1. This author apostrophized the title subject as the "true daughter of old Time" in one sonnet, while in another poem he coined the phrase "the glory that was Greece/And the grandeur that was Rome." This author averred that the hero of the tragedy called "Man" is the titular "conqueror worm" in another poem, while he rhymed the title female's three-syllable name with the word "tomb" in a poem set in the "ghoul-haunted woodland of Weir" in another. FTP, name this author of "Sonnet--to Science," "To Helen," and "Ulalume," [OO-la-loom] who is best known for a poem in which a "bust of Pallas" provides a perch for the title bird who likes to repeat the word "Nevermore!"

ANSWER: Edgar Allan Poe

2. In this work's third movement, the oboe plays behind the scenes during measures 3-20, then returns to the orchestra. The third movement of this work depicts a "Scene in the Fields" in which two young shepherds, represented by an English horn and an oboe, alternate playing a Swiss mountain melody called the "ranz des vaches." An obsession with an actress named Harriet Smithson inspired this five-movement work, which uses a single melody called the "idee [EE-dey] fixe." The fourth movement of this work, which is entitled "March to the Scaffold," depicts a beheading by guillotine. For 10 points, name this composition by Hector Berlioz.

ANSWER: <u>Symphonie Fantastique</u> [or <u>Fantastical Symphony</u>]

3. Myung Hyun developed the robotic machine JEROS to eliminate swarms of these animals that are threatening ecosystems. The unique feature of a protein discovered in this animal is due to the cyclic structure of its serine-tyrosine-glycine sequence. These animals are the cause of Irukandji syndrome. GFP, or green fluorescent protein, was first observed in one of these animals, the largest of which has certain yellow and red structures that resemble a lion's mane. The "box" type of these animals have very powerful venom. For 10 points, name these members of phylum Cnidaria that have a gelatinous umbrella-shaped body along with trailing tentacles that can sting.

ANSWER: jellyfish [or sea jelly; or sea jellies; or medusozoas]

4. Korean folklore describes a form of this animal that could live a thousand years and change into a beautiful woman to seduce men called a Kumiho. Creon tasked Amphitryon with killing one of these animals that could never be caught that was called the Teumessian one; that animal was eventually set upon by Laelaps, the dog that always caught its prey. The two were eventually turned into Canis Major and Minor by Zeus. Reynard was a medieval trickster animal of this type. FTP what type of animal, according to a fable, turned up its nose at some grapes it couldn't reach and called them sour?

ANSWER: fox

5. Warriors in this empire were known as "the shorn ones" because of their hairstyle. Other military groups in this empire had names like Otomies and Eagle Knights. Much of what we know about these people is recorded in the *Florentine Codex*. At its zenith, this civilization was organized under a triple alliance; however, it began to decline during the Flower Wars. This civilization fell after the Massacre at the Great Temple, and the Tlaxcala revolted against this civilization. This civilization was ruled by Montezuma II. For 10 points, identify this Mesoamerican civilization conquered by Hernan Cortes in 1521.

ANSWER: Aztec Empire

6. Philosopher Frank Jackson posited a thought experiment using this phenomenon as studied by a neuroscientist named Mary who understands its properties but hasn't experienced it directly, wondering if she will learn anything when she leaves a room in which this property isn't present. The "fictionalism" argument of this property suggests it's not inherent in the external world but only perceived by observers. Thomas Reid's argument that this property is mind-independent and inherent in objects is called its namesake "objectivism." FTP what is this property which has three primary forms: red, green, and blue.

ANSWER: color

7. When suffering from mental illness later in life, the poet John Clare often claimed to be this poet, a contemporary of his. Negative reviews of this poet's first book, *Hours of Idleness*, prompted him to write the satire "English Bards and Scotch Reviewers." Passion, rebelliousness, arrogance, and intelligence characterize this writer's namesake "hero," exemplified by the protagonist of this author's *Childe Harold's Pilgrimage*. Another example is the sexual virtuoso hero of this poet's Don Juan [*JOO-uhn*]. FTP what club-footed Romantic poet wrote "She Walks in Beauty" and was once described as "mad, bad, and dangerous to know"?

