

CALISTO: California Spring Tournament 2020

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Packet 13 Tossups

1. **During a conflict in this country, swordsmen called *Juramentados* carried out suicide attacks against occupying forces. This country's Muslim minority was massacred by occupying troops during the Moro Rebellion. Galleons named for this country's capital made bi-annual trading voyages to New Spain. Frederick Funston captured this country's first president, (*) Emilio Aguinaldo. Along with Cuba and Puerto Rico, this country was occupied by the United States after the Spanish-American War. For 10 points, name this Pacific archipelagic country that began its struggle against American colonizers in the Battle of Manila.**

ANSWER: Republic of the **Philippines** [or Republika ng **Pilipinas** or **Filipinas**]

<Asian History — Lin> [Ed. Ma]

2. **The Laplacian of this quantity equals charge density over epsilon-nought, according to an application of Poisson's equation. This quantity due to an infinite line of charge is proportional to the logarithm of distance, while this quantity due to an electric dipole is proportional to distance to the negative second power. The charge stored in a capacitor equals capacitance times the (*) difference in this quantity. In physics without calculus, this quantity divided by distance is the electric field. The power emitted by a resistor equals this quantity times current. For 10 points, name this quantity which, according to Ohm's law, is equal to current times resistance.**

ANSWER: **voltage** [or electric **potential** or scalar **potential** or electric scalar **potential**; accept **voltage** difference or electric **potential** difference or scalar **potential** difference or electric scalar **potential** difference; prompt on V or phi or delta-V or delta-phi; do NOT accept or prompt on "vector potential"]

<Physics — Gurazada> [Ed. French]

3. **A mezzo-soprano solo quoting the Book of Lamentation follows the "Profanation" movement in this composer's Bible-inspired first symphony. A Hebrew setting of the Psalms by this composer is titled for Chichester Cathedral. The soprano aria "Glitter and Be Gay" is often excerpted from this composer's operetta (*) *Candide*. After leaving the "Dance at the Gym," Tony sings that he "just met a girl named Maria" in a musical by this composer about a conflict between the Jets and the Sharks. For 10 points, name this longtime conductor of the New York Philharmonic who composed the music for *West Side Story*.**

ANSWER: Leonard **Bernstein** [do NOT accept or prompt on "Elmer Bernstein"]

<Classical Music — Ma> [Edited]

4. **The book *Noah's Flood*, written by William Ryan and Walter Pitman, proposed the "deluge" hypothesis about this body of water. The ancient cities of Tomis and Histria were established on this body of water. The Don River flows south into this body of water. The cities of Varna and (*) Odessa are located on this sea. The Strait of Kerch separates the Sea of Azov from this sea, which is connected to the Sea of Marmara by the Bosphorus Strait. This sea, which is home to the only warm-water ports in Russia, also contains a large peninsula annexed by Russia from Ukraine in 2014. For 10 points, name this sea which contains the Crimean Peninsula.**

ANSWER: **Black Sea**

<Geography — Song> [Ed. Venkateswaran]

5. **This author wrote about Cudjo Lewis' experience in the trans-Atlantic slave trade in the posthumously published novel *Barracoon*. Alice Walker described a search for this author's unmarked grave in the *Ms.* magazine article "Looking for" this author. One of this author's characters experiences a sexual awakening under a pear tree before her grandmother sets her up with (*) Logan Killicks. That character is later forced to shoot her husband Tea-Cake during a hurricane after he contracts rabies. For 10 points, name this author who described Janie Crawford's life in Eatonville in her novel *Their Eyes Were Watching God*.**

ANSWER: Zora Neale Hurston

<Long Fiction — Shahriar/Schwartz> [Ed. Schwartz]

6. **On this holiday, people proclaim that any number of blessings would have been "enough for us" while chanting "Dayenu" (die-eh-noo). A song performed during this holiday describes a goat, who is eaten by a cat, who is then bitten by a dog, and so forth. That song, "Chad Gadya" (HUHD GAHD-yah), describes the smiting of the (*) Angel of Death. The youngest family member traditionally asks, "Why is tonight different from all other nights?" as part of this holiday's "four questions." On this holiday, practitioners eat matzah to symbolize the unleavened bread that Jews had to eat while fleeing Egypt. For 10 points, name this Jewish holiday that commemorates the story of Exodus.**

ANSWER: Passover [or Pesach; prompt on the Seder by asking "What holiday is the Seder part of?"]

