data structures to track the vertices to be explored. A variant of these data structures that is used in the A* [STAR] search algorithm stores elements by their priority. Often contrasted with stacks, these data structures are described as FIFO, or first-in first-out. For 10 points, name these data structures that can represent a line of waiting people or a list of movies to be watched on Netflix.

ANSWER: queues

15. This character asks the spirits, "unsex me here,/And fill me from the crown to the top full/Of direst cruelty." Soon thereafter, this character exhorts her husband to "screw your courage to the sticking place," though she worries that he is "too full of th' milk of human kindness." By the last act in which this character appears, she is sleepwalking, and she marvels that the "old man [could] have had so much blood in him." FTP what character rubs her hands and grumbles "Out, damned spot!" as she goes mad after her husband kills Duncan in Shakespeare's Scottish play?

ANSWER: Lady Macbeth

16. Akshayavat is one of these entities in Hindu myth which was the only thing visible when Narayana flooded the world. In Greek myth, Baucis and Philemon were turned into these when they died. Ask and Embla, the first man and woman of Norse myth, changed from these entities into humans. Wyrd's Well could be found near the bottom of one of these, where the Norns also lived; four stags also feed on that example of this type of entity. Ratatosk and Nidhogg can be found on, FTP, what type of large plant exemplified by Yggdrasil?

ANSWER: tree

17. These materials can be classified into two categories based on the ratio of their penetration depth to coherence length, which is called the Ginzburg-Landau parameter. Ceramic materials such as LBCO and yttrium barium copper oxide are examples of their high-temperature variety. Electrons in these materials exist as Cooper pairs according to BCS theory. The expulsion of a magnetic field from the interior of these materials is called the Meissner effect. For 10 points, name these materials that conduct an electric current with zero electrical resistance.

ANSWER: superconductors

18. The title figure of Plato's Cratylus is an extreme naturalist when it comes to these entities, arguing that they naturally address their referent, going so far as to deny Hermogenese the right to his example of this. Gottlob Frege suggested that "sinn," or sense," was a necessary component of these entities. Saul Kripke said these entities differed from definite descriptions in their "modal profile," noting that these entities have an intention that is constant throughout metaphysically possible worlds. FTP Kripke paired the idea of these verbal entities with "necessity" in titling a book arguing that what kinds of proper nouns are rigid designators fixed by a baptismal act, and which include words like Chris and Billy?

ANSWER: <u>names</u> (accept word forms)

19. One short story by this author sees a semi-wild dog called Lion die while attacking the title creature, the name of which is Old Ben. In another story by this author, Abner purposely wipes manure on an expensive rug in Major de Spain's mansion; that story ends with Abner's arson of the major's barn. The title character of another story by this author refuses to acknowledge the death of Colonel Sartoris many years after poisoning Homer Barron and keeping his corpse in a bed in her home. FTP what Southern Gothic author wrote the short stories "The Bear," "Barn Burning," and "A Rose for Emily."

ANSWER: William "Gopher Bill" Faulkner

20. This event was presided over by William Stoughton, who had previously received a charter as lieutenant governor of the colony in which it occurred. At the urging of the author of *The Wonders of the Invisible World*, Stoughton agreed to allow the introduction of "spectral evidence" in this event. Bridget Bishop was the first victim of this event, hanged after being accused of having a third nipple and tormenting five girls, including Abigail Williams. Among the first to be accused was the black slave Tituba. FTP what 1692 event saw cockamamie claims of the supernatural lead to the executions of 20 people in a Massachusetts town?

ANSWER: Salem Witch Trials

Delta Burke 2015 Round 6 Bonuses

- 1. Unlike neighboring mid-latitude Ferrell cells, they are thermally driven. For 10 points each:
- [10] Name these eponymous convection cells in which the air near the surface moves towards the equator, and air at high altitudes moves poleward.

ANSWER: Hadley cells

[10] These calm equatorial areas are where the surface winds of the two Hadley cells converge.

They are often referred to by either a four-letter acronym or a term synonymous with depression.