ANSWER: Lord Byron (or George Gordon)

8. The conservation of this quantity is a consequence of translational invariance according to Noether's theorem. For a particle, the de Broglie wavelength equals the Planck constant divided by this quantity. According to a principle named for Heisenberg, the accurate measurement of position produces uncertainties in the measurement of this quantity. Newton's second law can alternatively be written as force equals the change in this quantity divided by the change in time. Unlike kinetic energy, this quantity is conserved in inelastic collisions. For 10 points, name this vector quantity symbolized by a lowercase p that is equal to an object's mass and velocity.

ANSWER: linear momentum [do NOT accept "angular momentum"]

9. This project was first envisioned by its developer, Jesse Hawley, while in debtor's prison for going bankrupt from a business scheme that shipped grain along the Atlantic. Branches of this transportation project include the Oswego and Cayuga-Seneca. Over one thousand workers, mostly Irish immigrants, died working on the first phase of this waterway, which ended at Utica. The "Flight of Five Locks" lifts boats 80 feet up the Niagara Escarpment on this man-made waterway. Derisively labeled "Clinton's Ditch." FTP, name this waterway that connects the Hudson River to its namesake Great Lake.

ANSWER: Erie Canal

10. Artifacts discovered in this country depict the Oculate Being, which possesses huge eyes. Julio Tello discovered monoliths depicting severed heads at the Cerro Sechin site in this country. Chan Chan and Chavín de Huantar are other archeological sites in this country. Thousands of animal figures and straight lines that extend for miles are found in this country and were created by the Nazca culture. Yale professor Hiram Bingham rediscovered the ruins of a "lost city" in this country. For 10 points, name this country where Machu Picchu is home to many Inca artifacts.

ANSWER: Peru

11. In a work by this artist, a dress hangs in between a toilet and a trophy that both sit on columns. One painting by this artist shows the titular woman both jumping from the Hampshire House and lying dead on the pavement. This artist of *The Suicide of Dorothy Hale* depicted herself surrounded by a snail, a purple orchid, and a fractured pelvis in the painting *Henry Ford Hospital*, which was inspired by a miscarriage. This artist, who lived in the Blue House, painted a self-portrait that includes a pet monkey, and a double self-portrait in which two figures are connected by a vein. For 10 points, name this Mexican painter who was married to Diego Rivera.

ANSWER: Frida Kahlo

12. This man wrote the sonnet "To every captive soul and gentle heart" after a dream in which the figure of Love gives a woman his heart to eat. A character created by this man has a name meaning "evil tail" and lies about the condition of bridges. A work by this man features Ugolino gnawing on Ruggieri as well as a gate inscribed "All hope abandon ye who enter here." This man loved a woman named Beatrice and wrote a poem that begins with Virgil guiding the protagonist through hell. For 10 points, name this Italian author of *La Vita Nuova* and the *Divine Comedy*.

ANSWER: Dante Alighieri [accept either]

13. This city is home to a row of statues which shows such figures as Charlie Chaplin and Mother Teresa wielding RPGs and machine guns. This city's downtown is home to the historical Tower Theater and Adrienne Arsht Center opera house. This city is home to a controversial soccer stadium project funded by David Beckham to be finished in 2018. In March of every year, this city celebrates the Calle Ocho festival. Suburbs of this city include Sweetwater and Kendall, both of which were the most devastated areas of Hurricane Andrew in 1992. For 10 points, identify this largest city in Dade County, Florida.

ANSWER: Miami

14. One woman with this title kept muskets by her windows every morning to shoot crows when she woke up. Another individual with this title destroyed his nation's economy in the Livonian War, which he lost. Individuals who held this title were also the Prince of Ryazan. One holder of this title had to deal with the Streltsy Revolt led by his sister, and also established a "Grand Embassy" in his visit throughout Europe. This title was first held by the last monarch of the Rurik Dynasty. For 10 points, identify this royal title which was held by such people as Ivan the Terrible and Peter the Great.

ANSWER: <u>Tsar</u> of Russia (accept "<u>Emperor</u>"; prompt on "ruler")

15. The gospel attributed to Marcion of Sinope is closely related to this religious text, though theologians debate whether it is a revision or basis for this text. Written in Koine [koi-NEY] Greek, this text is addressed to a figure addressed as "optime," Theophilus. This text is the only one of the Synoptic Gospels to include the story of the rich man and the beggar named Lazarus, and this gospel shares many parallels with the Gospel of John. Authored by an evangelist represented by an ox with wings, FTP name this gospel written by the author of Acts of the Apostles, which follows Matthew and Mark.