<Religion — Schwartz> [Edited]

7. **One country in this conflict escaped destruction after the Battle of Kunersdorf when Empress Elizabeth suddenly died. A string of British victories in this war led one year to be termed the *Annus Mirabilis*. This conflict was preceded by a shift of traditional alliances between countries called the Diplomatic Revolution. (*) George Washington started this war by firing on French troops at Fort Duquesne (doo-KANE). France lost control of Canada to Great Britain in this war's North American theatre, which was known as the French and Indian War. For 10 points, name this "first global war" that lasted from 1756 to 1763, its namesake period of time.**

ANSWER: Seven Years' War [accept Third Silesian War before "George Washington"; prompt on French and Indian War before mention]

<European History — Hong> [Edited]

8. **A character created by this author tells his grandson a story about a group of hens who peck a fox nearly to death to protect their nest. In another novel by this author, the title character is conceived when Consuelo sleeps with a gardener, who is dying of a snakebite. A novel by this author begins with a girl writing, "Barrabas came to us by the sea" in her journal. In that novel by this author, (*) Rosa's death by poison causes Clara to stop speaking for nine years, until she meets Esteban Trueba. For 10 points, name this author of *Eva Luna* and *The House of the Spirits*, a Chilean novelist.**

ANSWER: Isabel Allende

<Long Fiction — Schwartz> [Edited]

9. **The Marshallian demand term in the Slutsky equation represents an effect that occurs when this variable changes. In Keynesian analysis, menu costs lead to this variable being sticky. Monopsony power allows firms to set this variable, while firms in perfect competition are (*) "takers" of this variable. Deadweight loss is a consequence of floors or ceilings on this variable, which result in an inefficient vertical gap between levels of this variable on plots of supply and demand curves. Those plots of supply and demand curves have axes corresponding to quantity and this variable. For 10 points, name this amount of money needed to buy a product.**

ANSWER: price [or price level or aggregate price level]

<Economics — Gray> [Edited]

10. **One infection of this organ can be identified by the presence of urea in a patient's breath.**

Enterochromaffin- like cells in this organ secrete histamine in response to a hormone secreted by this organ's G cells. Intrinsic factor is secreted by this organ's parietal cells. *Helicobacter pylori* creates ulcers in this organ, in which zymogenic chief cells secrete (*) pepsinogen. Chyme is created in this organ, which is lined by a layer of mucus. The pyloric sphincter connects this organ to the small intestine. Gastrin promotes the release of hydrochloric acid in this organ. For 10 points, name this digestive organ whose "acid" breaks down food.

ANSWER: **stomach** [accept **stomach** infection or **stomach** lining or **gastric** mucosa or **gastric** chief cells or **stomach** acid or **gastric** acid]

<Biology — Schwartz> [Ed. Gurazada]

11. **A poem from what is now this country praises a man “for his valor, and for his virtues more” and commands him to “proceed” with “virtue on thy side.” That poem invokes a “celestial choir” and is addressed to one of this country’s leaders. A poet from what is now this country described being “wakened... with thund’ring noise” by a (*) fire that burnt down her house. A collection by that poet calls her “The Tenth Muse Lately Sprung Up In” this country. For 10 points, name this home country of Anne Bradstreet and Phillis Wheatley, the latter of whom addressed a poem “To His Excellency General Washington.”**

ANSWER: **America** [or the **United States** of America or **U.S.** or **U.S.A.**; accept Colonial **America**]

<Poetry — Schwartz> [Ed. French]

