

Minnesota Undergraduate Tournament 2016: A Vat of Ranch Dressing or a Bullet to the Head
Questions by Sam Bailey, Rob Carson, Mike Cheyne, Akhil Garg, Carsten Gehring, Andrew Hart, Ike Jose, Shan Kothari, Cody Voight, Najwa Watson, and NOT Cory Haala
Packet 5: Tossups

1. In one of this man's paintings, a scene from the Gospel of Luke is visible through a window in the background while a maid uses a mortar and pestle in a contemporary kitchen in the painting's foreground. In this man's only surviving history painting, a general in black armor genially places his hand on the shoulder of a man giving him the keys to the city. A painting by this man, which was said to be at the boundary between the worlds of Renaissance and Classical representation, was painted at the Royal (*) Alcázar. This painter of *Christ in the House of Mary and Martha* and *The Surrender at Breda* added a red cross to the chest of a man in one of his works after he was admitted to the Order of Santiago. The reflection of a king and queen can be seen in the background of a painting by him of the Infanta Margarita Teresa and her court. For 10 points, name this Spanish painter of *Las Meninas*.
ANSWER: Diego Velázquez <Bailey>

2. This is the inferior of two structures underdeveloped in sufferers of MRKH syndrome. Hypo•plasia of this structure can be surgically corrected using an olive-shaped bead in the Vecchietti procedure. A pouch that is named for two other structures, and is sometimes called the cul-de-sac, lies near the posterior fornix of this structure. A surgical incision through the posterior wall of this structure, called an e•pisi•o•tomy (ih-PIH-zee-AH-tuh-mee), is sometimes performed during a process that later causes this structure to discharge (*) lochia. J. Marion Sims developed the duck-beak-shaped speculum to investigate this structure. This structure, which terminates at the cervix, has an opening that may be partly covered by the hymen. For 10 points, name this muscular tube of the female genital tract that lies beyond the external vulva, into which the penis is inserted during sexual intercourse.
ANSWER: vagina[s] <Hart>

3. This leader's wife, known as "Auntie", tried to get him to ban miniskirts. This man described a united Europe "from the Atlantic to the Urals". During a crisis, this man, without notifying his prime minister, left the country to go to Baden-Baden. The OAS tried to kill this man out of revenge, in part, for the Oran massacre; that attempt on his life inspired the book *The (*) Day of the Jackal*. This leader controversially proclaimed, "Long live free Quebec", at the Montreal World's Fair. This man resigned the presidency almost a year after the mass protests during May of 1968; he previously founded a new government in 1958 to resolve such issues as Algerian independence. For 10 points, name this founder of the French Fifth Republic and leader of the Free French Forces during World War II.
ANSWER: Charles André Joseph Marie de Gaulle <Cheyne>

4. A woman from this country used a male pseudonym to write an epic novel divided into volumes including "The Way Home" and "Ultima Thule", whose protagonist suffers from early-onset dementia. "Durer: Innsbruck, 1495" was the first poem in a sequence submitted to the modernist magazine *Angry Penguins* by a pair of poets from this country as part of a hoax that inspired another author from this country to write the novel *My Life As a Fake*. This country is the birthplace of Henry Handel Richardson, the (*) Ern Malley hoax, and an author who reworked Dickens's *Great Expectations* into his novel *Jack Maggs*. Two inveterate gamblers on a boat to this country make a bet involving transporting a glass church to Bellingen in a 1988 novel from this country. For 10 points, name this birth country of *Oscar and Lucinda* author Peter Carey, who also wrote the travel book *30 Days in Sydney*.
ANSWER: Australia [or Commonwealth of Australia] <Carson>

5. In 1980, one body altered its mechanism for this process based on the recommendation of a committee led by North Carolina governor James Hunt. The history of this process is recounted in a 2008 book by Marty Cohen, David Karol, Hans Noel, and John Zaller that claims that “invisible” forces determine this process's outcome. Fred Harris selected a committee of 28 politicians who revised one body's mechanism for carrying out this process that was co-chaired by Donald Fraser and George McGovern. 1952 and 1948 were the two most recent years in which the outcome of this process required a (*) “brokered” meeting. The book *The Party Decides* posits a mechanism for this process, which has been altered by both parties to limit the power of “smoke-filled rooms”. For 10 points, name this process by which delegates at a party convention choose a candidate for the U.S.'s highest executive office.

