

CALISTO: California Spring Tournament 2020

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Packet 14 Tossups

1. **This country used motti tactics to isolate portions of the enemy’s army in the Battle of Raate Road. The League of Nations granted control of the Aland (OH-land) Islands to this country. In the Continuation War, this country allied with Nazi Germany and retook the Karelian Isthmus during Operation Barbarossa. Bombs dropped on this country were mockingly referred to as “bread baskets” and were followed by (*) “cocktails” thrown at invading tanks. A sniper from country nicknamed the “White Death” operated during the Winter War. For 10 points, name this Nordic country that is governed from Helsinki.**

ANSWER: **Finland** [or **Suomi**, accept **Finlandization**] (The sniper was Simo Häyhä.)
<European History — Lin> [Ed. Hong]

2. **When the parameter kappa is greater than the square root of one-half, these materials can be penetrated by flux quanta that form Abrikosov vortices. Two of these materials are separated by a thin insulator or a weak one of these materials in a Josephson junction. Cuprite perovskites such as BSSCO (B-S-S-C-O) or (*) YBCO (Y-B-C-O) act as so-called “high temperature” examples of these materials, which can be cooled to their critical temperature using just liquid nitrogen. These materials expel magnetic field lines in the Meissner (MICE-ner) effect, which can cause diamagnetic levitation. For 10 points, name these materials in which current flows with zero resistance.**

ANSWER: **superconductors** [accept **superconductivity**; accept type I **superconductors** or type II **superconductors** or type I **superconductivity** or type II **superconductivity**; do NOT accept or prompt on “conductors”]
<Physics — Gurazada> [Ed. French]

3. **One section of this poem describes “twenty-eight young men” bathing in the water who “do not think whom they souse with spray.” This poem asserts, “what I assume you shall assume” because “every atom belonging to me as good as belongs to you.” In this poem, a child’s question of “what is the grass?” prompts the speaker to observe that “it seems... the beautiful (*) uncut hair of graves.” The speaker of this poem declares, “I sound my barbaric yawp over the roofs of the world” after noting, “I am large, I contain multitudes.” The proclamation “I celebrate myself” begins, for 10 points, what poem by Walt Whitman?**

ANSWER: **“Song of Myself”**
<Poetry — Schwartz> [Ed. French]

4. **One denomination of this religion follows the teachings of Vernon Carrington, who claimed to be the reincarnation of the prophet Gad. Prince Emmanuel Edward Charles founded another denomination of this religion whose members do not eat meat, mangoes, or sugarcanes. This religion’s sacred texts include the Holy Piby and the Kebra Negast. Bobo Ashanti is a subset of this religion, whose members refer to God as (*) Jah and believe Jesus to be black. This religion believes Ethiopian emperor Haile Selassie to be the second coming of Christ. Smoking cannabis is central to, for 10 points, what Jamaican religion whose practitioners included Bob Marley?**

ANSWER: **Rastafarianism**
<Religion — Dai> [Edited]

5. **A woman in a black dress with a red sash points her finger downwards in this artist's *Duchess of Alba*. Manuel Godoy (GOH-doy) likely commissioned two portraits by this artist of a woman reclining on a bed of pillows, the first with her nude and the second with her in a gray dress. This artist of the (*) *Nude and Clothed Maja* (MAH-hah) depicted a crazed man with gray hair biting off a child's arm in a painting produced in the Quinta (KEEN-tuh del Sordo). In another work by this artist, a man in white holds his hands up as he is about to be executed by a firing squad. For 10 points, name this Spanish artist of *Saturn Devouring His Son* and *The Third of May, 1808*.**

ANSWER: Francisco Goya [or Francisco José de Goya y Lucientes]
<Painting — Li/Venkateswaran> [Ed. French]