12. **Greco-Bactrian syncretization resulted in the first sculptural depictions of this figure as earlier depictions showed only a pair of footprints. A giant statue of this figure is carved into a cliff at Lèshān. Another statue of this figure is called “emerald” due to its green color and is housed in the Grand Palace in (*) Bangkok. Hindu iconographic influences resulted in this figure’s hands often being in different positions called *mudras*. In 2001, the Taliban destroyed two sandstone statues of this figure in Bamiyan. For 10 points, name these religious figures who have attained nirvana.**

ANSWER: **Buddha** [or **Siddhartha** or **Siddhattha** or Siddhartha **Gautama** or Siddhattha **Gotama** or **Gautama** Buddha or Shakyamuni **Buddha**; accept Walking **Buddha** or Leshan Giant **Buddha** or Emerald **Buddha**; accept **arhat** or **bodhisattva** or other specific buddhas before “Leshan”]

<Sculpture — Li/Venkateswaran/Ma> [Ed. French]

13. **According to Herodotus, this ruler’s corpse was beheaded after he was defeated by the queen of the Massageteans, Tomyris. This ruler defeated his grandfather, Astyages, in order to conquer the Medes. The city of Sardis was besieged by this ruler after an unsuccessful invasion by the Lydian king Croesus. This ruler created a system of provincial governors known as (*) satraps. This ruler condemned the Babylonian king Nabonidus in an inscription that was popularized as the oldest known declaration of human rights. The Babylonian captivity was ended by, for 10 points, what founder of the Achaemenid Empire?**

ANSWER: **Cyrus** the **Great** [or **Cyrus II** or **Koresh II** or **Kurush II** or **Kourosh II** or **Cyrus** the **Elder**; prompt on **Cyrus** or **Koresh** or **Kurush** or **Kourush**; do NOT accept or prompt on “Cyrus the Younger”]

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

14. **Criteria including biochemical inertness and membrane impermeability were used to create a list of twenty of these things named for Norman Good. Limestone forms one of these things in soil in response to acid rain. An equation that sets the sum of (*) pKa and the logarithm of quantity conjugate base concentration over acid concentration equal to pH is used to describe the behavior of these things. One of these things based on the bicarbonate ion is found in blood. The Henderson-Hasselbalch equation can be used to find the pH of these things. For 10 points, name these things which contain a weak acid and conjugate base and counter changes in pH.**

ANSWER: **buffers** [or **buffer** solutions or pH **buffer**s or hydrogen ion **buffer**s; prompt on solutions; prompt on any answer mentioning a system containing both an acid and its conjugate base or a system containing both a base and its conjugate acid]

<Chemistry — Gurazada> [Ed. Bandara/Gurazada]

15. **Project Greek Island secretly built one of these structures at the Greenbrier Resort in West Virginia. Another one of these structures is at Raven Rock Mountain, Pennsylvania. The former headquarters of NORAD was in one of these structures in the Cheyenne Mountain Complex. Enver Hoxha mandated building thousands of these structures around (*) Albania. Since 1963, the Swiss government has mandated including these structures in every new building. Adolf Hitler committed suicide in one of these structures. For 10 points, name these fortified structures designed to protect inhabitants from attacks.**

ANSWER: **bunkers** [or **nuclear shelters** or **bomb shelters**; prompt on shelters or descriptions of underground structures]

<Mixed/Other Academic — Song> [Edited]

16. **A song in this musical pays tribute “to apathy, to entropy, to empathy, ecstasy” and begins with a mock funeral to an Akita that leapt out of a 23rd floor apartment. In this musical, a man is seduced by a dancer who looks like his dead girlfriend in the song “Light My Candle.” That man plays a guitar solo reminiscent of Musetta’s Waltz in this musical’s song (*) “La Vie Boheme.” This musical’s opening number begins with the lyrics “Five hundred twenty-five thousand six hundred minutes.” For 10 points, name this musical about New York artists struggling with AIDS and the cost of living.**

ANSWER: ***Rent***

<Musicals — Gray> [Ed. French]

17. **This president claimed that he would “never apologize for the United States of America” after the USS Vincennes shot down an Iranian flight. At the nominating convention for this president, a speech decrying the “prophets of doom” and declaring there was a “war... for the soul of America” was given by Pat Buchanan. This president attacked his opponent for being “soft on crime” in the (*) Willie Horton advertisement. This man proclaimed “Read my lips: no new taxes” at the 1988 Republican National Convention. For 10 points, name this president who succeeded Ronald Reagan, the father of the 43rd president.**