ANSWER: presidential nomination [accept any answer mentioning nomination or word forms thereof and candidates for President of the United States or word forms thereof; accept selecting presidential candidates or similar answers; prompt on “party nomination” or word forms thereof; prompt on “nominating conventions” or “party conventions”] <Hart>

6. The plot of one of this author's plays is set in motion when several slips of paper bearing quotations from Swinburne's “Anactoria” are found in the underwear drawer of Muriel McComber. A play by this man in which a house in Bethany becomes known as the House of Laughter was one of his attempts to revive the dramatic use of masks, as was a play whose title character poses as Margaret's husband after literally putting on the mask of the artist Dion Anthony. Another of this man's plays ends with a character kneeling and praying with her wedding dress in her hands while under the effects of a (*) morphine addiction begun by the difficult birth of her son Edmund. This author, whose only successful comedy was *Ah, Wilderness!*, used his own father as the basis for the typecast stage actor James Tyrone. For 10 points, name this American dramatist of *The Great God Brown* and *Long Day's Journey Into Night*.

ANSWER: Eugene O'Neill [or Eugene Gladstone O'Neill] <Carson>

7. For a de Sitter space, the energy density is negative and this vacuum quantity is positive, which yields a positive cosmological constant. A form of this quantity is obtained by dividing the time-averaged Poynting vector by the speed of light. The right side of Euler's momentum equation for inviscid flow involves taking the negative gradient of this quantity. Because fermions cannot simultaneously occupy the same quantum state, (*) white dwarfs are supported against the force of gravity by a form of this quantity. This quantity is always evenly distributed in an incompressible fluid, according to Pascal's principle. Types of this quantity include: “radiation”, “hydrostatic”, and “degeneracy”. For 10 points, name this physical quantity usually quantified as force per unit area.

ANSWER: pressure [accept specific forms of pressure mentioned such as radiation pressure] <Garg>

8. A popular action movie from this country is about a soldier fighting the gang leader Abdullah and is called *White Sun of the Desert*. Another film from this country was part of a proposed trilogy and abruptly switches to color for ten minutes during a sequence where the title ruler dresses a simple-minded relative like him to fool an assassin. Yet another movie from this country features the Writer and the Professor entering the Zone along with the (*) Stalker. The Union Station shootout at the end of *The Untouchables* was inspired by a movie from this country. In that film from this country, a crowd of civilians is massacred at the bottom of a flight of steps, including a mother pushing a baby carriage. For 10 points, name this home country of the director of the film *Battleship Potemkin*, Sergei Eisenstein.

ANSWER: The Soviet Union [or Russia; or Union of Soviet Socialist Republics; or USSR; or SSSR; or CCCP] <Cheyne>

9. **Members of this religion maintain equanimity for 48 minutes in a form of meditation called *samayik*, which is included in a ritual of repentance called Prati•kraman. This religion's most important prayer involves bowing down to the Panch Parmesthi. An open palm containing a wheel is a symbol for this religion, many of whose members fast during its eight- or ten-day Paryushan festival. Right faith, right knowledge, and right conduct are this religion's (*) Three Jewels. This religion venerates 24 figures who have attained moksha, or liberation. Its adherents recite the Namokar Mantra, whose first five lines are the only ones accepted by its Digambara sect, whose ascetics don't wear clothes. For 10 points, name this Indian religion that venerates the tirthankaras, including Mahavira, and practices non-violence, or ahimsa.**

ANSWER: Jainism <Kothari>

10. **This empire was the target of many of the articles of Januarius MacGahan. A governor of this empire had his blood used to sign a "Bloody Letter", which kicked off a failed rebellion against it that was opposed by this empire's "bashi-bazouk" forces; that rebellion was the April Uprising. Repetitive cartoons depicted this empire as a man holding a limp sword or lying on a cot. While fighting against it, an Englishman wrote the autobiography (*) *Seven Pillars of Wisdom*. This empire, once known as the "Sick Man of Europe", won the battle memorialized by Anzac Day that occurred during the Gallipoli campaign. This empire brutally carried out the Armenian Genocide, and the Arab Revolt during World War I was directed against it. For 10 points, name this empire whose dissolution was followed by the formation of Turkey.**

ANSWER: Ottoman Empire [prompt on Turks until "Turkey" is mentioned] <Cheyne>

11. **The Gauss-Markov theorem states that OLS estimators have the lowest value of this quantity among the class of linear unbiased estimators. Efficient estimators are those for which this quantity has been minimized. Chebyshev's inequality states the probability of a random variable being more than a units away from the expected value is less than or equal to this quantity divided by a squared. This quantity is constant among all errors if the errors are homo•sked•astic. The mean-squared error can be decomposed into the sum of (*) bias and this quantity. It is identical to the second moment of a distribution when the first moment equals zero. In the definition of the normal distribution, the exponential contains the reciprocal of this quantity, whose estimated value is often represented by a lowercase "s" squared. For 10 points, name this quantity, the square of the standard deviation.**