6. **A character on this show is diagnosed as the youngest person ever to get an ulcer after preventing his parent's divorce. After having an epiphany while on shrooms, a character on this show named Doug Forcet decides to live alone in the woods. A death on this show prompts the prepared message "attention, I have been murdered" to play across an entire community. A (*) Jacksonville native in this show attempts to solve many of his problems by chucking Molotov cocktails at things while yelling "BORTLES!" In this show, an "Arizona trash bag" repeatedly figures out that Michael does not actually run a heaven-like neighborhood and is in fact a demon. For 10 points, name this ethics-driven show about Jason, Tahani, Chidi, and Elanor's adventures in the afterlife.**

ANSWER: *The Good Place*
<Pop Culture — Schwartz> [Edited]

7. **This act was weakened by the Supreme Court decision *United States vs. E.C. Knight*. The Danbury Hatters' Case declared that labor unions were not exempt from this act. In 2001, Microsoft was found to have violated this act when it packaged Internet Explorer with its computers. This act was succeeded by the (*) Clayton act. William Howard Taft used this act to break up Standard Oil. Theodore Roosevelt was notorious for using this act to break up the Northern Securities company. For 10 points, give this act named for an Ohio senator that aimed to clamp down on monopolies.**

ANSWER: Sherman Antitrust Act [prompt on antitrust act]
<US History — Athreya> [Ed. Lin]

8. **Due to its resistance to weathering, this mineral is found at the bottom of the Goldich dissolution series. Along with iridium, the presence of this mineral in the fossil record gives support to the Alvarez hypothesis. This mineral's low relative crystallization temperature places it at the bottom of (*) Bowen's reaction series. The "shocked" variety of this mineral is formed after meteorite impacts, and this mineral produces a current when exposed to stress due to its piezoelectricity. For 10 points, name this silicate mineral with chemical name silicon dioxide, which is commonly found in sand.**

ANSWER: quartz [accept shocked quartz; accept silicon dioxide before "silicate"]
<Earth Science — Schwartz> [Ed. Bandara]

9. **Ben du Toit (doo TWAH) investigates the supposed "suicide" of his school's janitor in a novel from this country called *A Dry White Season*. A woman sprints towards a helicopter at the end of a novel from this country in which she and Bam travel through it in a yellow bakkie. In that novel, Maureen survives through a fictional civil war in this country with the help of her (*) black servant, July. In another novel from this country, Stephen Kumalo's son Absalom is executed for murdering Arthur Jarvis. Nadine Gordimer is from, for 10 points, what country, where Alan Paton wrote *Cry, the Beloved Country* to criticize apartheid?**

ANSWER: South Africa [or Republic of South Africa or RSA]
<Long Fiction — Schwartz> [Ed. French]

10. **One of these beings scolds a man for blowing air both to warm his hands and to cool his soup in one of Aesop's fables. Sophocles' *The Trackers* exemplifies a genre of burlesque comedy in which these beings are the chorus. After one of these beings challenges Apollo to a music contest, Apollo flays him for hubris. These beings include Comus, Crotus, and (*) Marsyas, as well as the god who invented the syrinx. Along with the Maenads, these beings make up most of the drunken procession that follows Dionysus. The god Pan is depicted as one of these beings. For 10 points, name these lustful beings with the torso of a man and the legs of a goat.**

ANSWER: satyrs [or satyroi or fauns; accept satyr plays]

<Mythology — Li> [Ed. French]

11. **A first-act tenor aria in this opera expresses the singer's desire to return to "mistico serto di luce e fior" (MEE-stee-koh serto di LOO-cheh fee-OR). As a chorus of priests hails a god, two characters bid farewell to the earth at the end of this opera. One aria in this opera addresses its "Celeste" (cheh-LEH-steh) title character. An Act II triumphal (*) march in this opera sometimes features elephants. This opera's title character, the daughter of Amonasro, is in a love triangle with Amneris and the prince Radames. This opera ends as Radames and the title character suffocate in a temple vault. For 10 points, name this opera by Giuseppe Verdi about an Ethiopian princess.**

ANSWER: Aïda

<Opera — Gray> [Edited]