ANSWER: George **H. W. Bush** [or George **Herbert Walker Bush** or George **Bush Senior** or **Bush 41**; accept any answer referring to the elder Bush; prompt on Bush or G. Bush or George Bush; do NOT accept or prompt on “George W. Bush” or any answer referring to the younger Bush]

<US History — Shahriar> [Ed. Iyer]

18. In one scene, this character advises his companion, “It were not for your quiet nor your good... to let you know my thoughts.” This character remarks “I will wear my heart upon my sleeve / For daws to peck at” before warning a senator that his daughter is making “the beast with two backs.” This character murders his wife (*) Emilia after she admits that this character bid her steal a strawberry-embroidered handkerchief, which this character plants with Cassio. This character calls jealousy the “green-eyed monster” as he manipulates the title general into strangling Desdemona. For 10 points, name this “honest” villain of *Othello*.

ANSWER: **Iago**

<Drama — Schwartz> [Ed. French]

19. This compound is the heaviest compound created in the photocatalyzed Chapman cycle. Pollutants classified as volatile organic compounds or oxides of nitrogen contribute to the dangerous ground-level presence of this compound. Dobson units were first created to measure the concentration of this compound. The Montreal Protocol banned (*) chlorofluorocarbons in response to the discovery of a “hole” over Antarctica lacking this compound. A layer of this compound in the stratosphere absorbs most harmful UV radiation. For 10 points, name this reactive molecule made up of three oxygen atoms.

ANSWER: **ozone** [or **trioxygen** or **O₃** (O-three); accept **ozone** layer or **ozone** hole or ground-level **ozone** or tropospheric **ozone**]

<Atmospheric Science — Schwartz> [Ed. French]

20. In this text, a member of a low class cuts off his thumb to appease his teacher. A woman in this text blindfolds herself to share the pain of her blind husband. Another character in this text attempts to disrobe a woman, but she is saved by a prayer that makes her clothes endless. That disrobement occurs after a character in this text is forced into (*) exile along with his brothers after losing a rigged dice game. In this text, Draupadi (DRAU-pah-dee) becomes the wife of the Pandavas (PAHN-duh-vahs), who fight against the Kauravas (kau-ruh-vahs) in the Kurukshetra (KOO-”rook”-SHAY-truh) War. Krishna convinces Arjuna that it is just to fight his cousins in, for 10 points, what ancient Indian epic that contains the *Bhagavad Gita* (BUH-guh-vuhd GEE-tah)?

ANSWER: *The Mahabharata* (MUH-hah-BAH-ruh-tah)

<Mythology — Athreya> [Ed. Venkateswaran]

Packet 13 Bonuses

1. Protests in this city erupted after the introduction of a bill that would allow extradition to mainland China. For ten points each:

[10] Name this city, a Special Administrative Region of China, where, in 2019, protesters have been calling for Chief Executive Carrie Lam to step down.

ANSWER: **Hong Kong** [or **Hong Kong** Special Administrative Region of the People's Republic of China]

[10] The Chinese government demanded that employees of this Hong Kong-based airline who participated in the protests be barred from entering China. Consequently, this company's CEO, Rupert Hogg, resigned.

ANSWER: **Cathay Pacific** Airways

[10] Protesters in Hong Kong have widely used these objects to defend themselves from pepper spray and tear gas. A 2014 "movement" of Hong Kong pro-democracy protests was named after these objects.

ANSWER: **umbrellas**

<Current Events — Song> [Edited]

2. At the end of this novel, Shimamura feels "the Milky Way [flow] down inside him with a roar" after Komako rescues Yoko from a cocoon warehouse fire. For 10 points each:

[10] Name this novel, in which Shimamura has an affair with the geisha Komako at a village with hot springs.

ANSWER: ***Snow Country*** [or ***Yukiguni***]

[10] This author wrote *Snow Country*. He also detailed Otake's defeat of Honinbo Shusai in the title game of his novel *The Master of Go*.