ANSWER: doldrums [or intertropical convergence zone; or ITCZ]

[10] The air flowing away from the equator doesn't reach the poles due to this effect that deflects surface winds to the right in the northern hemisphere and to the left in the southern hemisphere.

ANSWER: Coriolis effect

- 2. In "The Shadow over Innsmouth" this figure is described by the Deep Ones as waiting and dreaming in Ril'yeh. FTPE:
- [10] The "call" of what foul, green figure, described as having a face featuring octopus tentacles, titles a story by the American author of *At the Mountains of Madness*.

ANSWER: Cthulhu (ka-thoo_loo)

[10] Cthulhu is one of the best known creations of this racist weirdo author whose works, including "The Dunwich Horror" and "Herbert West: Reanimator," were recently collected by the Library of America.

ANSWER: H. P. Lovecraft

[10] The horrible Shug-Niggurath (nee-gure-oth) of the Lovecraft pantheon has an epithet calling her this kind of animal with a thousand young.

ANSWER: black goat

- 3. Noted economist Pope Francis called the "unbridled" form of this system the "dung of the devil." FTPE:
- [10] What economic system is characterized by free markets and private interests?

ANSWER: capitalism

[10] This French economist warned of what he calls patrimonial capitalism, in which a small number of families control much of a nation's wealth, in his 2013 book *Capital in the Twenty-First Century*.

ANSWER: Thomas Piketty

[10] Proponents of unbridled capitalism often use this two-word French phrase, meaning roughly "let it be," to refer to governmental non-interference in private industry and trade.

ANSWER: laissez-faire

- 4. During one battle, this man used vines and trees to rappel down Mt. Vesuvius and ambush the opposing army. FTPE:
- [10] Name this former gladiator whose ultimately unsuccessful uprising against Rome led to his followers being crucified along the Appian Way.

ANSWER: Spartacus

[10] The Spartacus League, a group of Marxist revolutionaries, launched a revolt in an attempt to undermine the rule of this German government established in the aftermath of World War I.

ANSWER: Weimar Republic

[10] The Comte de Lavaux referred to this man as the "Black Spartacus." Along with Jean-Jacques Dessalines, this former slave led the Haitian Revolution.

ANSWER: Toussaint L'Ouverture

5. He named the exuberant side of his personality Florestan, and the reflective side Eusebius. FTPE:

[10] Name this German composer who was married to a woman named Clara.

ANSWER: Robert Schumann

[10] The commedia dell'arte characters Pierrot and Harlequin name two of the pieces in this Schumann collection, which contains many musical motifs representing the letters A-S-C-H.

ANSWER: Carnaval

[10] The intermezzo of *Carnaval* is named for this Italian, whose own compositions include 24 caprices for solo violin, the last of which inspired a Sergei Rachmaninoff rhapsody.

ANSWER: Niccolo Paganini

- 6. The area under a pressure-volume diagram equals this quantity for a reversible process. FTPE:
- [10] Name this quantity equal to the dot product of force and displacement.

ANSWER: work

[10] The first law of thermodynamics states the change in this quantity equals heat minus work.

ANSWER: <u>internal energy</u> [prompt on partial answer]

[10] The work done in an isochoric process, in which this quantity is constant, equals zero.

ANSWER: volume

- 7. One of its members had the Yellow Millet Dream and another walks with an iron crutch. FTPE:
- [10] Name this group of legendary figures that includes Lu Dongbin, Li Tieguai, and six others.

ANSWER: Eight Immortals [or Ba Xian; or Pa Hsien]

[10] The Eight Immortals are a group from this Chinese religious philosophy that has a name meaning "way." The concept of *wu wei* is important in this religion that was founded by Laozi.

ANSWER: <u>Tao</u>ism [or <u>Dao</u>ism]

[10] Zhang Guolao was a member of the Eight Immortals who had a mule with this unique ability. The ship Skidbladnir from Norse myth also had this special ability.

ANSWER: could be <u>folded up</u> [accept equivalents; prompt on "could be put in a bag or pocket"]

- 8. One literary work written in this form details Poprischin's descent into insanity. FTPE:
- [10] What is this type of first-person writing usually meant to be kept private, one recent popular example of which was titled for the character Bridget Jones?