ANSWER: variance [or standard deviation before " a squared"] <Bailey>

12. **One poem titled for a worker in this profession claims that "God and his priest and king...make up a heaven of our misery". Another poem titled for a worker in this profession tells of "Dick, Joe, Ned, and Jack", who realize that "if all do their duty they need not fear harm" after a dream in which an angel with a key frees them from "coffins of black". A laborer of this type titles a poem that begins "when my mother died I was very young", which is contrasted with another poem in which one of these laborers is crying (*) "weep! weep! in notes of woe". A poem titled for one of these laborers describes Tom Dacre, who cried when his head was shaved, causing the speaker to reassure him that "the soot cannot spoil your white hair". William Blake wrote both a "song of experience" and a "song of innocence" about children who work as, for 10 points, what kind of laborer who clears ash from fireplaces?**

ANSWER: chimney sweepers [or chimney sweeps; accept any answer mentioning chimneys and the idea of sweeping or cleaning] <Hart>

13. **Two answers required. One of these two countries flooded sugarcane fields to trap the other country's M47 and M48 Pattons in a horseshoe, leading to the creation of "Patton City" from captured tanks; that 1965 conflict was ended with the Tashkent Declaration. Preemptive airstrikes during Operation Chengiz Khan started a war between these two countries that lasted only 13 days. The Simla Agreement determined a Line of Control, which was trespassed by one of these countries to kick off the (*) Kargil War between them. A. Q. Khan headed a nuclear program in one of these countries, whose first bomb tests occurred in 1998, just weeks after the second bomb tests by the other. A 1971 war between these two countries was prompted by one's support for the independence of Bangladesh. For 10 points, name**

these two countries that have disputed Kashmir since their 1947 partition.

ANSWER: India and Pakistan [accept either order; accept Bharat for "India"] <Kothari>

14. Other than "the", this is the first word in the title of a video game in which players encounter audio logs recorded by the researcher Alexandra Drennan and are able to climb a giant tower if they listen to Milton and thus disobey Elohim. That game, in which the android player character is tasked with solving puzzles to collect tetromino-shaped sigils, is titled for a "Principle" of this name. Illusion-creating aliens from a planet with this name appear in "The Cage", the pilot episode of *Star Trek*. The Aldmeri Dominion banned the worship of a god of this name who is the deified (*) Tiber Septim, thus sparking the Stormcloak Rebellion, in *Skyrim*. A mythical character with this name had a single ichor-filled vein that was emptied by Medea and was created by either Hephaestus or Daedalus to guard Crete, from which he hurled boulders at the Argo. For 10 points, give the name of that bronze giant from Greek mythology.

ANSWER: Talos [accept *The Talos Principle* or Talos IV; accept "Talon" after "vein" is read] <Carson>

15. In a June 2015 publication, this man described the problems caused to the environment by the current "throwaway culture" in a piece "On Care for Our Common Home". This man wrote a 15-point catalog of "diseases" in 2014 that included "funereal face" and "spiritual Alzheimer's". In September 2015, this man met with his former student Yayo Grassi and Grassi's partner Iwan Bagus, which occurred a day before this man greeted Kim (*) Davis. In February 2016, this man traveled to Jose Marti Airport in Havana, Cuba, to meet with Patriarch Kirill. That same month, this man's comments were labeled "disgraceful" after this man said that Donald Trump's plan to build a border wall between the U.S. and Mexico was "not Christian". For 10 points, name this Argentine who is the current pope of the Catholic Church.

ANSWER: Pope Francis [or Franciscus; Jose Mario Bergoglio; prompt on "the Pope" before "pope"] <Gehring>

16. In one of this author's books, Judge Bridoye is put on trial after he is exposed for making all of his rulings by rolling dice. This author wrote of the sheep merchant Dindenault (don-deh-noh), who has one of his sheep thrown into the sea aboard a ship, causing the rest of the sheep to blindly follow the first to their demise. The second book by this author ends with Friar John being financed to create an "anti-church" whose motto is "do what thou wilt" called the (*) Abbey of Thélème. This author created a son of Lord Grandgousier (grahn-goo-see-ay) who requires 17,913 cows to provide his daily milk and killed thousands of Parisians who annoyed him by drowning them in floods of his urine. The "third", "fourth", and "fifth" books by this author include the libertine Panurge. For 10 points, name this 16th-century French author of *Gargantua and Pantagruel*.

