

SOUTHEAST-MIDWEST HOUSEWRITE: PACKET 5

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NOTE: THESE TOSSUPS AND BONUSES ARE PAIRED. IF THE TOSSUP GOES DEAD, SKIP THE ASSOCIATED BONUS. DO NOT GO BACK AND READ ANY BONUSES THAT ARE SKIPPED.

1. A rural folk style of music from this country that features yelling by performers and audiences was popularized in a series of namesake 1930s comedy films by its government. A group whose name translates as “Tigers of the North” are performers of a European-influenced style of music from this country’s north that uses the twelve-stringed (*) *bajo* (“BAH-ho”) *sexto*. A popular style of music from this non-European country has performers wear *charro* outfits and play the *viuela* (“vee-WAY-lah”), a five-stringed guitar variant. That instrument, along with violin, trumpet, and the *guitarron*, is used to play standards from this country like “La Negra” and “La Cucaracha.” For 10 points, name this Latin American country that is home to *marachi* music.

ANSWER: **Mexico** [or **United Mexican States**; or **Estados Unidos Mexicanos**]

<Karthik, Classical Music> [Ed. Strombeck]

1. The foreword to this book states “That truth is why we can all have empathy, why we can all be stirred” when the title action occurs. For 10 points each:

[M] Name this book. In it, the author tells of her rape by Mr. Freeman and her home of Stamps, Arkansas.

ANSWER: ***I Know Why the Caged Bird Sings***

[E] *I Know Why the Caged Bird Sings* is a memoir by this woman, who described “A Rock, A River, A Tree” in her poem “On The Pulse of Morning,” read at Bill Clinton’s inauguration.

ANSWER: Maya **Angelou**

[H] In *I Know Why the Caged Bird Sings*, Angelou first becomes aware of lesbianism after reading this classic queer novel by Radclyffe Hall. In this novel, the “invert” Stephen Gordon struggles with Parisian life and begs God to “give us also the right to our existence.”

ANSWER: ***The Well of Loneliness***

<Valan, Long Fiction> [Ed. Leahy]

2. The use of the word “seem” in this poem’s first stanza may be an extension of Cicero’s *De Amicitia*. Elizabeth Bishop conjectured that a practice in this poem was influenced by its author’s frequent business trips to Florida. A cheap wooden dresser in this poem is depicted with three missing glass knobs, and was formerly used by a woman who “embroidered fantails” and whose (*) “horny feet protrude.” Helen Vendler suggests this poem is set at a funeral due to how “boys / bring flowers in last month’s newspapers.” The title figure of this poem, which was originally published in the collection *Harmonium*, is described as the “muscular one” and whips “in kitchen cups / concupiscent curds.” “Call the roller of big cigars” opens, for 10 points, what poem by Wallace Stevens about a man who prepares a title dessert?

ANSWER: **“The Emperor of Ice Cream”**

<Leahy, Poetry> [Edited]

2. Christer Pettersson was originally believed to have committed this crime, as he was identified from a lineup by the victim's wife, but was later acquitted since a murder weapon could not be found. For 10 points each:

[H] Name this crime, now believed to have been committed by the so-called Skandia Man, Stig Engstrom. It occurred after the victim had left a screening of the comedy *The Mozart Brothers*.

ANSWER: the **assassination** of Olof **Palme** [accept synonyms for assassination like **killing** or **murder**; prompt on, but DO NOT OTHERWISE MENTION anything describing the **assassination** of the **Prime Minister of Sweden**]

[E] The assassination of Olof Palme occurred in this country, of which Palme was the prime minister at the time. Palme was killed while walking down the streets of this country's capital Stockholm.

ANSWER: Kingdom of **Sweden**

[M] Author Jan Bondeson claimed Palme was killed to keep him from discovering that the Bofors company bribed officials from this country. This country's then-prime minister married the Italian-born Sonia Maino.

ANSWER: Republic of **India**

<Karthik, British/European History> [Ed. Prabhakar]

3. While fighting pirates led by Cheirmarrhus ("kare-MAHR-us"), this figure flooded the plain of Xanthus and called it off only when the local women lifted their robes. Diomedes swapped his armor with Glaucus after learning that Glaucus was the grandson of this man. The king of Tiryins was told to kill this figure after (*) Stheneboea ("sthen-uh-BEE-uh") accused him of raping her. The Solymi tribe was defeated by this figure, who was told by the seer Polyidus to sleep in the temple of Athena prior to his most famous deed, which was accomplished using a hunk of lead. Zeus sent a gadfly to bite this figure's mount as he tried ascending Olympus. For 10 points, what son of Poseidon rode Pegasus as he slew the Chimera?

