

ILLIAC -- ILLinois Academic Competition -- Round 7

1. **According to this religion’s rule of three, all actions are returned to the actor at three times the magnitude. In this religion’s liturgical calendar, eight sabbats are celebrated, as illustrated by the Wheel of the Year diagram. It isn’t Jainism, but many members of this religion work and practice ceremonies in the nude or “skyclad.” Members of this faith follow the code (*) “an it harm none, do what ye will” known as the “Rede” of this religion. Members of this religion, which was popularized by Gerald Gardner, meet in small groups called “covens” to worship a Mother Goddess. For 10 points, name this most popular Neopagan religion whose members are known for practicing witchcraft.**

ANSWER: **Wiccan** [accept British Traditional **Wicca**; prompt on Neopaganism or any form of the word “witch” or “witchcraft”; prompt on New Forest coven]

< Ethan Ashbrook | *Religion* >

2. **A Byzantine-inspired Paul Abadie-designed cathedral in this city is built out of strikingly white travertine stone which self-whitens each rainfall. A hospital for war veterans in this city was turned into a national museum of military history. A headless statue of the patron saint of this city can be found holding his head outside another (*) cathedral in this city. Three striking 13th-century rose windows dominate a cathedral restored by Eugène Viollet-le-Duc (*yoo-JEN vee-oh-LAY luh dook*) in this city whose Les Invalides museum holds Napoleon’s tomb. For 10 points, name this city known for its cathedrals of Sacré-Cœur (*sah-cray coor*) and Notre Dame.**

ANSWER: **Paris**

< Iain Carpenter | *Other Fine Arts* >

3. **A poem by this author is addressed to a man “to whom no sound is dissonant which tells of Life.” In one poem by this author, the title object makes a “soft floating witchery of sound.” Another poem by this author begins, “well, they are gone, and here must I remain.” This author of “This Lime-tree Bower (*) My Prison,” wrote a poem whose title phenomenon “performs its secret ministry/ unhelped by any wind.” This author wrote many Conversation Poems to his son Hartley. This poet was interrupted by the person from Porlock while writing a poem describing a “stately pleasure-dome” in Xanadu. For 10 points, name this author of “The Eolian Harp,” “Frost at Midnight,” and “Kubla Khan.”**

ANSWER: Samuel Taylor **Coleridge**

< Mitch McCullar | *Non-Epic Poetry* >

4. **According to tradition, Muhammad said that half the beauty in the world was apportioned to mankind and the other half to this figure and his mother. After Zuleikha failed to seduce this figure, she brought him before her handmaidens who all cut themselves with knives. Before he died, this man requested that his descendants bring his bones to the city of (*) Shechem. This man predicted the execution of a royal baker during his imprisonment. He interpreted a dream involving seven thin cows swallowing seven plump cows at the request of a pharaoh. For 10 points, name this biblical figure who was sold into slavery by his twelve brothers and was given a colorful coat by his father Jacob.**

ANSWER: **Joseph** [or **Yusuf**, or **Yosef**, or **Yosep**]

< Jonathan Lau | *Mythology, Stories, and Legends* >

5. **One modification to this equation multiplies one component of it by the d'Alambertian plus mu squared. The total phase between turning points is evaluated as an integer number of pi in a method using Airy functions to approximate solutions to this equation. A semiclassical method to find solutions to this equation (*) is the WKB method.** The derivative with respect to time of a state vector is multiplied by \hbar times i in the time-dependent form of this equation. This equation finds the allowed energy levels of quantum systems. For 10 points, name this equation named for an Austrian physicist who imagined a superposition between an “alive” and “dead” cat.