ANSWER: Gospel of Luke

16. With an old college friend named D. G. Champernowne, this man developed one of the first chess programs. Alan Perlis won the first annual award named for this person, who was working at the National Physical Laboratory when he designed the ACE, or automatic computing engine. A busy beaver is an example of a construct named for this man that combines a finite set of instructions with an infinitely long tape. CAPTCHAs are examples of a type of test named for this man that tries to distinguish between humans and machines. While working at Bletchley Park, this homosexual cracked the Enigma machine. For 10 points, name this British computer scientist.

ANSWER: Alan Turing

17. A song by this person about a lazy dog includes the lyric "My name's Snick and you're going to have to carry me." This politician attacked Tom Campbell in the "Demon Sheep" political ad. This politician lost to Barbara Boxer in the 2010 California senate race. During a six-year stint as CEO, this person's company merged with Compaq to create the world's largest PC manufacturer. This person was the only 2016 presidential candidate to have been promoted from the first bottom-tier debate to the second top-tier debate. For 10 points, name this former CEO of HP, a female Republican Party presidential candidate.

ANSWER: Carly Fiorina

18. The defenders of this operation instituted the Dyle Plan, which was meant to halt the invading force at the namesake river. The attacking side used a plan which saw Army Group B feint an attack to the north while Army Group A attacked south through the Ardennes Forest. The defending side also launched Operation Dynamo, which successfully evacuated the Pas-de-Calais amphibiously. In the aftermath of this invasion, Henri Petain became leader of a collaborating government at Vichy. For 10 points, name this six week invasion which saw an allied country defeated by German forces in the summer of 1940.

ANSWER: <u>Invasion of France</u> by Nazi Germany (accept <u>Battle of France</u>, <u>Fall of France</u>, or other equivalent descriptions)

19. A leak of a molecule with this number of carbon atoms was the cause of the Flixborough disaster. When n equals one, Huckel's rule predicts a molecule with this number of pi electrons will be aromatic. The structure of a molecule with this number of carbon atoms was imagined by August Kekule in a dream. A different molecule with this number of carbons can exist in either the boat or chair conformation. In the compound BF3, there are only this number of valence electrons around boron. The element with this atomic number has allotropes such as graphene and diamond. For 10 points, name this number of carbon atoms in a molecule of either benzene or cyclohexane.

ANSWER: six

20. This country is home to the contemporary avant-garde author of the novel *The Embroidered Shoes* and the story "The Boy Who Raised Poisonous Snakes" who writes under a pen name meaning "dirty snow." An author from this country with a pen name meaning "don't speak" wrote a novel in which Nao is punished by Lord Yama by being reincarnated as a donkey, followed by further reincarnations as different animals. That author from this country wrote *Life and Death Are Wearing Me Out* and won the 2012 Nobel Prize in Literature with special citation for his novel *Red Sorghum*. FTP what country produced the experimental writers Can Xue [shway] and Mo Yan?

ANSWER: China

Delta Burke 2015 Round 3 Bonuses

- 1. If crossing entire oceans on boats of amateurish construction sounds like a risky proposition to you, you're probably saner than these people. For 10 points each:
- [10] This Norwegian's most famous voyage was the Kon-Tiki Expedition, in which he sailed across the Pacific Ocean in an imitation of an ancient Polynesian raft to prove it was possible.

ANSWER: Thor Heyerdahl

[10] Heyerdahl later led an expedition to this Pacific island, where his team re-created the moai, or large stone heads that are found there.

ANSWER: Easter Island

[10] This man was convinced there was land west of Greenland. He set sail around the year 1000 and established a Norse settlement at Vinland on the northern tip of what is now Newfoundland.

Answer: Leif <u>Erikson</u>

- 2. Answer the following about studying astronomy over different wavelengths, for 10 points each.
- [10] This telescope, which was launched in 1990, can observe visual and near ultraviolet light.

Named for an American astronomer, it will be succeeded by a telescope named for James Webb.