ANSWER: François Rabelais <Hart>

17. A speech by this man opens historian Joseph Ellis's new and otherwise unrelated book, *The Quartet*. Many of his papers were assembled by his private secretary, the German-born John Nicolay. While standing on a railroad car, this man tearfully bid farewell to his hometown, saying he knew not "when, or whether ever", he would return. This politician said "let us have faith that right makes might" during a speech delivered at a (*) Manhattan college named for philanthropist Peter Cooper. In an inaugural address, he urged "malice toward none" and "charity for all". In another speech, this man noted that, "four score and seven years ago", a new nation was "conceived in liberty". For 10 points, name this president who delivered the Gettysburg Address.

ANSWER: Abraham Lincoln <Cheyne>

18. A Titan of this name was, according to Hesiod, the father of Kratos, Bia, and Nike with his wife, the goddess Styx. Pandion II had a son with this name whose own fifty sons are betrayed by their herald Leos, foiling their plan to challenge Theseus for the Athenian throne. A depiction of the Danaids murdering their husbands appears on a belt owned by a character of this name; that belt is stolen by that man's killer Turnus. Helenus reveals that Troy's safety is assured as long as an (*) object depicting a character of this name is within its walls, prompting Odysseus and Diomedes to steal it. That object was created by a goddess who was remorseful over accidentally killing her childhood playmate, a daughter of Triton who had this name. For 10 points, give this name, shared by the son of Evander in the *Aeneid* and by a companion of Athena whose name is sometimes attached to hers.

ANSWER: Pallas [prompt on "Palladium"] <Carson>

19. Discharging a capacitor through a reaction cell is a method of studying reaction rates by "relaxing" this quantity in its "jump" method. When describing a frequency, this quantity is raised to the one-half power in collision theory and to the first power in transition state theory, or TST. The Q10 coefficient describes the effect of changing this property. TST fails at high values of this quantity because more intermediate states become accessible. The reciprocal of this quantity is plotted against the (*) natural log of the rate constant to calculate the pre-exponential factor. Reaction rate varies exponentially with this quantity because it is multiplied by R in the denominator of the exponential term of the Arrhenius equation. For 10 points, name this property that describes the average kinetic energy of particles and is measured in Kelvins.

ANSWER: temperature [or T] <Garg>

20. A piece by Annea Lockwood requires burning one of these things, and La Monte Young wrote a piece for Terry Riley which requires pushing on one for a long time. Leo Ornstein was a virtuoso on this instrument. John Cage's star chart-based *Etudes Boreales* can be played on the cello or this instrument, for which he also wrote his *Etudes Australes*. Charles Ives wrote a set of pieces for two of these instruments tuned a quarter-tone apart. David (*) Tudor was an avant-garde performer of this instrument and premiered Cage's 4'33" ("four minutes, thirty-three seconds") on it. Cage's *Sonatas and Interludes* use a "prepared" version of this instrument, in which objects are placed on or between its strings. Movements like "Emerson" and "Hawthorne" appear in Ives's *Concord Sonata* for it. Beethoven wrote 32 sonatas for, for 10 points, what keyboard instrument?

ANSWER: pianoforte <Kothari>

Tiebreaker. A 1978 novel by Andrew Holleran is titled after a line that this author wrote in a poem that describes the title characters' wonder at a "sixty-year-old smiling public man" interrupting their attempts to "learn to cipher and to sing". This man's *Last Poems* concludes with a short lyric about what a "travelled man" and a "politician" say about "war and war's alarms" entitled "Politics", which appears immediately after a poem by this man that begins "I sought a theme and sought for it in vain" and ends with this man "[lying] down where all the ladders start". This poet of "The (*) Circus Animals' Desertion" asked "how can we know the dancer from the dance?" at the end of his poem "Among School Children". He wrote of the "widening gyre" of a falcon's flight in a poem in which a "rough beast" "slouches towards Bethlehem to be born". For 10 points, name this Irish poet of "The Second Coming".

ANSWER: William Butler Yeats <Hart>

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Packet 5: Bonuses

1. The nomenclature system for these structures was devised by Luke Howard. For 10 points each:

[10] Name these structures that Howard classified into cirriform, cumuliform, or stratiform types, depending on their appearance.

ANSWER: clouds

[10] Howard's system caught on more readily than the one devised in the same year by this Frenchman, who proposed categories of clouds including "grouped", "broom-swept", and "dappled". Ernst Mayr's term "soft inheritance" encompasses a theory that this man, the coiner of the word "invertebrate", described in his 1809 book *Philosophie Zoologique*.