12. **Scholars from this country translated the *New Text on Anatomy* from a different language through a policy which allowed a certain country's traders on an artificial island in its south. One era of this country's history ended after eight "black ships" opened up trade. This country's period of "Dutch Learning" lasted until 1854, when (*) Matthew Perry arrived on the shores of this country. This country's policy of isolation, or *sakoku*, ended with the Convention of Kanagawa. This country's last shogunate was overthrown in 1868 in the Meiji Restoration. For 10 points, name this country ruled during the Edo period by the Tokugawa Shogunate.**

ANSWER: Japan [or Nippon-koku or Nihon; accept Tokugawa Shogunate or Tokugawa Bakufu before mention]

<Asian History — Li> [Ed. Iyer]

13. **A Ramachandran plot is used to visualize the potential values of the dihedral angles phi and psi between components of these compounds. The structure of these compounds can be regulated with chaperonins and is the subject of Anfinsen's dogma. These compounds can contain DNA-binding structural motifs like the (*) zinc finger and the helix-turn-helix. Disulfide bridges and hydrogen bonds between R groups contribute to these compounds' tertiary structure, while beta sheets and alpha helices are their main types of secondary structure. For 10 points, name these macromolecules, which are formed using peptide bonds and are composed of amino acids.**

ANSWER: proteins [or polypeptides; prompt on enzymes with "enzymes are a subtype of what more general class of macromolecule?"; do NOT accept or prompt on "amino acids"]

<Biology — Gurazada> [Edited]

14. **In a play by this author, a group of old men get doused with water while trying to set fire to a building. In another play by this author, a character decides to burn down a school after he discovers that his son thinks beating his father is morally justified. A naked maid named Reconciliation distracts generals while a peace agreement is brokered in a play by this author. Another of this author's plays features a school called the (*) Thinkery, which parodies the Socratic method. In a play by this author, a woman stops the Peloponesian war by convincing other women not to boycott sex until it ends. For 10 points, name this ancient Greek comic playwright of *The Clouds* and *Lysistrata*.**

ANSWER: Aristophanes

<Drama — Schwartz> [Edited]

15. **The San people put this substance at the base of termite mounds as part of a process to trick baboons into helping them find water. A place where this substance was procured for centuries in Mali is called Taoudenni. In Africa this substance was often traded for gold silently through the use of drums. The Azalai is a semi-annual trading route in the Sahara where this substance is transported by (*) camel caravans to Timbuktu in the form of slabs. A form of this substance called natron was used by the Ancient Egyptians to preserve mummies. For 10 points, name this valuable substance with chemical formula NaCl.**

ANSWER: **salt** [accept **NaCl** before mentioned; prompt on **sodium**]

<Anthropology— Li> [Ed. Gray]

16. **This ruler referred to himself as the “Beloved of the Gods” and planted banyan trees at regular intervals to aid travellers. This ruler concealed wounds from his older brother Susima to avoid being killed in a succession dispute. An elaborate torture chamber that this ruler built was known as his namesake “hell.” This ruler was so shaken by the bloodshed during the (*) Kalinga War that he converted to Buddhism. This ruler constructed a pillar with four lions standing back to back, which is his “lion capital,” and constructed many rock edicts. For 10 points, name this “Great” ruler of the Maurya Empire.**

ANSWER: **Ashoka** Maurya [or **Ashoka** the Great; accept **Piyadassi** (Pee-yuh-dah-see)]

<Ancient/Classical History — Hong> [Ed. Athreya]

17. **This element’s tert-butoxide is a prototypical sterically hindered base. A salt of this element is a very strong oxidizing agent that produces an intense magenta color in water. This element’s radioactive 40 isotope decays by electron capture to (*) argon-40 and is used in one form of radioactive dating. This element’s chloride is used to induce cardiac arrest in lethal injections. This alkali metal sits directly above rubidium and below sodium on the periodic table. For 10 points, name this element with atomic number 19 and symbol K, large amounts of which are found in bananas.**

ANSWER: **potassium** [accept **K** before mention; accept **potassium** tert-butoxide or **t-BuOK** or **potassium** permanganate or **KMnO₄** or **potassium-40** or **⁴⁰K** or **potassium** chloride or **KCl**]