ANSWER: **Bellerophon** [accept **Bellerophontes** or **Hipponous**]

<Prabhakar, Myth> [Edited]

3. A ruler with this name had the Lakhmid king Al Nu'man III executed. For 10 points each:

[H] Give this name of a Sassanid *shahanshah* who then annexed the Lakhmid kingdom. An earlier *shahanshah* of this name went to war with Justinian after his allies raided the Lakhmids, who were then Sassanid vassals.

ANSWER: **Khosrau** [accept **Khosrau I**, **Khosrau II**, **Khosrau Anushirawan**, **Khosrau the Just**, or **Chosroes**]

[E] The Lakhmid kingdom was dominated by these people. After annexing the Lakhmid kingdom, the Sassanids were defeated at the Battle of Dhi Qar ("DEE KAR") by tribes of these people, who would later be united under Muhammad.

ANSWER: **Arabs**

[M] The former Lakhmid capital of al-Hirah was the site of a Sassanid defeat during the reign of this first Rashidun caliph. Sunni Muslims believe this father-in-law of Muhammad was rightfully chosen over Ali.

ANSWER: **Abu Bakr** Abdullah ibn Uthman

<Karthik, World History> [Ed. Prabhakar]

4. Saito et al. discovered a molecule with six phenylselenyl groups that demonstrates the "double" form of this property. Another form of this property is exemplified by the homotropylium ("homo-tro-PIL-ium") cation. Large negative values for diamagnetic susceptibility exaltation indicate molecules with this property. A molecule has this property if all of its electrons are located in the lower bonding half of a (*) Frost circle. A class of compounds with this property present in bitumen and interstellar space are polycyclic hydrocarbons. Molecules with this property contain $4n + 2$ pi electrons, have completely delocalized electrons, and are planar according to Hückel's rules. For 10 points, name this property of exceptionally stable cyclic molecules like benzene.

ANSWER: **aromaticity** [accept double **aromaticity** or homo**aromaticity**]

<Valan, Chemistry> [Ed. Lei]

4. Answer the following about the principal quantum number, for 10 points each.

[E] The principal quantum number gives the energy level for these particles, which orbit the nucleus according to the Bohr model.

ANSWER: **electron**

[M] Two values of the principal quantum number for different energy levels are squared in this formula, which gives the wavelength of light emitted when an electron makes an energy transition in the hydrogen atom.

ANSWER: **Rydberg** formula [or **Rydberg** equation]

[H] The expression [*read slowly*] “the principal quantum number minus the azimuthal quantum number minus 1” gives the number of these nodes in the wavefunction. These nodes are spherical areas of zero electron probability inside the orbital.

ANSWER: **radial** nodes [do NOT accept or prompt on “angular nodes”]

<Valan, Chemistry> [Ed. Bowman]

5. Augustus Lindley led the fleet for the losing side in this conflict. Members of that side of this conflict fled south after their defeat and initiated the Haw Wars. The leader of one side in this conflict was influenced by a series of pamphlets called “Good Words to Admonish the Age” and once studied under Issachar Roberts. The other side in this conflict included a force led by Frederick Townsend (*) Ward and Charles Gordon, the Ever Victorious Army. The losing side in this rebellion was defeated after Zeng Guofan’s forces captured Nanjing. The Hakka people comprised many of the participants in this rebellion which began after a man claimed to be Jesus’ younger brother. Hong Xiuquan (“shyoo-CHWAN”) led, for 10 points, what mid-19th-century rebellion in Qing China?

ANSWER: **Taiping** Rebellion [accept **Taiping** Revolution or **Taiping** Civil War]

<Alaro/Prabhakar, World History> [Ed. Prabhakar]

5. Steve Dunstone and Timothy Awoyemi helped to repatriate two items in this collection in 2014, more than a century after this collection was looted by soldiers in the wake of James Phillip’s death. For 10 points each:

[H] Give this collective name of over 900 metal plaques and figurines that originally adorned the walls of a palace in modern-day Nigeria. Many items in this collection show an *oba* in full armor.

ANSWER: **Benin Bronzes**

[M] This museum is the current home of the largest collection of Benin Bronzes. This museum has faced criticism for ignoring calls to return immorally acquired artworks like the Benin Bronzes and the Elgin Marbles.