ANSWER: Schrodinger's equation

< Iain Carpenter | *Physics* >

6. **Scotland Yard retiree Richard Cullen claimed to have forensic evidence that this man was shot by Secret British Intelligence agent Oswald Rayner. This man's youth was spent with a group rumored to practice orgies and self-flagellation known as the Khlysty (*kleees-tee*). This man was invited to a dinner at the Moika palace where he was offered wine and asked to say prayers to a cross on the wall before (*) surviving a shot to the back of the head. After being shot another two times and beaten with a blunt object, this man's corpse was thrown into a distributary of the Neva. The assassination of this man was orchestrated by Prince Felix Yusupov. He gained favor with Nicholas I after healing his son of hemophilia. For 10 points, name this holy mystic who possibly had an affair with Tsarina Alexandra.**

ANSWER: Grigori Yefimovich Rasputin

< Michael Etkorn | *Continental Europe* >

7. **This author wrote an essay describing placing the word *Whim* above the door post and argues to shun parents in an effort to counter the “doctrine of love” with a “doctrine of hatred.” That essay by this author argues against dragging around a “corpse of memory.” In another essay by this author, he asserts that “every end is a beginning” and that the first title construct was (*) the eye. In an essay by this author, he argues that the true mark of genius is being willing to believe in your own thoughts. That essay by this author claims, “to be great is to be misunderstood” and “foolish consistency is the hobgoblin of little minds.” For 10 points, name this Transcendentalist author of “Circles” and “Self-Reliance.”**

ANSWER: Ralph Waldo Emerson

< Ethan Ashbrook | *Misc Literature* >

8. **In one debate in this election, a candidate compared the U.S. to a “goldfish bowl before the world,” and later in this election, Quemoy and Matsu were described as “two little pieces of real estate.” The losing candidate in this election pledged to campaign in all 50 states. When asked about the losing candidate's ideas, the then-president stated that he (*) might think of an answer “if he was given a week.” While radio listeners gave the first debate of this election to a former California governor, those who watched on TV gave it to a candidate who hid his Addison's disease from the public. This was the first election to have televised debates. For 10 points, name this election where Richard Nixon lost to John F. Kennedy.**

ANSWER: United States Presidential Election of 1960 [prompt on 60s; prompt on answers describing Nixon-Kennedy election with “What year?”]

< Sarod Nori | *U.S. History* >

9. **An artist from this country painted a black-and-white checkerboard pattern collapsing towards the center in *Movement in Squares*. Another artist from this country placed 102 names on the inside of a blue tent. Billy Childish created the Stuckist movement to oppose one artistic movement from this country. One artist from this country put (*) her bed on display and created the tent artwork *Everyone I Have Ever Slept With*. Another artist from this country placed a shark in formaldehyde in *The Physical Impossibility of Death in the Mind of Someone Living*. Tracey Emin and Damien Hirst are from, for 10 points, what country home to the Tate Gallery in London?**

ANSWER: **United Kingdom** [accept **England** or **Britain**; accept Young **British** Artists] (*Movement in Squares* is by Bridget Riley)

< Iain Carpenter | *Painting and Sculpture* >

10. **A bridge intermediate complex that models this type of reaction contains two pentaammine ruthenium atoms connected by pyrazine. Henry Taube explained the mechanism behind the inner sphere variety of this type of reaction which occurs via covalent linkage. When heated, phosphorous acid undergoes disproportionation -- a variety of this type of reaction. The equilibrium constant in (*) the Nernst equation is related to the standard potential for this type of reaction. This type of reaction can be written as two half-reactions occurring at the anode and cathode of a galvanic cell. For 10 points, name this type of reaction involving the transfer of electrons, which lowers one material's oxidation state while raising the other.**

ANSWER: **redox** reaction [or **reduction-oxidation** reaction; accept inner sphere **electron transfer**; prompt on **reduction** reaction; prompt on **oxidation** reaction; prompt on **disproportionation** until mentioned]

< Michael Etzkorn | *Chemistry* >

11. **One novel by this author centers on Felix, a theater director exiled to a prison while trying to get revenge on his former assistant Tony. In another novel by this author, the protagonist works in the Rejoov compound while helping to advertise BlyssPluss pills as an age-reverting drug. This author retold Shakespeare's *The Tempest* in the (*) novel *Hag-Seed*. The protagonist Jimmy plays the trivia game *Extinctathon* and takes the name Snowman in this author's post-apocalyptic novel *Oryx and Crake*. This author wrote about Angels and Guardians surveilling for rebels in a novel set in Gilead. For 10 points, names this Canadian author who wrote about Offred in her novel *The Handmaid's Tale*.**