<Chemistry — Gurazada> [Ed. French]

18. **In one essay, this author mocked the phrase “objective considerations of contemporary phenomena” after using it in a parody translation of a verse from Ecclesiastes. That essay by this author condemns “verbal false limbs” and “dying metaphors” as qualities of “modern English of the worst sort.” This author of (*) “Politics and the English Language” described being a policeman in colonial Burma in “Shooting an Elephant.” This author coined the words “doublethink” and “thoughtcrime.” For 10 points, name this author who developed the language Newspeak for his novel *Nineteen Eighty-Four*.**

ANSWER: George **Orwell** [or Eric Arthur **Blair**]

<Essay — Gray> [Ed. French]

19. **The nave of a church in this city is built as a large hyperboloid vault. That church in this city has a naturalistic Nativity facade and an angular Passion façade. An apartment building in this city has curved wrought-iron balconies that follow the undulating stone façade. A long serpentine bench and a mosaic-covered salamander sculpture are located in this city’s (*) Park Güell (gwell). An unfinished church in this city will have 18 towers and is planned to be completed in 2026. The Casa Mila and Sagrada Familia were designed by Antoni Gaudí (GAO-dee) in, for 10 points, what largest city in Catalonia?**

ANSWER: **Barcelona** [or **Barna**]

<Architecture — Gray> [Edited]

20. **Little Saint James Island is best known as the residence of this person. Tova Noel and Michael Thomas were charged with conspiracy and filing false records over this man. Prince Andrew frequently rode on this person's private plane, a Boeing 727 nicknamed the (*) "Lolita Express."** This man was found dead after two security cameras malfunctioned and guards failed to check his cell every 30 minutes. This person allegedly committed suicide by hanging on August 10, 2019 while being held on trial for child prostitution. For 10 points, name this person, the subject of a meme stating that he didn't kill himself.

ANSWER: Jeffrey Edward **Epstein**

<Current Events — Dai> [Edited]

Packet 14 Bonuses

1. Liouville's theorem states that the distribution function is constant along trajectories in this space. For 10 points each:

[10] Name this space, which describes all possible states of a dynamical system. Canonical coordinates specify the position and momentum of all points in this space.

ANSWER: **phase** space

[10] Canonical coordinates can be found from generalized coordinates by applying this operation to the generalized coordinates. Applying this operation to linear momentum yields force.

ANSWER: **time derivative** [or **derivative** with respect to **time** or **differentiation** with respect to **time**; prompt on **derivative** or **differentiation** by asking "with respect to what quantity?"; prompt on *d over dt* or *d by dt*; do NOT accept or prompt on **spatial derivative** or *d over dx* or *d by dx*]

[10] This type of motion can be depicted as an ellipse in phase space. For small amplitudes, oscillation of a pendulum can be modelled as this type of motion.

ANSWER: **simple harmonic** motion [or **simple harmonic** oscillation or **SHM** or **SHO**; accept **simple harmonic oscillators**]

<Physics — Gurazada> [Edited]

2. "The Ecstasy of Gold" plays during this film's iconic Mexican standoff. For 10 points each:

[10] Name this Sergio Leone film about the fight for stolen Confederate gold between Blondie, Angel Eyes, and Tuco.

ANSWER: ***The Good, the Bad, and the Ugly***

[10] This Italian film composer wrote the score to *The Good, the Bad, and the Ugly*. He included a "Love Theme" and "Toto and Alfredo" in his score for the film *Cinema Paradiso*.

ANSWER: Ennio **Morricone**

[10] Morricone's collaborations with Sergio Leone were mostly on films of this genre like *The Good, the Bad, and the Ugly*. Clint Eastwood often starred in Leone's "spaghetti" films of this genre.

ANSWER: **Westerns** [accept spaghetti **Westerns**]

<Film — Ma> [Edited]

3. This regime was put in place after the overthrow of the creator of the concept of NASAKOM. For 10 points each:

[10] Name this anti-communist military regime whose leaders included Suharto. Many of this regime's civilian politicians belonged to the Golkar political party.