ANSWER: <u>Hubble</u> Space Telescope [or <u>HST</u>]

[10] The space telescope named for Spitzer is designed to detect radiation from this portion of the electromagnetic spectrum, which is shorter than microwaves but longer than visible light.

ANSWER: infrared

[10] An observatory sensitive to the X-ray portion of the spectrum is named for this astrophysicist, who determined that the limit for a stable white dwarf is around 1.4 solar masses.

ANSWER: Subrahmanyan Chandrasekhar [prompt on "Chandra"]

- 3. This author was stabbed in the neck by a member of the Muslim Brotherhood in 1996. FTPE:
- [10] What Egyptian author of the *Midaq Alley* won the 1988 Nobel Prize in Literature?

ANSWER: Naguib Mahfouz

[10] Mahfouz thus became the first author to write primarily in this language to win a literature Nobel.

ANSWER: Arabic

[10] Kemal, protagonist of much of Mahfouz's Cairo Trilogy, suffers from this disease, as does the protagonist of Dumas fils' novel *The Lady of the Camelias*.

ANSWER: tuberculosis

- 4. In the *Ghent Altarpiece*, this man has his right hand raised and wears a green cloak. FTPE:
- [10] Name this man who was beheaded by Herod after Salome asked for his head on a platter.

ANSWER: John the Baptist [prompt on partial answer]

[10] *The Peacock Skirt* and *The Stomach Dance* are two black and white illustrations by this Englishman that are found in an 1894 translation of Oscar Wilde's play *Salome*.

ANSWER: Aubrey Beardsley

[10] John the Baptist is depicted as an infant in the *Virgin of the Rocks*, a painting by this Italian, whose other works include *The Last Supper* and the *Mona Lisa*.

ANSWER: Leonardo da Vinci [accept either underlined portion]

- 5. This term denotes not so much a philosophical school as a mode of approaching a question. FTPE:
- [10] What term is used to refer to medieval thinkers like Peter Lombard and Albertus Magnus, who used a method of disputation to argue for ideas in early universities?

ANSWER: Scholasticism (accept word forms)

[10] Perhaps the best known Scholastic thinker to modern audiences is this author of *Sic et Non*. His love for a woman named Heloise led her uncle to castrate this thinker.

ANSWER: Peter Abelard

[10] This other Scholastic thinker derived a principle of parsimony, suggesting that the simplest approach to a question is usually the best one, known as his namesake "razor."

ANSWER: William of Occam

- 6. Brian Witt came up with the nickname for these people, who are both the sons of former players, and who include the reigning MVP and a person who once scored 37 points in a quarter. FTPE:
- [10] Name these so-called "siblings" who play guard for the Golden State Warriors.

ANSWER: Splash Brothers [or Stephen Curry and Klay Thompson]

[10] This team, led by Lebron James, lost to the Golden State Warriors in the 2015 NBA Finals.

ANSWER: Cleveland Cavaliers [accept either]

[5 each] Name the colleges Stephen Curry and Klay Thomspon attended. One of them recently switched from the Southern Conference to the A-10, while the other is in the city of Pullman.

ANSWER: Davidson and Washington State

- 7. This city was the location of the University of Sankore, and is currently home to the Djinguereber [jingah-REY-bur] and Sidi Yahia mosques. For 10 points each:
- [10] Name this city whose name is often casually used to denote a distant or faraway place.

ANSWER: <u>Timbuktu</u> [or <u>Timbuctoo</u>; or <u>Timbuktoo</u>; or <u>Tombouctou</u>]

[10] Timbuktu was an important city in this empire of West Africa, whose rulers were known as mansas. This empire shares its name with a modern-day country with capital at Bamako.

ANSWER: Mali

[10] This event involving a Malian mansa in 1324 consisted of a three-thousand mile journey that flooded markets on the way with gold.

ANSWER: Musa's pilgrimage to Mecca [accept equivalents like Musa's Hajj]

- 8. In one of his experiments, bands of bright light alternated with regions of darkness. FTPE:
- [10] Name this scientist who demonstrated the wave nature of light in his double-slit experiment.

ANSWER: Thomas Young

[10] Light behaves as a stream of particles in Einstein's Nobel Prize winning explanation of this effect, in which electrons are ejected from a metal when struck by light.