ANSWER: Margaret (Eleanor) **Atwood**

< Ethan Ashbrook | *Long-Form Literature* >

To the Moderator: Please look over the answerline carefully

12. *Description acceptable.* **Calibration of two techniques to accomplish this goal is assured with an acrylic cylinder known as a Jaszczak (*jay-zak*) phantom. The changing magnetic fields in superparamagnetic iron oxide nanoparticles is used in a magnetic particle technique to accomplish this goal. This goal makes use of *true 3D* information by capturing radiation with a gamma camera in the technique SPECT. The (*) functional techniques that accomplish this goal make use of tracers to track metabolism -- such as the use of BOLD in functional magnetic resonance. X-rays, CT scans, and ultrasounds all look to accomplish, for 10 points, what goal of creating a visual representation of anatomy and physiology?**

ANSWER: medical **imaging** [accept **diagnostics** or descriptions of determining the **cause of disease**; or biomedical **imaging**; or biological **imaging**; or physiological **imaging**; accept nuclear medicine **tomographic** imaging; accept nuclear medicine **tomography**; accept nuclear medicine **imaging**; accept functional **imaging**; accept Magnetic particle **imaging**; accept functional magnetic resonance **imaging**; prompt on **MPI**, **fMRI**, **MRI**, or **SPECT** by asking “What general class of techniques is your answer apart of?”; prompt on medical **instrumentation** by asking “Designed to do what task?”]

< Michael Etzkorn | *Other Science - Bioengineering* >

13. **The opening theme of a concerto for this instrument begins with the rhythm (*Read Slowly*) quarter note, half note, dotted eighth, sixteenth, on the pitches (*Read Slowly*) B-flat, B-flat, D, B-flat. The only surviving concerto by Mozart for this instrument is in B-flat major. This instrument plays the main theme over low strings to open Tchaikovsky’s (*) *Pathetique Symphony*. This instrument begins the overture to *The Marriage of Figaro*. In *Peter and the Wolf*, this instrument represents the grandfather. “The Adoration of the Earth” begins with a high-register solo for this instrument in Stravinsky’s *The Rite of Spring*. For 10 points, name this low-pitched double-reed instrument whose larger cousin is “contra” [this instrument].**

ANSWER: **bassoon**

< Michael Etzkorn | *Music* >

14. **This school of thought advocated for the concepts of autarkia and askesis -- often translated as independence and self-denial. Another concept in this school of thought is parrhesia, commonly translated as “shameless speech.” One member of this school was supposedly instructed by the Oracle of Delphi to “debase the (*) currency,” after which he began defacing coins. That man, sometimes called the “faithful hound” of Antisthenes, roamed the streets of Athens with a lantern during daylight looking for an honest man. For 10 points, name this school of thought whose name means “dog-like,” that was followed by Diogenes of Sinope.**

ANSWER: **Cynicism** [or **Cynics**]

< Ethan Ashbrook | *Philosophy* >

15. **One holder of this title exacted 2,000 blankets from a conquered city before stealing three women from his dead brother Zaca. The last holder of this title was hanged from the same ceiba tree as the final cacique (*ka-see-kay*) of Tacuba. A holder of this title met with his future captor on a bridge as described in a letter to Charles V. Another holder of this title allied with the poet of the “Flower Songs” to defeat the (*) Tepanecs and create a “Triple Alliance.” The death of one holder with this title led his subjects to attack an army escaping with their gold in La Noche Triste. The last holder of this title, Cuauhtémoc (*kwow-te-mawk*), was executed on the order of Hernán Cortés. For 10 points, identify this title held by Montezuma II, a man who ruled from Tenochtitlan.**

ANSWER: **Aztec emperor** [accept **Aztec king**; accept answer in either order like **King** of the **Aztecs**; accept **Tlatoani** of Tenochtitlan; accept **tlatoque** of Tenochtitlan; accept **emperor** of the Aztec **Triple Alliance** until “**Triple Alliance**”; prompt on **emperor** or **king** alone]