ANSWER: **New Order** [or **Orde Baru** or **Orba**; do NOT accept or prompt on "Old Order" or "Orde Lama"]

[10] The New Order came to power after a 1965 massacre of Communist Party members in this country which occurred on many of its islands, like Java and Sumatra.

ANSWER: Republic of **Indonesia** [or Republik **Indonesia**]

[10] Massacres of PKI members occurred after the failure of the 30th September movement, which aimed to overthrow this first President of Indonesia, who formulated the Pancasila.

ANSWER: **Sukarno** [or Kusno **Sosrodihardjo**]

<World History — Iyer> [Edited]

4. This city is the only national capital to be home to puffins, due to a colony on nearby Akurey Island. For 10 points each:

[10] Name this city, whose name means “smoky bay” in reference to its nearby hot springs. This northernmost capital in the world contains its country’s parliament, the Althing.

ANSWER: **Reykjavík** (“rake”-YA-veek)

[10] Reykjavik is the capital of this North Atlantic country, whose position along the Mid-Atlantic Ridge leads to its active volcanism and hot springs. This island country is actually greener than Greenland.

ANSWER: **Iceland** [or **Ísland**]

[10] In 1963, underwater volcanic eruptions formed this island off the coast of Iceland, which became its southernmost point. This island is named after a Norse fire giant.

ANSWER: **Surtsey** (surt-SEA)

<Geography — Lin/Gray> [Edited]

5. This author described a 1959 trip to Cuba in *I Can't Think of Any Title*, one of his many journalistic pieces. For 10 points each:

[10] Name this author. Characters created by this author include Úrsula Iguarán, who lives for over 150 years, and Colonel Aureliano, who fathers seventeen sons that share his name.

ANSWER: Gabriel **García Márquez** [or Gabriel José de la Concordia **García Márquez**; accept **Gabo** or **Gabito**; prompt on **García** or **Márquez**]

[10] Those characters appear in this novel by García Márquez, in which José Arcadio Buendía founds the town of Macondo.

ANSWER: **One Hundred Years of Solitude** [or **Cien Años de Soledad**; do NOT accept or prompt on “A Hundred Years of Solitude”]

[10] In *One Hundred Years of Solitude*, Úrsula warns her family that their incest will lead to their children having this physical feature. When Aureliano sleeps with his cousin Armanta Úrsula, their child has this feature and ultimately is eaten by ants.

ANSWER: a **pig’s tail** [or a **tail of a pig**; prompt on **tail**]

<Long Fiction — Venkateswaran> [Ed. French]

6. The anions of large and highly polarizable atoms, such as the iodide ion, are good examples of these species. For 10 points each:

[10] Name these electron-rich species. These species can “attack” and bond to electron-deficient species.

ANSWER: **nucleophiles** [accept **nucleophilicity** or **nucleophilic** centers or **Lewis bases**]

[10] In one subtype of this type of reaction, a nucleophile attacks a compound and replaces a leaving group. In general, this kind of reaction involves the transfer of a group from one molecule to another, and can be represented as $AB + C \rightarrow A + BC$ (“A-B plus C yields A plus B-C”).

ANSWER: **substitution** reaction [or **single displacement** reaction or **single replacement** reaction or single **substitution** reaction; accept nucleophilic **substitution reaction** or **S_N1** or **S_N2**; prompt on **displacement** reaction or **replacement** reaction; do NOT accept or prompt on “double displacement reaction” or “double replacement reaction” or “double substitution reaction”]

[10] Salts containing a lithium cation (“cat”-“eye”-“on”) and an anion (“Anne”-“eye”-“on”) containing two alkyl groups bonded to an atom of this element are strong nucleophiles called Gilman reagents. This metallic element forms bronze when alloyed with tin.

ANSWER: **copper** [or **Cu**]

<Chemistry — Gurazada> [Edited]

7. In one of this composer's operas, a voice reads from the Pyramid texts, proclaiming: "Open are the double doors of the horizon; unlocked are its bolts." For 10 points each:

[10] Name this composer of *Akhnaten*, part of his Portrait Trilogy. Another opera by this composer features five "knee plays" and sections titled "Bed" and "Spaceship."