ANSWER: diary

[10] Much of this short story by Charlotte Perkins Gilman is presented as diary entries by the narrator as she loses her mental stability during her husband's effort at a rest cure.

ANSWER: "The Yellow Wallpaper"

[10] Another novel taking the form of a diary is *Journal of the Plague Year* by this British author, who also had his title character Robinson Crusoe briefly keep a journal.

ANSWER: Daniel Defoe

- 9. It took hold when Tokugawa Yoshinobi stepped down as shogun. For 10 points each:
- [10] Name this "restoration" that began in 1868 and led to the swift industrialization of Japan.

ANSWER: Meiji Restoration

[10] This American commodore and his advanced gunships forced Japanese leaders to open ports other than Nagasaki up to foreign trade, pressing Japanese leadership into industrialization.

ANSWER: Matthew C. Perry [prompt on partial]

[10] Perry was sent to Japan by this president who acceded to the office after the death of Zach Taylor, and who was the last Whig to be president.

ANSWER: Millard Fillmore

- 10. This book divides the human mind into "analytical" and "reactive" parts, and it claims that traumas and negative memories are stored in the reactive mind as engrams. FTPE:
- [10] What book first published in 1950 was subtitled "The Modern Science of Mental Health" by author L. Ron Hubbard?

ANSWER: Dianetics

[10] *Dianetics* is the founding text for this pseudo-religious cult which claims numerous duped celebrity adherents, including John Travolta and Tom Cruise.

ANSWER: "Church of" Scientology

[10] Actress Leah Remini, a former Scientologist, filed a missing person report for the wife of this current leader of Scientology; reports suggest he is keeping her prisoner and is a total dick.

ANSWER: David Miscavige

- 11. Unique types of it include Benfey's spiral version and Janet's left-step version. FTPE:
- [10] Name this arrangement of chemical elements by their atomic number that was first developed by the Russian chemist Dmitri Mendeleev in 1869.

ANSWER: periodic table

[10] This relationship exists between some pairs of similar elements, like lithium and magnesium, as well as boron and silicon, which are located in different groups and periods on the periodic table.

ANSWER: diagonal relationship

[10] A diagonal relationship exists between beryllium and this element. Its similarly named oxide is extracted from bauxite in the Bayer process and dissolved in the Hall–Heroult process.

ANSWER: aluminum [or aluminium; or Al; do NOT accept "alumina"]

- 12. This person's website includes a photo of the numbers 1488 scrawled in sand. For 10 points each:
- [10] Name this person who murdered nine black churchgoers in Charleston in June of 2015.

ANSWER: Dylann Roof

[10] The murders led South Carolina to remove this object from the grounds of the state capitol. Walmart also stopped selling this object, although Chris Borglum still proudly displays it.

ANSWER: Confederate (battle) flag [accept equivalents]

[10] A jacket owned by Dylann Roof included the flag of this African polity, which was led by noted racist Ian Smith until 1979, the year before it changed its name to Zimbabwe.

ANSWER: (Southern) Rhodesia

- 13. Styles of this art form in Islam include the older Kufic and more recent Maghribi. FTPE:
- [10] Name this stylized writing important since Islam decrees much representative art idolatrous.

ANSWER: calligraphy [or khatt]

[10] Islamic prohibition of figurative art was important in the development of this fabric-dyeing technique, which uses wax as a dye repellent, and is popular in Southeast Asia.

ANSWER: batik [or battik]

[10] The newspaper Jyllands [YYL-lahns] Posten in this country caused an uproar in the Islamic world by publishing twelve cartoons in 2005 that include the image of Muhammad.

ANSWER: Denmark [or Danmark]

- 14. This poem is preceded by the name of the Italian city of Ferrara, functioning as an indicator of setting. FTPE:
- [10] What poem includes the duke's admission that he "gave commands" for his young wife to be killed? ANSWER: "My Last Duchess"
- [10] "My Last Duchess" was written by this husband of the poet Elizabeth Barrett, who also wrote "Fra Lippo Lippi" and "Porphyria's Lover."