< Mitch McCullar | *Non-Commonwealth, Non-European* >

16. **Walther et. al.’s study coined the name for transamidation of small GTPases with this neurotransmitter while studying its role in smooth muscle contractions. The production of this neurotransmitter is dependent on the enzymes TPH1 and TPH2. One of this neurotransmitter’s receptors, 2A, is targeted by (*) LSD. The majority of the receptors for this neurotransmitter are in the Raphe nuclei. This neurotransmitter is synthesized by enterochromaffin cells from the precursor tryptophan. Levels of this neurotransmitter are increased by SSRIs, such as Zoloft and Prozac. For 10 points, name this neurotransmitter which regulates appetite and mood.**

ANSWER: **serotonin** [or **5-hydroxytryptamine**, accept **5-HT**]

< Jonathan Lau | *Biology* >

17. **The title character of one work by this author is horrified after the decapitated head of his lover’s father is brought in. This author created a character who is disdained over being an “eater of left-overs.” Another character created by this author tricks one of his followers into believing he has ascended into heaven. In a play by this author, women pretend to be the tires of a car during the (*) Dance of the Lost Traveller. In addition to writing *Kongi’s Harvest* and *The Trials of Brother Jero*, this author wrote a play about Simon Pilkings failing to stop the deaths of Olunde and Elesin. For 10 points, name this Nigerian playwright of *The Lion and the Jewel* and *Death and the King’s Horseman*.**

ANSWER: Wole **Soyinka** [or Akinwande Oluwole Babatunde **Soyinka**]

< Mitch McCullar | *Drama* >

18. **In one film by this director, a girl’s inability to stop talking leads Louis to lose his temper and shoot her in the parking lot of a shopping mall. In another film by this director, a man blows his cover by using the wrong three fingers when ordering drinks. This director’s first independent film features the undercover cop (*) Mr. Orange, played by Tim Roth, who shoots Mr. Blonde after he slices of a cop’s ear. One film by this director of *Jackie Brown* ends with a movie theater burning down, killing many Nazis and Adolf Hitler. A mysterious suitcase sought by Jules and Vincent Vega is the central plot point of another film by this director. For 10 points, name this gory director of *Inglourious Basterds* and *Pulp Fiction*.**

ANSWER: Quentin (Jerome) **Tarantino** (Mr. Orange and Mr. Blonde are from *Reservoir Dogs*)

< Mitch McCullar | *Misc - Other Academic* >

19. This psychologist called a person's ability to live each minute to the fullest an "existential lifestyle," which is characteristic of a person experiencing "the good life." This psychologist used the Q-sort technique to identify the gap between a person's ideal self and real self. He's not Maslow, but this psychologist used 19 propositions to describe a person's "self-actualizing tendency," which allows a person to become "fully functioning." This psychologist's (*) therapeutic method involves unconditional positive regard towards patients, which he laid out in his book *On Becoming a Person*. For 10 points, name this humanistic psychologist who pioneered client-centered therapy.

ANSWER: Carl (Ransom) **Rogers**

< Ethan Ashbrook | *Social Science* >

20. This man converted his mother to Christianity, leading his mother to refuse to sleep with this man's father if he didn't convert as well. This man's father abandoned him when he fell off his horse, believing it to be a bad omen. This man hired 35 men and purchased the ship of an explorer who left uncharted territory because he missed (*) his dad. This explorer earned the nickname "Lucky" after rescuing a shipwrecked crew. Helge and Anne Ingstad discovered a settlement created by this man at L'Anse aux Meadows. After sailing past Helluland and Markland, this man built a settlement at Vinland, according to his father's saga. For 10 points, name this son of Erik the Red and the first European to set foot in North America.

ANSWER: Leif **Erikson** (the Lucky) [or Leif **Ericson**]

< Mitch McCullar | *Non-Euro, Non-Commonwealth* >

BONUSES:

1. This opera is one of the oldest in the standard repertoire. For 10 points each:

[10] Name this opera where the title character sings “Posento Spirito” to lull Caronte to sleep. This opera was premiered at the 1607 Carnival in Mantua.

ANSWER: *L’Orfeo* [or *Orpheus*]

[10] This late-Renaissance / early-Baroque composer composed the music for *L’Orfeo* while working grueling hours for Vincenzo Gonzaga as his court musician in Mantua.