ANSWER: Jean-Baptiste Lamarck [or Jean-Baptiste Pierre Antoine de Monet, Chevalier de Lamarck; accept Lamarckism]

[10] In the 1960s, TIROS-1 through TIROS-10, the brainchildren of Harry Wexler, became the first devices of this kind to be used to study clouds.

ANSWER: weather satellites [or remote sensing satellites] <Hart>

2. This ruler was known as the "Farmer". For 10 points each:

[10] Name this ruler during the Gordon Riots. Many historians have speculated he suffered from the genetic disease porphyria.

ANSWER: George III

[10] George III was reportedly ready to take up arms personally to fight the French until this British admiral defeated the Franco-Spanish fleet at the Battle of Trafalgar, only to die in the battle.

ANSWER: Horatio Nelson [or 1st Viscount Nelson]

[10] After the death of William Pitt the Younger, the king supported this Prime Minister's creation of the "Ministry of All the Talents", which tried to cross party lines. This man was himself the son of the Prime Minister who had authored the Stamp Act.

ANSWER: William Grenville [or 1st Baron Grenville; do not accept "George Grenville"] <Cheyne>

3. This man fictionalized the lives of the Collyer brothers, two New York City hoarders, in his novel *Homer & Langley*. For 10 points each:

[10] Name this American author whose other historical novels include a fictionalization of William Tecumseh Sherman's campaign through Georgia entitled *The March*.

ANSWER: E.L. Doctorow [or Edgar Lawrence Doctorow]

[10] Coalhouse Walker seeks vengeance for his vandalized Model T and encounters many famous figures of the 1900s in this 1975 Doctorow novel, named for a genre of music.

ANSWER: Ragtime

[10] The title character of Doctorow's novel *Billy Bathgate* is a messenger and confidante of Dutch Schultz, a historical figure in this line of work whose rivalry with Lucky Luciano is recounted in the novel.

ANSWER: mafia or mobster or member of organized crime or gangster [accept racketeer or other equivalents; prompt on "crime" or "criminal"] <Hart>

4. Answer the following about Carsten Gehring's favorite Craig T. Nelson TV role...Hayden Fox on *Coach*. For 10 points each:

[10] *Coach* was set in this state, whose real-life professional sports teams include the Twins, Vikings, and Timberwolves.

ANSWER: Minnesota

[10] Hayden Fox, however, was based on Hayden Fry, a long-time college coach in this state, and most of the shots of the "Minnesota State" campus were from an university in this state. That university in this state has won 23 wrestling national championships.

ANSWER: Iowa

[10] In the final seasons of *Coach*, Hayden Fox became a NFL coach in this city, which does not have a NFL team. Its NBA team was the last one coached by Chuck Daly and also employed for nine years a man who once shot a layup in a Slam Dunk Contest, Darrell Armstrong.

ANSWER: Orlando <Cheyne>

5. Answer the following about posthorns in classical music, for 10 points each:

[10] A posthorn plays a solo in the second trio of the second minuet of this Austrian composer's ninth serenade, which is fittingly enough nicknamed "The Posthorn". This former child prodigy's thirteenth serenade is known as "Eine Kleine Nachtmusik".

ANSWER: Wolfgang Amadeus Mozart [or Johannes Chrysostomus Wolfgangus Theophilus Mozart]

[10] A posthorn plays an offstage solo that is interrupted by a trumpet fanfare in the third movement of this 1896 symphony, the longest symphony in the standard repertoire. Its fifth movement is a setting of "Es sungen drei Engel", one of its composer's *Des Knaben Wunderhorn* songs.

ANSWER: Gustav Mahler's Symphony No. 3 [accept equivalents like "Mahler's Third"; prompt on partial answers]

[10] A man hearing the sound of a posthorn is the subject of the thirteenth entry in this Franz Schubert song cycle that ends with "The Hurdy-Gurdy Man". Like Schubert's *Die schöne Müllerin* (**dee SHOO-nuh MOO-ler-IN**), it was based on poems by Wilhelm Müller.

ANSWER: Winterreise [or Winter Journey] <Carson>

6. This quantity was demonstrated to be quantized when a beam of electrons was sent through an inhomogeneous magnetic field and the beam was deflected in two opposite directions. For 10 points each:

[10] Name this quantity that is plus or minus one-half for electrons in an orbital; its existence was confirmed by the Stern-Gerlach experiment.