ANSWER: Yasunari **Kawabata** [accept names in either order]

[10] Yasunari Kawabata was from this country. Another author from this country, Kenzaburō Ōe (oh-ay), based many characters on his son Hikari.

ANSWER: State of **Japan** [or **Nippon**-koku or **Nihon**-koku]

<Long Fiction — Venkateswaran> [Edited]

3. Konstantin Batygin (ba-tee-gin) and Michael Brown proposed the existence of this object in 2016. For 10 points each:

[10] Name this object, whose gravitational effects would explain unusual clustering in orbits of trans-Neptunian objects. This object, if it exists, is likely five to ten times Earth's mass and between 400 and 800 astronomical units from the sun.

ANSWER: **Planet Nine** [accept **Planet X** or **Jehosaphat** or **George**; accept any answer indicating a potential ninth planet]

[10] This object was considered the ninth planet until it was officially demoted to a dwarf planet in 2006. This object was observed in 2018 by the New Horizons probe and is orbited by the large moon Charon.

ANSWER: **Pluto**

[10] Efforts to detect Planet Nine have included WISE (*wise*), a telescope that uses this form of electromagnetic radiation. This radiation's wavelength is generally measured in micrometers.

ANSWER: **infrared** radiation [or **IR**]

<Astronomy — Gurazada> [Edited]

4. This artist included Savonarola among theologians arguing about the Eucharist in one work. For 10 points each:
[10] Name this artist who produced the frescos *Parnassus* and *The Disputation of the Holy Sacrament* on a commission from Julius II to paint the Stanza della Segnatura.

ANSWER: **Raphael** [or **Raffaello** Sanzio da Urbino]

[10] Raphael's frescoes in the Stanza della Segnatura include this painting, which represents philosophy. It includes a portrait of seated Michelangelo as Heraclitus in front of a conversation between Plato and Aristotle.

ANSWER: *The School of Athens* [or *Scuola di Atene*]

[10] Raphael depicted Saint Sixtus pointing at the viewer in his painting of the *Sistine* [this figure]. In another of his paintings, this figure holds a book while two children play with a goldfinch.

ANSWER: **Madonna** [or **Mary** or **Virgin** or Blessed **Virgin Mary**; accept *Sistine Madonna* or *Madonna with a Goldfinch*; do NOT accept or prompt on "Mary Magdalene"]

<Painting — Venkateswaran> [Ed. Malouf]

5. This tax was first paid to a group of invaders after the Battle of Maldon. For 10 points each:

[10] Name this tax, often running into the thousands of pounds of silver, which Anglo-Saxon kings would use to pay off invaders from Norway, Sweden, or Denmark.

ANSWER: **Danegeld**

[10] This group of invaders from Scandinavia were often on the receiving end of the Danegeld. Their members included Harald Hardrada.

ANSWER: **Vikings** [or **Norsemen**]

[10] This king of England, known as "the unready," paid the most in Danegeld before ordering the St. Brice's day massacre in 1002. He would later be replaced by Cnut the Great.

ANSWER: **Aethelred** the Unready [or **Aethelred** II]

<British/Commonwealth History — Iyer> [Edited]

6. According to one novel, this crop, "the king of crops, was a man's crop," in contrast to the "womanly" crops like beans and cassava. For 10 points each:

[10] Name this crop. A dictator demands to be served this crop, but instead he is presented with a farmer's head on a platter in the play *Kongi's Harvest* by Wole Soyinka.

ANSWER: **yam** [do NOT accept or prompt on "coco-yam"]

[10] This character prides himself on his ability to grow enough yams to feed his three wives, whom he beats regularly. This man celebrates the Feast of the New Yam with the rest of his village in Umuofia.

ANSWER: **Okonkwo**

[10] This Nigerian author created Okonkwo in his novel *Things Fall Apart*. He called Joseph Conrad a "bloody racist" in his essay *An Image of Africa*.