ANSWER: Philip **Glass**

[10] Philip Glass' third string quartet "Mishima" was adapted from this type of music he composed for *Mishima: A Life in Four Chapters*. John Williams wrote this type of music for the *Star Wars* and *Indiana Jones* franchises.

ANSWER: **film** music [or **movie** music or **film** score; prompt on **score**]

[10] Glass' best known score was written for this experimental Godfrey Reggio film that is the first in a trilogy. Its title is Hopi for "life out of balance" and this film is composed mostly of slow motion and time-lapse footage.

ANSWER: ***Koyaanisqatsi***

<Classical Music — Gurazada> [Ed. Ma]

8. Hōne Heke, a chieftain of these people, fought other tribes in a war named for weapons supplied by the British. For 10 points each:

[10] Name these people who constructed hill forts called "pa" and fought a series of destructive intertribal conflicts known as the Musket Wars.

ANSWER: **Maōri** [accept **Ngāpuhi iwi**]

[10] Hōne Heke supposedly signed the Treaty of Waitangi, the founding document of this country. The Maori are among the indigenous people of this country.

ANSWER: **New Zealand** [or **Aotearoa**]

[10] Hōne Heke provoked this conflict when he chopped down its namesake object from Maiki hill. Hōne Heke had earlier gifted that namesake object to James Busby, the first British Resident of New Zealand.

ANSWER: **Flagstaff** War [or **Northern** War or **First Maori** War; prompt on **Maori War**]

<British/Commonwealth History — Lin> [Ed. Athreya]

9. The sum of two terms raised to the fourth power can be factored with an identity named for this mathematician. For 10 points each:

[10] Name this mathematician, who names primes p such that "two p plus one" is also prime. She obtained lecture notes from the Ecole Polytechnique (ey-COLE poly-TECK-neeck), since women were not allowed to enroll.

ANSWER: Sophie **Germain**

[10] Sophie Germain studied her eponymous primes to establish a strong divisibility criterion for counterexamples to this theorem. This theorem was unproven for centuries until the modularity theorem was proved for supersingular elliptic curves in the 1990s.

ANSWER: **Fermat's Last** Theorem [prompt on **Fermat's** theorem or **FLT**; do NOT accept or prompt on "Fermat's little theorem"]

[10] Sophie Germain discussed her work on Fermat's last theorem with this prolific German mathematician. The normal distribution is also named for this mathematician.

ANSWER: Carl Friedrich **Gauss** [accept **Gaussian** distribution]

<Math — Dai/French> [Ed. French]

10. At the end of this play, two couples maniacally scream “It’s not that way, it’s over here!” before swapping roles. For 10 points each:

[10] Name this play, which opens when an “English clock strikes 17 English strokes.” In this play, Mary recites a poem about everything catching fire after the arrival of the Fire Chief.

ANSWER: The **Bald Soprano** [or La **Cantatrice Chauve**]

[10] This Romanian playwright of *The Chairs* and *Rhinoceros* wrote about an absurd party attended by the Smiths and the Martins in *The Bald Soprano*.

ANSWER: Eugène Ionesco (ee-oh-NESS-koh)

[10] Eugène Ionesco wrote the majority of his plays in this language. It was also used by playwrights like Jean Genet (zhuh-NAY), Antonin Artaud (ar-TOH), and Victor Hugo.

ANSWER: French [or Français]

<Drama — Schwartz> [Edited]

11. This country’s Fort St. Elmo was the home of the Knights Hospitaller. For 10 points each:

[10] Name this country, where an Ottoman invasion was pushed back from taking Fort St. Elmo on the island of Gozo by Jean de Vallette.

ANSWER: Malta

[10] This sultan, who was advised by Pargali Ibrahim Pasha, ordered the invasion and subsequent siege of Malta. He was given the epithet “The Magnificent.”

ANSWER: Suleiman the Magnificent

[10] The Knights Hospitaller moved to Malta after being displaced from this island off the coast of Anatolia.