ANSWER: **British** Museum

[E] Another artwork in the British Museum seized during the Benin Expedition was a mask of this material with the face of the Queen Mother Idia. This now-illegal material is harvested by poachers and makes up carved tusks.

ANSWER: **ivory**

<Strombeck, Painting & Sculpture> [Edited]

6. While at this location, a character recalls locking himself in his study to avoid his “last cigarette,” only to escape after three hours. That character has his diary published when he begins avoiding this location. The frame narrative of Italo Svevo’s *Confessions of Zeno* takes place at this type of location, where in another novel a character describes his mother’s sudden menstruation while preparing meat. In that novel, a man who has sex with the Italian prostitute Lina recalls (*) masturbating with a piece of liver. A man who works at this location tells the protagonist "Now vee may perhaps to begin. Yes?" At this general location, a man describes his relationship with a girl he calls “The Monkey” and his overbearing mother Sophie. For 10 points, name this setting of *Portnoy’s Complaint*, whose title character narrates his life story to the psychoanalyst Spielvogel.

ANSWER: **therapist’s office** [or **doctor’s office**; or **psychiatrist’s office**; prompt on **office**]

<Leahy, Long Fiction> [Edited]

6. Ronald Coase claimed these kinds of taxes ignore the reciprocity of social costs. For 10 points each:

[M] Name these taxes on negative externality-causing economic activities. They were proposed by a British economist in the 1920 work *Economics of Welfare*.

ANSWER: **Pigovian** taxes [or **Pigouvian** taxes; accept **Pigou** taxes; prompt on **sin** taxes]

[H] Pigou also posited that an economy at equilibrium without full employment could occur only if this phenomenon was present. This phenomenon is present when prices are resistant to change.

ANSWER: **nominal rigidity** [accept **price-stickiness**; accept **wage-stickiness**; prompt on **stickiness**; prompt on **rigidity**]

[E] Pigou’s studies in nominal rigidity built on this other economist’s theory that rigidity affects the ability of a market to reach equilibrium, which this economist proposed in his book *The General Theory of Employment, Interest, and Money*.

ANSWER: John Maynard **Keynes**

<Prabhakar, Economics> [Edited]

7. This person lifts some weights while lying on a bench in a Philippe Halsman photo titled "How I Stay in Form." Eve Arnold’s book-length “Appreciation” of this person includes several photos of this person wearing a jean jacket in the Nevada desert. Photojournalist Douglas Kirkland first gained fame for his series featuring this person wrapped only in (*) white bedsheets for *Look* Magazine. George Barris, who took the “Last Photos” of this person, also took a photo showing this woman’s character on a sidewalk in a scene from a Billy Wilder film. In that photograph, this woman tries to hold down her white dress while standing above a windy subway grate. An Andy Warhol *Diptych* depicts, for 10 points, what “blonde bombshell” actress from the 1950s?

ANSWER: Marilyn **Monroe** [or Norma Jeane **Baker**; or Norma Jeane **Mortenson**]

<Strombeck, Photography> [Edited]

7. This company’s failure led to a 4.5% drop in the Dow Jones Industrial Average in a single day, caused mainly by the ongoing subprime mortgage crisis. For 10 points each:

[M] Name this bank which declared bankruptcy on September 15, 2008.

ANSWER: **Lehman Brothers** Holdings Inc.

[E] The 2008 fall of Lehman Brothers and the subprime mortgage crisis were contributing factors to this global economic crisis. This event was largely blamed on large banks being “too big to fail.”

ANSWER: the **Great Recession** [prompt on the 2008 **recession**; do NOT accept or prompt on the “Great Depression”]

[H] This act significantly increased financial regulation after the Great Recession. This law created the Financial Stability Oversight Council to see if firms were “too big to fail” and the Consumer Financial Protection Bureau.

ANSWER: **Dodd–Frank** Act [or the **Dodd–Frank** Wall Street Reform and Consumer Protection Act]

<Nageswaran, American History> [Edited]

8. Tractates such as *Parah* and *Uktzim* detail rules regarding this action and are included in the *Seder Tohorot* (“TOH-hoh-rote”), an order of the Mishnah about this action. Dead bodies are given *tachrichim* (“takh-rih-HEEM”) after undergoing this action. Many Conservative Jewish sects still hold that people who are *niddah* must perform this action to remove that status. An extreme form of this action is done using the ashes of a burned (*) red heifer. *Netilat yadayim* (“net-ee-laht ya-DIME”) is a form of this action that often uses two-handed cups. Converting to Judaism requires performing this action in a *mikveh* (“mick-vuh”). Coming into contact with an animal corpse not prepared for eating requires one to perform this action. For 10 points, name this action in which a person removes impurities from their body using water.