ANSWER: Chinua **Achebe** [or Albert Chinualumogu **Achebe**]

<Other Literature — Schwartz> [Ed. French]

7. This force provides the torque on an object rolling down an inclined plane. For 10 points each:

[10] Name this force. This force also provides the centripetal acceleration when a car rounds a corner.

ANSWER: **friction** [or **frictional** force; accept static **friction**]

[10] The magnitude of this force multiplied by the coefficient of friction μ is the magnitude of the friction force. A floor applies this force to things on it so that they don't fall through it.

ANSWER: **normal** force

[10] Friction is *not* this kind of force, because an object moving against friction loses energy in the form of heat.

ANSWER: **conservative** force [accept word forms like **conservativeness** or being **conservative**]

<Physics — Schwartz> [Ed. Gurazada]

8. This stage of development has not been passed if a person cannot tell that the volume in a glass has not changed after it has been poured into another container. For 10 points each:

[10] Name this stage of development, which is characterized by the manipulation of symbols and pretend play. It follows the sensorimotor stage.

ANSWER: **preoperational** stage [do NOT accept or prompt on “operational”]

[10] This Swiss psychologist described abilities like object permanence and the understanding of conservation in his four-stage model of development.

ANSWER: Jean **Piaget**

[10] Piaget's four stages of cognitive development describe these people, whose “attachment” to their mothers was described by Mary Ainsworth.

ANSWER: **children** [accept **babies** or **toddlers** or any answer indicating people younger than 13]

<Psychology — Schwartz> [Edited]

9. This building's design was based off the native *Hymenocallis* plant. For 10 points each:

[10] Name this Dubai skyscraper, which currently holds the world record for tallest building in the world.

ANSWER: **Burj Khalifa** [or **Burj Dubai**; prompt on **Khalifa tower** or **Dubai tower**]

[10] The Burj Khalifa was designed by Adrian Smith while he was at this architectural firm. Other projects by this firm include San Francisco International Airport and One World Trade Center.

ANSWER: **Skidmore, Owings, and Merrill** [or **SOM**]

[10] Skidmore, Owings, and Merrill employed Fazlur Khan when he developed the “bundled tube” design for this Chicago building. This former tallest building in the world used to be named for Sears.

ANSWER: **Willis** Tower

<Architecture — Gurazada/Malouf> [Ed. French]

10. This man was part of an intelligence division known as Knowlton's Rangers. For 10 points each:

[10] Name this American spy executed by the British during the Revolutionary War. This man is attributed the quote, “I only regret that I have but one life to lose for my country.”

ANSWER: Nathan **Hale**

[10] Nathan Hale was executed in this U.S. city, which the British captured under William Howe in the Battle of Long Island. The Battle of Staten Island was a failed American attempt to take this city.

ANSWER: **New York** City [or **NYC**]

[10] Along with John Sullivan, this general was in charge of troops at the Battle of Long Island. This general is said to have ordered “Do not fire until you see the whites of their eyes” to his men at the battle of Bunker Hill.

ANSWER: Israel **Putnam**

<US History — Shahriar> [Ed. Iyer]

11. This song ironically plays over shots of a plant eating a hummingbird and an alligator eating a duckling in a sequence from the first *Madagascar* film. For 10 points each:

[10] Name this song. A line from this song states, “The colors of the rainbow, so pretty in the sky / Are also on the faces of people going by.”

ANSWER: “**What a Wonderful World**”

[10] The first recording of “What a Wonderful World” was performed by this jazz singer and trumpeter nicknamed “Satchmo.” This musician is also known for covering Edith Piaf’s “La Vie en Rose.”

ANSWER: Louis **Armstrong** [or Louis Daniel **Armstrong**]

[10] This Hawaiian singer and ukulelist recorded a medley combining “What a Wonderful World” and “Somewhere Over the Rainbow.” He died of obesity-related issues in 1997.

ANSWER: Israel **Kamakawiwo‘ole** (kah-MAH-kah-VEE-voh-OH-lay) [or Israel Ka‘ano‘i **Kamakawiwo‘ole** or **IZ** or **Bruddah Iz**]

<Pop Culture — French> [Edited]

12. Transformation of plants is generally accomplished using the "Ti" one of these things from *A. tumefaciens*. For 10 points each:

[10] Name these circular self-replicating pieces of DNA found in bacteria. Genes are usually transferred to bacteria using these things in transformation.