ANSWER: Robert Browning

[10] "My Last Duchess" ends with the duke asking his listener to admire a sculpture of this Roman god of the sea taming a sea horse.

ANSWER: Neptune

- 15. This island contains an "Airport in the Sky" as well as a casino that overlooks Avalon. FTPE:
- [10] Name this member of the Channel Islands that is actually located 22 miles from the mainland.

ANSWER: Santa Catalina Island

[10] Catalina is located off the coast of this state, whose national parks include Yosemite.

ANSWER: California

[10] Catalina is also home to a Memorial and Botanic Garden named for this chewing gum magnate, who owned a share of the Chicago Cubs during the 1920s.

ANSWER: William Wrigley, Jr.

- 16. Before it was banned in the 1970s, it caused bald eagles to have very thin eggshells. FTPE:
- [10] Name this insecticide that was banned in the US due to the publication of *Silent Spring*.

ANSWER: <u>DDT</u> [or <u>dichloro-diphenyl-trichloro-ethane</u>]

[10] DDT was used during World War II to control an outbreak of this disease among US troops.

Caused by species of *Rickettsia* [ri-KET-see-uh] bacteria, this disease can be transmitted by lice.

ANSWER: typhus [do NOT accept "typhoid"]

[10] DDT was discovered by a scientist with this last name. The "ducts" that develop into the external female genitalia are named for a scientist with this last name, as is a type of mimicry.

ANSWER: Müller

- 17. This man spent much of World War I as a dispatch runner on the Western Front and earlier was rejected from the Vienna's Academy of Fine Arts. FTPE:
- [10] Name this Fuhrer of the Third Reich who took power in Germany after the death of President Paul Von Hindenburg. Jeb Bush would totally kill him in the crib if he had a time machine.

ANSWER: Adolf Hitler

[10] This German Propaganda Minister was chancellor for one day after Hitler committed suicide.

ANSWER: Joseph Goebbels

[10] This man took a solo flight to arrange peace talk with the Duke of Hamilton, but was promptly put in British jail. He was tried at Nuremberg and lived the rest of his life in Spandau prison.

ANSWER: Rudolf Hess

- 18. This 1664 play is subtitled "The Hypocrite." FTPE:
- [10] In what French play does Orgon finally realize that the title pious fraud has deceived him? ANSWER: *Tartuffe*

[10] *Tartuffe* is probably the best-known play by this French author of *The Misanthrope*.

ANSWER: Moliere (or Jean Baptiste Poquelin from smartyboots)

[10] Harpagon is the skinflint title character of this Moliere play; in the end he keeps his casket of money but his son Cleante marries Mariane.

ANSWER: *The Miser* or *L'Avare*

- 19. An 18th-century thinker asked what this movement in human thought really was, answering by calling it "man's emergence from his self-imposed immaturity." FTPE:
- [10] What was this progressive movement espousing scientific reason, social tolerance, and liberty in the 1700s?

ANSWER: Age of Enlightenment

[10] This German philosopher wrote the long essay "What Is Enlightenment?" You may know him better for his *Critique of Pure Reason*.

ANSWER: Immanuel Kant

[10] Kant argued for the abolition of standing armies and for the establishment of Republican governments in all states in this essay, saying those would help achieve the utopian, anti-war condition.

ANSWER: "Perpetual Peace: A Philosophical Sketch"

- 20. This president's cabinet included James Blaine as Secretary of State and Robert Todd Lincoln as Secretary of War. For 10 points each:
- [10] Name this president who was succeeded by the mutton-chopped Chester A. Arthur after serving for only six months because he was assassinated by a disgruntled office seeker.

ANSWER: James Garfield

[10] This act was pushed through Congress with the help of President Arthur. It was a reform billed that encouraged a civil service system rather than the spoil system.

ANSWER: Pendleton Act

[10] The namesake of the Pendleton Act, "Gentleman" George Pendleton, was a U. S. Senator from this state, whose others have included Mark Hanna and an anti-trust act namesake, John Sherman.

ANSWER: Ohio