ANSWER: spin angular momentum [prompt on "angular momentum"; do not accept or prompt on "momentum"]

[10] "The Stern-Gerlach experiment worked because the experiment used electrons from silver atoms that had a value of zero for this quantity. This quantity can take on integer values from 0 to "n minus 1".

ANSWER: orbital angular momentum quantum number [or azimuthal quantum number; or l; or second quantum number; prompt on "orbital angular momentum"]

[10] More evidence for the existence of spin was found in the split spectral lines of hydrogen, in which plus or minus one-half times the Bohr magneton times this quantity is added to the magnetic field. Because of the Lamb shift, this quantity for an electron is not exactly two.

ANSWER: electron [spin] g-factor [or electron spin gyromagnetic ratio or g value; prompt on "g"] <Garg>

7. The temple at Elephantine was dedicated to this god, his consort Satis, and their daughter Anukis. For 10 points each:

[10] Name this ram-headed Egyptian god who creates the bodies of human children from clay at his potter's wheel.

ANSWER: **Khnum** [or **Khnemu**]

[10] Khnum also represents the source of this geographical entity, whose regular flooding served as the linchpin of Egyptian agriculture.

ANSWER: the **Nile** River

[10] Khnum was closely associated with the god Min, who was at the center of a coronation rite that ensured the flooding of the Nile. Min is often depicted with a flail in his right hand and one of these things in his left hand; another one of these things was eaten by an oxyrhynchus fish after being thrown into the Nile.

ANSWER: an erect **penis** [his own, in Min's case, and Osiris's in the latter; accept equivalents like **phallus** or ding-**dong**; prompt on "a body part" or equivalents] <Carson>

8. A loss for this empire was said to occur in a contest "between the two great families of the world" according to the book *The Fifteen Decisive Battles in History*. For 10 points each:

[10] Name this empire that lost the Battle of the Metaurus, after which the losing commander's head was thrown into the camp of his brother, another commander for this empire.

ANSWER: **Carthage** [or **Carthaginian** Empire]

[10] This commander defeated the Romans at Cannae, though the Romans killed his brother Hasdrubal at Metaurus and he was ultimately defeated at Zama.

ANSWER: **Hannibal** Barca

[10] In the First Punic War between Roman and Carthage, the Romans made much use of this boarding device, a spiked bridge that allowed their forces to board Carthaginian ships. This device allowed the Romans to counter Carthage's naval superiority.

ANSWER: **corvus** [or **harpago**] <Cheyne>

9. Mark Griffith examined this play's unusually high amount of *Eigenwörter* (**EYE-gen-vurr-turr**), or words that appear a certain number of times in *it* but in none of its author's other six plays, while M.L. West suggested that it was written by the author's son Euphorion. For 10 points each:

[10] Name this play whose title character is visited by Io, Hermes, and the Oceanids after Kratos, Bia, and Hephaestus leave him in the Caucasus Mountains.

ANSWER: **Prometheus Bound** [or **Prometheus Desmotes**]

[10] *Prometheus Bound* was written by this ancient Greek tragedian, whose plays *Agamemnon*, *The Libation Bearers*, and *The Eumenides* make up his *Oresteia*.

ANSWER: **Aeschylus**

[10] In Aeschylus's only play about contemporary events, Atossa and the chorus summon the ghost of this character, who condemns the hubris exhibited by another character in building a bridge across the Hellespont and prophesies "the mother of disasters" to come in Boeotia.

ANSWER: **Darius** I [or **Darius** the Great; from *The Persians*] <Carson>

10. In 2014, this newspaper launched the website *Crux* for Catholic news. For 10 points each:

[10] Name this New England newspaper whose “Spotlight” team’s coverage of the sexual abuse trials of five Catholic priests thrust the scandal into the limelight in 2002, causing the resignation of its city’s archbishop, Bernard Francis Law.

ANSWER: *The **Boston Globe*** [prompt on “**Globe**”]

[10] This other Northeastern bishop, who presided over Rochester, ran the radio show *The Catholic Hour* and the popular, Emmy-winning TV show *Life Is Worth Living*. He recited the burial scene from *Julius Caesar*, substituting the names of Soviet leaders, just before Stalin died.

ANSWER: Fulton John **Sheen** [or Peter John **Sheen**]

[10] Though Sheen is designated “Venerable” out of recognition for his “heroic virtues”, the cause for beatification and this process was halted in 2014. Catholics and other churches recognize saints through this process.

ANSWER: **canonization** [or word forms] <Kothari>

11. This group was headed by Leon Rom, who kept severed heads in his flower bed. For 10 points each:

[10] Name this military organization that was originally used as a private police squad before becoming an official colonial military. This group’s main responsibility was enforcing rubber quotas among natives, which could involve cutting off hands when quotas were not met.