ANSWER: photoelectric effect

[10] In the photoelectric effect, the maximum kinetic energy of the ejected electrons equals the product of Planck's constant and frequency minus this quantity usually symbolized phi.

ANSWER: work function [do NOT accept or even prompt on just "work"]

- 9. The "Door to Hell," a pit of fiery natural gas nearly three football fields in diameter, has been burning continuously for over 44 years in this country. FTPE:
- [10] That exciting location is in this Central Asian country, which has its capital at Ashgabat.

ANSWER: Turkmenistan

[10] Nearly seven-tenths of Turkmenistan is composed of this biome, specifically the Karakum, which means "black sand" in Turkic.

ANSWER: desert

[10] Turkmenistan has a western coast on this so-called "sea," which is really a lake since it is fully enclosed by land. It's fed by the Volga River.

ANSWER: Caspian Sea

- 10. People in this social position were depicted in a collection of stories called *A Sportsman's Sketches*. FTPE:
- [10] What was this low social status of people whose "dead souls" were collected in a novel by Nikolai Gogol?

ANSWER: <u>serfs</u> (prompt on "peasants" and don't accept "slaves")

[10] This Russian author wrote A Sportsman's Sketches and Fathers and Sons.

ANSWER: Ivan <u>Turgenev</u> [first and last name required from Matt Jackson]

[10] This is the character who plots to turn dead souls into rubles in the novel *Dead Souls*.

ANSWER: Chichikov

- 11. This son of Clymene is responsible for Ethiopians having dark skin. For 10 points each:
- [10] Name this figure who lost control of the sun chariot belonging to Helios, his father.

ANSWER: Phaethon [FEY-uh-thon] [or Phaeton]

[10] Phaethon's grieving friend Cycnus is turned into one of these aquatic birds with white plumage and a long neck.

ANSWER: swan

[10] This figure from Finnish myth dies while trying to kill the Swan of Tuonela [TWAW-ne-luh], but his body is recovered by his mother, and he is restored to life with some magic honey.

ANSWER: Lemminkainen

- 12. Identify these minor parties in American history FTPE:
- [10] This secretive party with a strong anti-immigration stance had a nickname derived from a response members often gave when asked about it.

ANSWER: American Party [or Know Nothing Party]

[10] This party nominated Martin Van Buren as president in the 1848 election, and its name comes from its stance against the expansion of slavery

ANSWER: Free Soil Party

10] This party was found as a means for Teddy Roosevelt to run in the 1912 election after not being chosen as the Republican Candidate at the National Convention.

ANSWER: Progressive Party [or the Bull Moose Party]

- 13. This composer founded a festival in Bayreuth, Germany in 1876 to present his operas. FTPE:
- [10] Name this composer whose anti-semitism is on display in his essay "Jewishness in Music."

ANSWER: Richard Wagner [VAHG-ner]

[10] Wagner composed this epic cycle, which is named for an object made by the dwarf Alberich, and includes the operas *The Rhine Gold*, *The Valkyrie*, and *Twilight of the Gods*.

ANSWER: <u>Ring Cycle</u> [or The <u>Ring of the Nibelung</u>; or Der <u>Ring des Nibelungen</u>]

[10] The oboe quotes the lullaby "Sleep, Little Child, Sleep" in this work, which was composed by Wagner as a birthday gift for his wife. It partly shares its title with a work from the *Ring Cycle*.

ANSWER: Siegfried Idyll [do NOT prompt on partial answer]

- 14. In a Hemingway novel, Jake Barnes and Bill Gorton travel to Burguete in the Pyrenees to engage in this activity. FTPE:
- [10] What is this common Hemingway pastime which Nick Barnes does while thinking about World War I in the story "Big Two-Hearted River"?

ANSWER: fishing [or angling if there are old English people playing]

[10] Barnes appears in this Hemingway novel which begins by noting that "Robert Cohn was once middleweight boxing champion of Princeton."

ANSWER: The Sun Also Rises

[10] This aristocratic woman in *The Sun Also Rises* dallies with the bullfighter Pedro Romero before announcing she plans to return to Mike Campbell at the end of the novel.

ANSWER: Lady Brett Ashley [accept either]

- 15. This element is bonded to two cyclo-penta-dienyl complexes in both Tebbe's reagent and the Petasis reagent, and its dioxide is widely used as a white pigment for paints. For 10 points each:
- [10] Name this transition metal that is also often used in aircraft parts and golf clubs.