ANSWER: ritual **cleansing** [or **purification**; or **washing**; or **ablution**; accept **tevilah**; accept references to specific parts of the body, like **washing** hands; prompt on **bathing** by asking “what is the purpose of bathing?”; prompt on **cleaning**]

<Valan, Religion> [Ed. Ashbrook]

8. In a novel from this country, the reclusive Kerewin adopts the mute Simon after Simon’s father is arrested for physical abuse. For 10 points each:

[M] Name this country home to Keri Hulme, the author of *the bone people*. Bertha Young questions her feelings for Pearl after discovering Eddie’s homosexuality at a dinner party in a story from this country titled “Bliss.”

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

[E] Katherine Mansfield, the author of “Bliss,” also wrote a story titled for a party set in one of these locations.

Adam and Eve inhabit one of these locations in John Milton’s *Paradise Lost*.

ANSWER: **gardens** [accept “The **Garden Party**” or the Garden of **Eden**]

[H] In this other New Zealand-set novel, Walter Moody listens to the accounts of twelve men describing a series of elaborate crimes in Hokitika. This novel by Eleanor Catton assigns a zodiac sign to each of the twelve narrators.

ANSWER: ***The Luminaries***

<Ashbrook, Short Fiction/Other> [Ed. Leahy]

9. Turan’s theorem gives an upper bound on the number of these components that can exist given parameters n and r . Each one of these components adds 1 to the corresponding cell in an adjacency matrix. A capacity is assigned to each of these components in the maximum flow problem. Kruskal’s algorithm creates a sorted list of these things and proceeds to add them to an MST. An (*) Eulerian circuit traverses all of these objects once. A non-planar graph cannot be drawn in the plane without these things overlapping. In a directed graph, these things are associated with a direction. These things represent the bridges of Königsberg in Euler’s classic problem. For 10 points, name these things that connect vertices.

ANSWER: **edges** [or **E**; accept weighted **edge** or unweighted **edges** or directed **edges** or undirected **edges**]

<Karthik, Math> [Ed. Bowman]

9. On an album titled for these two musicians, the track “Desafinado” opens with the guitar characteristically thumbing bass notes and plucking the chords. For 10 points each:

[H] Name these two musicians. The wife of one of these two musicians, named Astrud, sang the English lyrics on the song “Corcovado” for their collaborative album.

ANSWER: Stan **Getz** AND João **Gilberto** [accept **Getz/Gilberto**; prompt on either answer individually]

[M] The most famous song from the album *Getz/Gilberto* is this song, which describes a “tall and tan and young and lovely” woman on a beach. This song’s success helped to popularize bossa nova in the United States.

ANSWER: “The **Girl from Ipanema**”

[E] Before his work in the bossa nova style, Stan Getz was known for playing in this West Coast style of jazz. Miles Davis included the track “Boplicity” on his album titled for the *Birth of* [this style].

ANSWER: **cool** jazz

<Bowman, Jazz> [Edited]

10. Howard's Grove was home to one of these locations built using a layout designed by Thomas Kirkbride. Franklin Pierce vetoed a bill to fund these locations, claiming state governments were responsible for social welfare. An advocate for these locations described people who "do not feel heat or cold." One of these locations for women was located on Blackwell Island and was visited by a New York (*) World journalist. The poor treatment of residents of these locations were exposed by a journalist who spent ten days in one of them, Nellie Bly. Dorothea Dix campaigned for the establishment of these locations. For 10 points, name these locations which, after the Civil War, housed veterans with PTSD and other mental illnesses.

ANSWER: mental **asylums** [or insane **asylums**; accept **mental hospitals**; accept **psychiatric hospitals**; accept lunatic **asylums**; accept **psychiatric wards**; prompt on **hospitals**]
<Valan, American History> [Ed. Nageswaran]

10. This movement's founder claimed Jesus would be reincarnated on Earth in 1892. For 10 points each:
[M] Name this spiritual movement propagated by the spiritualist Wovoka. Some followers of this movement wore articles of clothing infused with *wakan* ("wuh-KAHN"), which they believed were able to stop bullets.

ANSWER: **Ghost Dance** movement [accept **Nanissáanah**]

[E] The namesake "dance" of Ghost Dance was a ceremonial dance in this shape. Many dances in this shape throughout the world involve participants linking hands and spinning as a group.