ANSWER: **Force Publique** [or **Public Force**; or **Openbare Weermacht**]

[10] The Force Publique enforced the law during the days of the Congo Free State, a private African colony that was controlled by a ruler from this European country. This country’s colonial possessions effectively ended with the Congo, which was much larger than this nation.

ANSWER: Kingdom of **Belgium** [or **Belgique**; or **Belgien**]

[10] This Belgian ruler personally controlled the Congo Free State before it became the government-run Belgian Congo. Numerous writers at the time criticized his bloody control of the Congo, during which possibly over 10 million people died.

ANSWER: **Leopold II** [prompt on “**Leopold**”] <Cheyne>

12. In *This Half Has Never Been Told*, Edward Baptist argues for the importance of this system in funding industrialization in the early U.S. For 10 points:

[10] Name this system. Baptist’s work relies heavily on the narratives of people once involved in it collected by the Works Progress Administration.

ANSWER: **slavery**

[10] In a book written with Stanley Engerman, this man agreed with Baptist’s contention that slavery was profitable and in no danger of dying out. This historian argued that the absence of railroads would have been negligible for American economic growth, thanks to an expanded canal system.

ANSWER: Robert **Fogel**

[10] Baptist focuses on the production of this crop, which was exported to English textile manufacturers. A 2014 book by Sven Beckert emphasizes the importance of this crop in creating global capitalism.

ANSWER: **cotton** <Bailey>

13. Answer the following about Russian dance and the Himalayas, for 10 points each.

[10] Russian painter Nicholas Roerich, who painted many Himalayan scenes and was obsessed with Tibetan Buddhism, was the set designer for this ballet company with a French-language name that was founded by Sergei Diaghilev.

ANSWER: Les Ballets **Russes**

[10] This Russian composer thankfully never completed his *Mysterium*, a multimedia work of dance, music, and light, whose performance in the foothills of the Himalayas would have brought about the end of the world, at least according to this composer. His other works include the *Poem of Ecstasy* and a piano sonata called *Black Mass*.

ANSWER: Alexander **Scriabin** [or Alexander Nikolayevich **Scriabin**]

[10] This French choreographer included a scene set in the “kingdom of the shades”, a Himalayan dream landscape, in a ballet written in collaboration with composer Ludwig Minkus entitled *La Bayadère*. This choreographer worked with Lev Ivanov to create the original choreography for *The Nutcracker*.

ANSWER: Marius **Petipa** [or Marius Ivanovich **Petipa** or Victor Marius Alphonse **Petipa**] <Hart>

14. This play's central character throws a servant from a balcony after learning that Princess Estrella (**es-TRAY-uh**) is engaged to Astolfo. For 10 points each:

[10] Name this play by Pedro Calderon de la Barca in which the King of Poland, Basilio, locks Prince Segismundo in a tower.

ANSWER: Life is a Dream [or *La Vida es Sueño*]

[10] *Life is a Dream* was written during this period of Spanish literary history, which began in the 1500s. Its other great playwrights included Lope de Vega.

ANSWER: Spanish Golden Age [or Siglo de Oro; accept Golden Century]

[10] This playwright of the Golden Age was the first to record the Don Juan legend in his play *The Trickster of Seville and the Stone Guest*.

ANSWER: Tirso de Molina [accept either underlined portion; or Gabriel Télliez] <Hart>

15. Horizontal bonds stick out of the page and vertical bonds go into the page when using the Fischer projection to visualize these molecules. For 10 points each:

[10] Name these biological molecules that consist only of carbon, hydrogen, and oxygen.

ANSWER: carbohydrates [accept sugars or saccharides]

[10] This other type of projection is a compressed version of a sawhorse projection and displays a carbon-carbon bond from front to back. For hydrocarbons, this type of projection lets you measure the torsional, or dihedral, angle of the substituents.

ANSWER: Newman projection

[10] This term refers to any conformation between staggered and eclipsed. This term also refers to a twisted version of cyclohexane that is a type of boat.

ANSWER: skew conformation [or skew twist boat conformation] <Garg>

16. To promote a reductionist view of personal identity in terms of psychological and physical continuity, this man imagined being transformed, molecule by molecule, into Greta Garbo. For 10 points each:

[10] Name this British philosopher who argued that personal identity doesn't matter for ethics in *Reasons and Persons*.