ANSWER: **plasmids** [accept F-**plasmid** or **Ti**-plasmid or **bacterial artificial chromosome** or **BAC**; prompt on **replicons**; do NOT accept or prompt on "bacterial chromosomes" or "artificial chromosomes"]

[10] Cells can be made competent for transformation through a “shock” in which this quantity is temporarily increased. Warm-blooded organisms are able to regulate their internal value of this quantity.

ANSWER: **temperature** [accept **heat** or **heat** shock]

[10] Plasmids for transformation often contain the gene for this protein, which acts as a reporter when exposed to a black light. This protein was discovered in the jellyfish *A. victoria*.

ANSWER: **green fluorescent** protein [or **GFP** or **avGFP**]

<Biology — Schwartz> [Ed. Gurazada]

13. This character throws scaldingly hot applesauce at Edgar Linton’s face after Edgar insults his long hair. For 10 points each:

[10] Name this orphan who falls in love with Catherine Earnshaw. He is the landlord of Mr. Lockwood.

ANSWER: **Heathcliff**

[10] Heathcliff becomes a bitter man with many vicious dogs after Catherine’s death in this novel by Emily Brontë.

ANSWER: **Wuthering Heights**

[10] In *Wuthering Heights*, the title estate is surrounded by this infertile, hilly region, whose dangers mirror the doomed relationship between Cathy and Heathcliff. Their ghosts are seen walking across this region at the end of the novel.

ANSWER: the **moors** [or **moorland**]

<Long Fiction — Schwartz> [Edited]

14. The mural “My God, Help Me to Survive This Deadly Love” depicting Erich Honecker and Leonid Brezhnev kissing was painted on this structure. For 10 points each:

[10] Name this structure which fell after SED (S-E-D) spokesman Günter Schabowski (GIN-ter sha-BAO-ski) mistakenly said that a new travel law would be in effect “immediately, without delay.”

ANSWER: **Berlin Wall** [or **Anti-Fascist Protection Rampart** or **Wall of Shame**]

[10] The Berlin Wall, which surrounded West Berlin, was constructed by this country to deter intellectuals from leaving it. It eventually reunified with its Western counterpart in 1990.

ANSWER: **East Germany** [or **German Democratic Republic**, or **GDR**, or **Deutsche Demokratische Republik** or **DDR**; do NOT accept or prompt on “West Germany,” “Federal Republic of Germany,” or “Germany”]

[10] This East German secret police also attempted to prevent East German emigration. In 1990, its files were declassified and held in its namesake Records Agency.

ANSWER: **Stasi** [or **Ministry of State Security** or **State Security Service**]

<European History — Lin> [Edited]

15. For 10 points each, answer the following about equivalence relations:

[10] A relation is an equivalence relation if it is symmetric, transitive, and has this property. This property states that a equals a for any applicable a .

ANSWER: **reflexive** property [accept word forms such as **reflexivity**]

[10] The reflexive property of this equivalence relation appears in many elementary geometric proofs. Two geometric figures have this relation if their corresponding side lengths and angle measures are all equal.

ANSWER: **congruence** [accept word forms such as **congruent**]

[10] In abstract algebra, this relation forms an equivalence relation on a given class of algebraic structures. Two algebras have this relation if there is a bijective homomorphism from one to the other, which informally means that they have the same structure.

ANSWER: **isomorphic** [accept word forms such as **isomorphism**]

<Math — French> [Edited]

16. An Old Norse kenning for bad poetry is “the dung of the ancient” one of these animals. For 10 points each:

[10] Name this animal. After drinking the mead of poetry, Odin escapes Suttung’s lair by transforming into one of these animals.

ANSWER: **eagle** [or **ari** or **orn**; prompt on **bird**]

[10] To access the mead of poetry, Odin sneaks into Suttung’s lair by transforming into one of these animals. An enormous one of these animals named Jörmundgandr encircles Midgard.