ANSWER: Claudio (Giovanni Antonio) **Monteverdi**

[10] This is the last opera by Monteverdi. In this opera, the Emperor Nero exiles Ottavia and Ottone so that he can finally marry the title character with whom Nero sings the love duet “Pur ti Miro” in this opera’s finale.

ANSWER: *L’Incoronazione di Poppea* [or *The Coronation of Poppea*]

< Dylan Bowman | *Music* >

2. In a work with this title, the protagonist attempts to save other prisoners while building the Burma Death Railway. For 10 points each:

[10] Give this name of a Richard Flanagan novel following Dorrigo Evans. This is also the title of a work that begins, “the months and days are the travellers of eternity.”

ANSWER: *The Narrow Road to the Deep North* [or *Oku no Hosomichi*; or *The Narrow Road to the Interior* (by Matsuo Basho)]

[10] Richard Flanagan is an author from this country. Another author from this country, Thomas Keneally, wrote about a boy facing racism for his half-Aboriginal ancestry in *The Chant of Jimmie Blacksmith*.

ANSWER: Commonwealth of **Australia**

[10] This Australian author who wrote about the artist Hurtle Duffield in *The Vivisector* described the death of a German explorer in his novel *Voss*.

ANSWER: Patrick **White** [or Patrick Victor Martindale **White**]

< Mitch McCullar | *Long-Form Fiction* >

3. This formula was based on Gamow’s liquid drop model of the nucleus. For 10 points each:

[10] Name this formula that uses the total number of nucleons, the number of protons, and the number of neutrons to predict the binding energy of a nucleus.

ANSWER: **semi-empirical mass** formula [accept **SEMF**; accept Bethe–**Weizsäcker** mass **formula**]

[10] The asymmetry term of the semi-empirical mass formula is required because nucleons are this type of particle that cannot occupy the same quantum state due to Pauli’s exclusion principle. These half-integer spin particles are contrasted with bosons.

ANSWER: **fermion**

[10] According to the semi-empirical mass formula, this metallic element has the highest binding energy per nucleon. This is the heaviest element that does not require supernovas to be manufactured.

ANSWER: **iron**

< Nathan Fredman | *Physics* >

4. Red fish swim around a beaker in this artist's *The Goldfish*. For 10 points each:

[10] Name this French artist -- a Fauvist (*foh-vist*) who included his painting *The Dance* in the background of his other painting, *The Joy of Life*.

ANSWER: Henri (Émile Benoît) **Matisse**

[10] Matisse shares his love of goldfish with this artist, who painted a woman staring at a goldfish bowl in the painting *Goldfish Window*. In this artist's *Avenue in the Rain*, a blur effect gives the viewer a feeling of rain along an American flag-decorated street.

ANSWER: (Frederick) Childe **Hassam**

[10] This Swiss artist of *The Goldfish* hinted an obsession with fish in works like *Fish Magic*. In a watercolor by this artist, it's ambiguous whether the birds are perched on top of the hand crank or attached to it.

ANSWER: Paul **Klee** (*clay*) (the unnamed watercolor is *Twittering Machine*)

< Iain Carpenter | *Painting and Sculpture* >

5. In 1896, this future Georgian senator was seriously considered as a possible running mate for William Jennings Bryan on the Democratic platform. For 10 points each:

[10] As a representative, this man tried to require the Postal Service to deliver to rural areas for free, and he earned black support by condemning lynching, but was later prosecuted for his anti-Catholic newsletters.

ANSWER: Thomas Edward "Tom" **Watson**

[10] Watson switched from the Democratic Party to this liberal 19th-century political party. As this party's nominee in 1904 and 1908, Watson was this party's last nominee for president. This party advocated for bimetallism and was supported by farmers.

ANSWER: **Populist** Party [or **People's** Party]

[10] One of the Populist Party's goals was to nationalize railroads, telegraph networks, and this recently invented communication technology, patented by Alexander Graham Bell.

ANSWER: **telephone** networks

< Nathan Fredman | *US History* >

6. After losing to the Demak sultanate, the Majapahit emperors retreated to this non-Javanese island. For 10 points each:

[10] Name this island with a capital at Denpasar. This island's nine major kingdoms accepted the Dewa Agung of Klungkung as *primus inter pares* or first among equals.