ANSWER: Rhodes

<European History — Iyer> [Edited]

12. The rectification of names and the maintaining of proper relationships are central to the school of thought associated with this thinker, which is officially called Ruism. For 10 points each:

[10] Name this Chinese thinker. The Four Books and Five Classics are central to this philosopher’s school of thought, which is often contrasted with Daoism and Legalism.

ANSWER: Confucius [or Kǒng Zi or Kǒng Qiu; accept Kǒng Fuzi; accept Confucianism]

[10] Mencius dubiously claimed that Confucius compiled this text, one of the Five Classics which chronicles the affairs of the State of Lǔ. The *Commentary of Zuǒ* is one of the traditional Three Commentaries on this text.

ANSWER: Spring and Autumn Annals [or Chūnqiū]

[10] A later Han Dynasty text titled the *Classic of this virtue* is framed as a conversation between Confucius and his pupil Zengzi. This Confucian virtue generally entails respect for one’s elders and ancestors.

ANSWER: filial piety [or xiào; accept xiàojing; do NOT accept or prompt on “piety”]

<Philosophy — Ma> [Edited]

13. This technique was based on the color theory of Michel Chevreul (chev-“RULE”) and was used for a painting depicting an art critic holding a flower in front of a swirling background. For 10 points each:

[10] Name this technique used in Paul Signac’s (seen-YAK’s) *Portrait of Félix Fénéon* (FAY-nay-on). Another artist used this technique in his *Bathers at Asnières* (ay-nee-“AIRS”).

ANSWER: **pointillism** [accept **divisionism** or **Neo-Impressionism**]

[10] This artist of *Bathers at Asnières* developed pointillism with Paul Signac. This artist depicted a park on the River Seine (sen) in *A Sunday Afternoon on the Island of La Grande Jatte*.

ANSWER: Georges **Seurat** [or Georges-Pierre **Seurat**]

[10] Seurat’s (soo-RAH’s) first night scene depicts one of these locations. Another Seurat painting set in one of these places depicts a woman in a yellow tutu standing on a white horse and was left unfinished after Seurat’s sudden death.

ANSWER: **circus** [accept *Parade de cirque* or *The Circus*]

<Painting — Venkateswaran> [Ed. Malouf]

14. For 10 points each, answer the following about commands you might find on a Unix-like system:

[10] This command sends ICMP (I-C-M-P) packets to an IP address or URL at regular intervals, which is useful for diagnosing network problems. This command also measures network speed by timing the roundtrip.

ANSWER: **ping**

[10] This command invokes a pager to read files. It allows unrestricted backwards movement within a file, unlike a command with a complementary name.

ANSWER: **less** [The complementary command is `more`.]

[10] The `rm` command performs this action on a file. On Windows, moving a file to the recycling bin does not actually perform this irreversible action. A description is fine.

ANSWER: **deleting** a file [or **removing** a file; accept word forms or synonyms]

<Computer Science — Gurazada> [Edited]

15. A line addressed to this person laments, “ah... while you are not safe I am not safe, and now you’re really in the total animal soup of time.” For 10 points each:

[10] Name this person whose time in Greystone Park Psychiatric Hospital inspired a poem that tells him, “I’m with you in Rockland.”

ANSWER: Carl **Solomon** [or **Carl**]

[10] Carl Solomon is the dedicatee of this Allen Ginsberg poem, which begins, “I saw the best minds of my generation destroyed by madness.”

ANSWER: “**Howl**”

[10] The second section of *Howl* is addressed to this deity, “whose breast is a cannibal dynamo” and “whose mind is pure machinery.” That section also calls this Canaanite god a “sphinx of cement and aluminum.”

ANSWER: **Moloch**

<Poetry — French> [Edited]

16. Before Gregory IV moved it to its current date, All Saints Day was celebrated in this month, replacing the Roman holiday of Lemuria. For 10 points each:

[10] Name this month. A folk festival celebrated on the first day of this month often involves dancing around a pole.