ANSWER: **snake** [or **serpent** or **ormr**; accept **sea serpent**]

[10] The mead of poetry was created by two of these beings from the blood of Kvasir, whom they murdered. Two of these beings named Brokk and Eitri created Freyr’s boar Gullinbursti.

ANSWER: **dwarves** [or **dwarf** or **dverg**; accept **svartálfar** or **myrkálfar** or **black elves** or **swarthy elves** or **dark elves** or **dusky elves** or **murky elves**; do NOT accept or prompt on “elves”]

<Mythology — French> [Edited]

17. Compounds with this property have a “*K* sub *sp*” greater than one. For 10 points each:

[10] Name this property possessed by solids which can dissolve in water.

ANSWER: **solubility** [accept word forms like being **soluble**]

[10] Salts containing alkali metals, halogens, ammonium, or this anion are almost always soluble. Saltpeter, this anion’s potassium salt, is commonly used in fertilizer and gunpowder.

ANSWER: **nitrate** [or **NO₃⁻**; accept **potassium nitrate** or **KNO₃**; do NOT accept or prompt on “NO₃” alone]

[10] While most sulfate salts are soluble, this element’s sulfate is not soluble. A suspension of this element’s sulfate is commonly used as a contrast agent in X-ray procedures.

ANSWER: **barium** [or **Ba**; accept **barium sulfate** or **BaSO₄**]

<Chemistry — Gurazada> [Edited]

18. Leo Ornstein used this type of chord in *Wild Men’s Dance* and *Suicide in an Airplane*. For 10 points each:

[10] Name these chords, which involve at least three neighboring tones in the chromatic scale.

ANSWER: tone **clusters** [or **cluster** chords]

[10] This composer ordered for tone clusters to be played with a wooden board in his *Concord Sonata*. He also wrote *Central Park in the Dark* and *The Unanswered Question*.

ANSWER: Charles Edward **Ives**

[10] Polish composer Krzysztof Penderecki used tone clusters to depict the detonation of one of these weapons in his *Threnody to the Victims of Hiroshima*. An opera by John Adams dramatizes the Trinity test of these weapons at Los Alamos.

ANSWER: **atomic bombs** [or **atom bomb** or **nuclear bomb**; prompt on **bomb**] (The John Adams opera is *Doctor Atomic*.)

<Classical Music — Gurazada> [Edited]

19. A poem describes this character by saying, “*Her lips were red, her looks were free, / Her locks were yellow as gold.*” For 10 points each:

[10] Name this “Night-mare” whose “skin was white as leprosy” and who “thicks man’s blood with cold.” In a game of dice, this character wins the fate of the title character of the poem in which she appears.

ANSWER: **LIFE-IN-DEATH** [do NOT accept or prompt on “LIFE” or “DEATH”]

[10] As a result of the game of dice, the title character of this poem is forced to live and watch his men die. This poem’s title “grey-beard loon” narrates it to the Wedding-Guest.

ANSWER: “The **Rime of the Ancient Mariner**”

[10] This author of “The Rime of the Ancient Mariner” included it in the collection *Lyrical Ballads*, on which he collaborated with William Wordsworth.

ANSWER: Samuel Taylor **Coleridge**

<Poetry — B. Wang> [Ed. Venkateswaran]

20. This practice was opposed by Rodrigo da Silva, who authored a bill outlawing it. For 10 points each:

[10] Name this practice, which was the backbone of the sugar industry in Brazil. It was ended by the Golden Law.

ANSWER: **slavery**

[10] This Brazilian Emperor from the House of Braganza signed the Law of the Free Womb, the predecessor to the Golden Law. He was the last emperor of Brazil.

ANSWER: Dom **Pedro II**

[10] Pedro II’s support for the Colorado party in the Uruguayan civil war eventually led to this war, where dictator Francisco Solano Lopez was defeated at the battle of Cerro Corá.

ANSWER: War of the **Triple Alliance** [or **Paraguayan** War]

<Latin American History — Shahriar> [Ed. Iyer]