ANSWER: **Bali**

[10] The Majapahits once controlled this modern-day city-state whose last ruler was Parameswara. The Sultanate of Johor also ruled this city-state at the tip of the Malay peninsula.

ANSWER: **Singapore** [accept Kingdom of **Singapura**; accept Kerajaan **Singapura**]

[10] The Majapahit defeat of the Kingdom of Singapura led to the establishment of this non-Johor Sultanate. This Sultanate's control of a namesake body of water contributed to a spreading of Malay culture around Southeast Asia.

ANSWER: **Malacca** Sultanate [accept Kesultanan Melayu **Melaka**]

< Sarod Nori | *Non-Euro, Non-Commonwealth* >

7. This thinker once compared the problem of evil to an architect who designed a building to cause “noise, confusion, fatigue, and darkness.” For 10 points each:

[10] Name this thinker whose bundle theory argues that all objects are composed of a collection of perceptions. This thinker also presented a thought experiment about a missing shade of blue.

ANSWER: David **Hume**

[10] Hume is a famous proponent of this school of thought, which is often contrasted with rationalism. John Locke advocated for this school which argues that knowledge is derived from sensory experience.

ANSWER: **empiricism** [accept **empiricists**]

[10] Hume advanced a distinction between these things and “ideas,” arguing that ideas are less intensely perceived than these things. Hume’s copy principle holds that these things are the origins of all ideas.

ANSWER: **impressions**

< Brad McLain | *Philosophy* >

8. While still described by a “lock-and-key” model, the dynamics of this protein class are better appreciated in “induced-fit” theory. For 10 points each:

[10] Name this general class of catalytic proteins that work by reducing the activation energy of a biochemical reaction.

ANSWER: **enzymes**

[10] This kind of enzyme kinetics named for a German biochemist and a Canadian physician is useful for determining the reaction rate of classical enzymes. The equation named for this kind of kinetics assumes that the concentration of enzyme bound to substrate is always in equilibrium with reactants and products.

ANSWER: **Michaelis-Menten** kinetics [accept **Michaelis-Menten** equation]

[10] This plot, sometimes known as the “double reciprocal plot,” analyzes the Michaelis-Menten equation. This graph plots the reciprocal of the reaction velocity against the reciprocal of substrate concentration.

ANSWER: **Lineweaver-Burk** plot

< Michael Etzkorn | *Biology* >

9. Answer some questions about the Seven Against Thebes. For 10 points each:

[10] The army of the Seven Against Thebes was led by this commander who was banished by his brother Eteocles after they got into a fight over succession to the throne.

ANSWER: **Polynices**

[10] This father of Polynices and Eteocles prophesied that they would kill each other in a duel. This man is well-remembered today for killing his father Laius and marrying his mother Jocasta.

ANSWER: **Oedipus**

[10] During the fighting, Tydeus was going to be granted immortality. However, this goddess spotted him eating Melanippus’s brains and decided to let him die.

ANSWER: Pallas **Athena** [accept **Athene**]

< Ethan Ashbrook | *Mythology* >

10. Name these historical events associated with people with funny names. For 10 points each:

[10] Cotton Mather, son of Increase Mather, was involved in this event. Nathaniel Hawthorne altered his name to avoid being associated with one of his ancestors involved in this event.

ANSWER: **Salem witch** trials [prompt on **Salem trials**; prompt on **witch trials**]

[10] Nicholas Unless-Jesus-Christ-Had-Died-For-Thee-Thou-Hadst-Been-Damned Barbon established the first successful property insurance company after this event. Christopher Wren built St. Paul's Cathedral and redesigned many buildings after this disastrous 1666 event.

ANSWER: Great **Fire of London** [prompt on partial answers; accept **Great London Fire**; accept **London Fire of 1666**; and other equivalents mentioning both "London" and "Fire."]

[10] Alcibiades DeBlanc formed a group known as [this word] "of the White Camelia." Uriah Stephens founded a group whose shortened name begins with this word that was led by Terence Powderly.