ANSWER: <u>titanium</u> [or <u>Ti</u>]

[10] This industrial process for manufacturing titanium begins with rutile ore, which is primarily titanium dioxide, being reacted with chlorine to make titanium tetrachloride.

ANSWER: Kroll process

[10] In the final part of the Kroll process, titanium tetrachloride is often converted to titanium using this element as a reducing agent. An atom of this element is in the center of chlorophyll.

ANSWER: magnesium [or Mg]

- 16. According to Steven Pinker's book *The Better Angels of Our Nature*, this rebellion resulted in the death of a sixth of the world's population and was "the worst atrocity of all time." FTPE:
- [10] Name this rebellion against Xuanzong led by the namesake obese Turkic general, whose forces captured the cities of Luoyang and Chang'an before he was assassinated by his son.

ANSWER: An Lushan rebellion [or An-Shi rebellion; or Tianbao rebellion]

[10] In addition to the An Lushan rebellion, events during this century include the end of the Umayyad Caliphate following the Battle of the Zab and the beginning of the Nara Period in Japan.

ANSWER: 8th century [or 700s; or 701-800; accept equivalents]

[10] The poets Li Bai and Du Fu were active during this Chinese dynasty that saw the An Lushan rebellion. This dynasty was defeated by the Abbasid Caliphate at the Battle of Talas.

ANSWER: T'ang dynasty

- 17. In a long essay, this person used the fictional Judith, Shakespeare's sister, to illustrate the obstacles women writers face. FTPE:
- [10] What British novelist created a title character who lives for 300 more years after changing sex from male to female in the novel *Orlando*?

ANSWER: Virginia Woolf

[10] What essay by Woolf, the title of which refers to a place where a woman could safely write, was referenced in this bonus's opener?

ANSWER: "A Room of One's Own"

[10] Woolf's novel *The Waves* is emblematic of much of her work in this literary movement of the 1920s and 30s, characterized by "art for art's sake" and dense, allusive writing often featuring the use of stream of consciousness.

ANSWER: Modernism

- 18. Abnormalities in children with this genetic condition include duodenal atresia, a single palmar crease, epicanthal folds, a short neck, and mental retardation. For 10 points each:
- [10] Name this genetic disorder most often caused by having an extra copy of chromosome 21.

ANSWER: Down's syndrome [prompt on "trisomy 21"]

[10] Another characteristic feature of Down syndrome is Brushfield spots, which give a speckled appearance to this anatomical structure. Lisch nodules project from the surface of this structure.

ANSWER: iris [prompt on less specific answers, such as the "eye"]

[10] The easily visible parts of eye include the pupil, iris, and this thick outer coat. The limbus separates the cornea from this structure, which is often referred to as the white of the eye.

ANSWER: sclera

- 19. Name these items of clothing that observant Muslim women might wear FTPE:
- [10] This loose outer garment, most common in Afghanistan, covers the entire body and has a veiled opening for the eyes.

ANSWER: <u>burqa</u> [or <u>burka</u>; or <u>burkha</u>; or <u>burkha</u>; or <u>burqu</u>; or <u>chadri</u>; or <u>paranja</u>]

[10] This term refers to a scarf worn by women as well as the traditional dress code for women.

ANSWER: hijab

[10] Along with a hijab, this long and usually black robe is worn by women in Saudi Arabia.

ANSWER: abaya [or aba; or abayah; or aba'ah; or abayat; or aba'at]

- 20. This state, which first emerged when Grand Duke Jogaila married Queen Jadwiga, existed until its third partition in 1795. For ten points each:
- [10] Name the state that merged one polity with capital at Vilnius and another at Krakow.

ANSWER: Polish-Lithuanian Commonwealth [or Poland-Lithuania Commonwealth]

[10] This order of knights and their Grand Master lost to the Polish-Lithuanian Commonwealth at the Battle of Tannenberg, or by the Poles known as Grunwald, in 1410.

ANSWER: Teutonic Knights [or Teutonic Order]

[10] A different Battle of Tannenberg, which saw the Germans defeated the Russians, occurred during this war, which also included the Battle of the Marne and the Gallipoli Campaign.

ANSWER: World War I