ANSWER: Derek Parfit

[10] Parfit's view of personal identity is inspired by this British empiricist, whose *Essay Concerning Human Understanding* imagines a prince and a cobbler switching bodies to emphasize the role of psychological continuity. He also wrote *Two Treatises on Government*.

ANSWER: John Locke

[10] Locke's claim that God could make matter think is opposed to this philosopher's "mill argument", which concludes that only simple substances can perceive. He responded to Locke's *Essay* with his *New Essays on Human Understanding*.

ANSWER: Gottfried Wilhelm Leibniz <Kothari>

17. Answer the following about conservatives who didn't like the New Deal for 10 points each.

[10] This possible anti-Semite led the isolationist America First Committee. He is better known as being the first man to fly alone across the Atlantic Ocean.

ANSWER: Charles Augustus Lindbergh [or Lucky Lindy]

[10] Hugh S. Johnson, the former head of this agency, opposed FDR after the court-packing debacle.

Symbolized by the Blue Eagle, this agency tried to create fair labor practices and was created by a similarly named 1933 law.

ANSWER: The National Recovery Administration [or the NRA; do not accept "NIRA"]

[10] This Virginia Senator reportedly "came from his death bed" to the 1940 Democratic Convention to oppose FDR. A former Secretary of the Treasury under Wilson, he co-sponsored a controversial 1933 act that separated commercial and investment banking.

ANSWER: Carter Glass <Cheyne>

18. The background of this painting shows two potted plants, a geranium and a mother-in-law's tongue, both of which also appear in a painting by its artist entitled *Woman with Plants*. For 10 points each:

[10] Name this painting that won a bronze medal and a \$300 cash prize when it was entered into a competition in 1930. The woman in this painting wears a cameo brooch.

ANSWER: American Gothic

[10] Grant Wood entered *American Gothic* into a competition at this art museum on Michigan Avenue in a large Midwestern city, where it is still displayed today.

ANSWER: Art Institute of Chicago [accept AIC; accept answers mentioning both Chicago and Art Institute such as Chicago's Art Institute]

[10] The Minneapolis Institute of Arts holds a Wood painting depicting West Branch, Iowa, and titled for the "birthplace of" this man, a one-time engineer.

ANSWER: Herbert Hoover [or Herbert Clark Hoover; accept *The Birthplace of Herbert Hoover*, *West Branch, Iowa*] <Hart>

19. Answer the following about the rural British Romantic poet John Clare, for 10 points each.

[10] In the mid-1800s, while institutionalized for paranoid delusions, Clare claimed that he wrote the dramatic works of this Elizabethan playwright of *Measure for Measure* and *Love's Labours Lost*.

ANSWER: William Shakespeare

[10] Benjamin Britten's *Spring Symphony* used part of Clare's work of this type that is written for "shepherds". Edmund Spenser's first major poetic work was also a "Shepherd's" work of this type based on the *Eclogues* of Virgil.

ANSWER: calendars [accept *A Shepherd's Calendar* or *The Shepherd's Calendar* or *The Shepherdes Calendar*]

[10] Clare's poem *Helpstone*, about the negative effects of enclosure on rural communities, was inspired by this Anglo-Irish author's poem "The Deserted Village".

ANSWER: Oliver Goldsmith <Hart>

20. For 10 points each, answer some non-questions about intra-genomic conflict.

[10] A classic example of genes whose success is bad for the genome involves these multiplying elements, whose class I includes SINEs and LINEs, the latter of which encode reverse transcriptase.

ANSWER: transposons [or transposable elements]

[10] A namesake "drive" during this process is often modeled with linked Target and Killer loci and causes segregation distortion in gametes made through this process. For example, in females, it may help an allele end up in the ovum rather than polar bodies.

ANSWER: meiosis [prompt on "oo-genesis"]

[10] Medea genes are a selfish manifestation of this phenomenon, in which the phenotype of an organism is affected by factors like mRNA, proteins, or other compounds in the ovum, rather than just its genotype and environment.

ANSWER: maternal effects <Kothari>

Extra. Name the following kinds of structures from glaciology, for 10 points each.

[10] When two alpine glaciers erode parallel U-shaped valleys, these thin knife-like ridges are formed between the glaciers.

ANSWER: arêtes

[10] These accumulations of till are deposited during glacier advance and glacier retreat. Their defining characteristic is that they consist of unsorted sediments, and types of them include "terminal" and "lateral".

ANSWER: moraines [accept lateral moraines or terminal moraines]

[10] The upper thirty meters or so of ice in a glacier tends to be very brittle, so it can form these cracks as the glacier flows.

ANSWER: crevasses <Hart>