ANSWER: **Knights**

< Sarod Nori | *Classics, Commonwealth or Britain, Other History* >

11. Famous examples of these types of songs include "Spanish Ladies" and "The Coasts of High Barbary." For 10 points each:

[10] Give this music genre that embodies a large number of "work songs" created and sung by sailors to pass the time while they were out voyaging.

ANSWER: sea **shanties** [accept sea **chanties**]

[10] A well-known sea shanty discusses handling a sailor in this state. Some options the song provides include "shave his belly with a rusty razor" and "put him in a longboat 'til he's sober."

ANSWER: **drunken** [accept "(What will we do with a) **drunken** sailor?"]

[10] In another shanty, seemingly unrelated lyrics intersperse the refrain "Way, haul away, we'll haul away" a man with this name.

ANSWER: **Joe** [accept "Haul Away **Joe**"; do **NOT** accept or prompt on "Joseph" or other answers]

< Ethan Ashbrook | *Miscellaneous* >

12. This woman was executed by guillotine during the Reign of Terror due to her support for the Girondins. For 10 points each:

[10] Name this French woman who wrote *Declaration of the Rights of Woman and the Female Citizen*.

ANSWER: Olympe **de Gouges** (*de-GOOZH*) [accept Marie **Gouze**]

[10] The Girondins opposed the Montagnards (*moan-tan-yards*), whose members included this "incorruptible" leader of the Reign of Terror. This man ordered the execution of his former political ally Georges Danton.

ANSWER: Maximilien François Marie Isidore de **Robespierre**

[10] Robespierre was assassinated during a "reaction" named for this eleventh month of the French Revolutionary calendar. This month starts in mid-July, ends in mid-August, and precedes Fructidor.

ANSWER: **Thermidor** [accept **Thermidorian** Reaction; accept **Fervidor**]

< Sarod Nori | *Continental Europe* >

13. For 10 points each -- Answer some questions about prayer in Judaism:

[10] This declaration is recited before the evening service on Yom Kippur. This declaration's name translates to "all vows."

ANSWER: **Kol Nidre**

[10] When performing morning prayers, or any prayer on Yom Kippur, some Jews wear one of these garments around their heads. These woolen objects traditionally have knotted tassels on their corners called *tzitzit* (*tseet-SEET*)

ANSWER: **tallit** [accept **tallitot**, **tallis**; accept prayer **shawl**; accept **Tallit** katan or **Tallit** gadol]

[10] After the weekly portion of this text is chanted, congregants rise and hold their pinky fingers up while this scroll is held aloft and exclaim that this text was given to Moses.

ANSWER: sefer **Torah** [accept **Pentateuch**]

< Nathan Fredman | *Religion* >

14. One of this author's poems opens, "I have lived long enough, having seen one thing, that love hath an end." For 10 points each:

[10] Name this poet of "Hymn to Proserpine." This author's poem *Atalanta in Calydon* contains a chorus that opens, "when the hounds of spring are on winter's traces."

ANSWER: Algernon **Swinburne** [or Algernon Charles **Swinburne**]

[10] A Swinburne poem set in one of these locations belonging to Proserpine describes it as a place "where the world is quiet." The narrator of an Andrew Marvell poem states that "no white nor red was seen" as lovely as the color of one of these locations.

ANSWER: **garden** [accept "The **Garden** of Proserpine"]

[10] In this Marvell poem, the speaker informs the title character that we don't actually have "world enough and time" because the speaker hears "Time's wingèd chariot hurrying near."

ANSWER: "**To His Coy Mistress**"

< Mitch McCullar | *Non-Epic Poetry* >

15. The theory that this type of payment should be the main source of public revenue is one of the main tenets of Georgism. For 10 points each:

[10] Name this type of payment, whose namesake law states that it should be equal to the maximum economic advantage of the land associated with it.

ANSWER: **rent**

[10] This British economist formulated the law of rent in *Principles of Political Economy and Taxation*, which also presented this man's theory of comparative advantage.

ANSWER: David **Ricardo**

[10] Ricardo also advanced this theory, which holds that the moral price of a good or service must be based on the amount of wages spent to produce it. Marx's Law of Value is an extension of this theory.