ANSWER: **May** [or **Maia**; accept **maypole** or **May Day**]

[10] The Green Man marries a ritual Queen of May in neo-Pagan celebrations of this holiday. This holiday is celebrated on May 1, six months after Samhain.

ANSWER: **Beltane**

[10] Catholics, on the other hand, hold the month of May as sacred to this woman. The Immaculate Conception refers to this woman's conception as free from original sin, not her virgin conception of Jesus Christ.

ANSWER: Virgin **Mary** [or **Madonna**]

<Mythology — French> [Edited]

17. In this person's trial, judge Ward Hunt directed the jury to deliver a guilty verdict without deliberation. For 10 points each:

[10] Name this woman, who was not imprisoned to avoid a writ of habeas corpus after her trial in Rochester. She denounced her trial as not "having a jury *not* of my peers."

ANSWER: Susan B. **Anthony** [or the Susan B. **Anthony trial** or *United States v. Susan B. Anthony*]

[10] The case brought against Anthony found her guilty of illegally performing this action. The suffrage movement fought to secure women the right to perform this action.

ANSWER: **voting** [accept word forms like casting a **vote**]

[10] Anthony worked closely with this other suffragist, who wrote the Declaration of Sentiments read at the 1848 Seneca Falls Convention.

ANSWER: Elizabeth Cady **Stanton**

<US History — Gray> [Edited]

18. For 10 points each, answer the following about the end:

[10] According to this political scientist's book *The End of History and the Last Man*, the end of history is in the current system of capitalist liberal democracy.

ANSWER: Yoshihiro Francis **Fukuyama**

[10] Since the Sun is on the main sequence, it will probably exhaust its core hydrogen and become this kind of star in five billion years. These large, relatively cool stars eventually become white dwarfs.

ANSWER: **red giants** [prompt on **giant**]

[10] In Norse mythology, this apocalyptic "twilight of the gods" will see Asgard and the Bifrost set on fire as the Midgard Serpent and the fire giants cause the end of the world.

ANSWER: **Ragnarök**

<Mixed/Other — Gray> [Edited]

19. This archetype describes characters who are present in the Russian social elite but are unable to perform meaningful actions. For 10 points each:

[10] Name this 19th century Russian literary archetype, which is often analogized to the Byronic hero. Characters in this archetype include Ivan Goncharov's Oblomov and a man who dances with Olga at her name day celebration.

ANSWER: the **superfluous man** [or *lishniy chelovek*]

[10] The superfluous man Eugene Onegin dances with Olga and shoots Lensky in a verse novel by this Russian poet. This author also wrote "The Bronze Horseman."

ANSWER: Alexander **Pushkin** [or Alexander Sergeyevich **Pushkin** or Aleksandr Sergejevich **Pushkin**]

[10] This other author wrote about Tchulkaturin's obsession with Liza in *The Diary of a Superfluous Man*. This author described the nihilist Bazarov in his novel *Fathers and Sons*.

ANSWER: Ivan **Turgenev** [or Ivan Sergeyevich **Turgenev** or Iván Sergéyevich **Turgénev**]

<Long Fiction — Schwartz> [Edited]

20. Botulinum toxin functions by cleaving SNAP-25 ("snap twenty-five") to block the release of this neurotransmitter. For 10 points each:

[10] Name this neurotransmitter whose synthesis is catalyzed by ChAT ("chat"). Antibodies block or destroy this neurotransmitter's nicotinic receptors in myasthenia gravis.

ANSWER: **acetylcholine** [or **ACh**]

[10] Acetylcholine is released when an action potential triggers the opening of voltage-gated channels of this element's +2 ion. This element is a major constituent of bone.

ANSWER: **calcium** [or **Ca** or **Ca²⁺**]

[10] Acetylcholine triggers contractions in this tissue. This striated tissue is under voluntary control and is comprised of myofibrils that in turn are comprised of sarcomeres.

ANSWER: **skeletal muscle** tissue [prompt on muscle tissue; do NOT accept or prompt on "cardiac muscle" or "smooth muscle"]

<Biology — Gurazada> [Edited]