ANSWER: **labor theory of value** [accept **LTV**; prompt on partial answer]

< Ethan Ashbrook | *Social Science* >

16. This man wrote the lyrics “I feel pretty and witty and bright” for the song “I Feel Pretty.” For 10 points each:

[10] Name this lyricist of *West Side Story*. This man also composed the scores to *Assassins* and *Into the Woods*.

ANSWER: Stephen (Joshua) **Sondheim**

[10] This man delivered a series of Young People’s Concerts as the conductor of the New York Philharmonic. As a composer, this man wrote the music for *West Side Story*.

ANSWER: Leonard (or Louis) **Bernstein**

[10] This man shared a Best Director Oscar with Robert Wise for the film version of *West Side Story*. This choreographer won a Tony for the dance moves in *West Side Story*.

ANSWER: Jerome **Robbins** [accept Jerome Wilson **Rabinowitz**]

< Iain Carpenter | *Other Fine Arts* >

17. The narrator of this story describes the shining golden eyes of the title creature that look as if they’re saying, “save us. Save us.” For 10 points each:

[10] Name this story about a man who visits the Jardin de Plantes to see the title creatures, only to become one at the end.

ANSWER: “**Axolotl**”

[10] “Axolotl” is by this Argentine author who encouraged readers to take various paths through his novel *Hopscotch*.

ANSWER: Julio **Cortazar** [or Julio Florencio **Cortazar**]

[10] Julio Cortazar wrote a short story about the “Discontinuity of [these locations].” In *Catcher in the Rye*, Holden Caulfield wonders what happens to the ducks from an urban one of these locations in New York City.

ANSWER: **park** [accept Central **Park**; accept “Discontinuity of **Parks**”]

< Mitch McCullar | *Short-Form Fiction* >

18. This class of stars lies below the main sequence on the Hertzsprung-Russell diagram. For 10 points each:

[10] Name this stage in a star’s life -- for stars that don’t have enough mass to become a neutron star. After going through a red giant stage, this kind of star is formed.

ANSWER: **white dwarf** [prompt on **dwarf**]

[10] This limit, approximately 1.4 times the mass of the sun, is the upper stable limit on the mass of a white dwarf.

ANSWER: **Chandrasekhar** limit

[10] DAV, ZZ Ceti, and GW Vir are examples of this type of white dwarf that has noticeable variation in luminosity due to the star’s gravity waves.

ANSWER: **pulsating** white dwarf [prompt on **variable** white dwarf]

< Michael Etzkorn | *Other Science - Astronomy* >

19. Answer some questions about fetishes in literature. For 10 points each:

[10] A missionary develops an unhealthy relationship with an idol known as Fetish in “The Renegade,” a story that appears in this author’s collection, *Exile and the Kingdom*.

ANSWER: Albert **Camus**

[10] In this collection’s story “Hands,” Adolph Myers is fired from his teaching position due to an unfortunate tendency to caress his students, leading him to change his name to Wing Biddlebaum. Wing is one of the residents of the title town of this Sherwood Anderson collection.

ANSWER: **Winesburg, Ohio**

[10] In this novel by J.G. Ballard, the protagonist becomes a follower of Dr. Robert Vaughan after he begins fetishizing car accidents.

ANSWER: **Crash**

< Ethan Ashbrook | *Miscellaneous Literature* >

20. This scientist used scanning tunneling microscopy to analyze the adsorption of hydrogen and nitrogen to the surface of iron oxide. For 10 points each:

[10] Name this German scientist who won the 2007 Nobel Prize in Chemistry for his studies in surface chemistry.

ANSWER: Gerhard **Ertl**

[10] Ertl won the 2007 Nobel Prize in Chemistry in part for his work in elucidating the mechanism of this nitrogen fixation process that is used to produce ammonia.

ANSWER: **Haber**-Bosch process [accept Bosch-**Haber**]

[10] Ertl worked on iron-oxide form of the Haber-Bosch process, but the original Haber process used this densest, naturally occurring element as a catalyst. The use of this metal’s tetroxide in alkene reactions fell out of favor due to its ability to react with alkenes in retinol, causing temporary blindness.

ANSWER: **osmium** [accept **osmium** tetroxide]

< Michael Etzkorn | *Chemistry* >