ANSWER: **circle** [accept **circle** dance]

[H] The Sioux concept of *wakan tanka* that was infused into the Ghost Shirts has been translated as this term for the life force in many Native American religions. The Algonquin variant of this term is *gitchi manitou* ("geet-chee mahn-ih-too").

ANSWER: the **Great Spirit** [accept the **Great Mystery**]

<Prabhakar, Religion> [Edited]

11. In 2012, this state's town of Buford was auctioned off by its only permanent resident to two Vietnamese entrepreneurs for \$900,000. This state's capital draws 200,000 people to its namesake "Frontier Days" celebration, which is one of the largest rodeos in the United States. Medicine Bow Peak is in this state, which is also home to the oil-rich town of (*) Rock Springs. It's not South Dakota, but this state's portion of the Black Hills is home to Devils Tower National Monument. This state's most notable national park contains the geyser Old Faithful. Grand Teton and Yellowstone National Parks are located in, for 10 points, what least populous U.S. State with capital at Cheyenne?

ANSWER: **Wyoming**

<Lau, Geography> [Ed. Prabhakar]

11. Answer some questions about philosophical communes, for 10 points each.

[E] This book by Sir Thomas More details a self-contained island commune based on rationalist principles. This book lends its name to the general term for a perfect and idealized society.

ANSWER: **Utopia** [accept *Libellus vere aureus, nec minus salutaris quam festivus, de optimo rei publicae statu deque nova insula Utopia*; accept *A little, true book, not less beneficial than enjoyable, about how things should be in a state and about the new island Utopia*]

[M] Followers of this ancient Greek philosopher formed communes around the Mediterranean inspired by his self-sustaining "Garden." This philosopher held that the greatest good is found in the pursuit of modest pleasures.

ANSWER: **Epicurus** [accept **Epicureanism**]

[H] Communes like Brook Farm were inspired by the ideals of this socialist philosopher. This philosopher envisioned social units called "phalanxes" that contained a man and woman of each of his 810 personality types.

ANSWER: Charles **Fourier** [or Francois Marie Charles **Fourier**]

<Bowman, Philosophy> [Edited]

12. One character created by this author is sent to the hospital after her father beats her for admiring a painting of her “pagan” grandfather that her cousin created. In that novel, the devout Catholic Eugene is poisoned by his wife, leading their son Jaja to take the blame. A character created by this author grows guilty over her sexual involvement with a tennis coach for money and wins a fellowship at (*) Princeton. A novel by this author opens with a character taking a train to Trenton to get her hair braided as she thinks about her childhood love Obinze. That character created by this author creates the blog “Raceteenth” about her experience as a Black woman. This author credited Chinua Achebe in her TED Talk “The Danger of a Single Story.” For 10 points, name this Nigerian author of *Purple Hibiscus* and *Americanah*.

ANSWER: Chimamanda Ngozi **Adichie**

<Kala, Long Fiction> [Ed. Leahy]

12. This figure spent 730 years in the womb of his mother, the air spirit Ilmatar (“IL-mah-tar”). For 10 points each:
[M] Name this “eternal bard” from Finnish mythology who is the central character of the Kalevala. Along with Lemminkäinen (“lem-in-KEYE-nen”) and Ilmarinen (“il-ma-rih-nen”), this figure goes on a quest to steal the Sampo from Pohjola (“PAW-hyaw-lah”).

ANSWER: **Vainamoinen**

[E] Vainamoinen was betrothed to Aino, who drowned herself to avoid marrying him and was reincarnated as one of these animals. Aphrodite and Eros transformed into these animals, resulting in the constellation Pisces.

ANSWER: **fish** [accept **perch** or **mermaids**]

[H] In another story, Vainamoinen crafts the first of these musical instruments from the jawbone of a pike. The strings for that first of these instruments were made from the hairs of a stallion.

ANSWER: **kantele** [prompt on **harp**]

<Prabhakar, Myth> [Ed. Groger]

13. This artist made several paintings of rural women carrying baskets during his two year stay in the Northumbrian village of Cullercoats. Four freed slaves confront their former mistress in a painting by this artist that borrowed from his earlier depictions of captured Confederate soldiers. In a painting by this artist of *Prisoners From the Front*, a line of boys charge forward in front of a (*) red schoolhouse. This artist’s paintings *Eight Bells* and *Rum Cay* are set near his studio in Prouts Neck, Maine. This artist’s trip to Nassau inspired a maritime painting showing a Black man on a boat surrounded by sharks in a turbulent ocean. For 10 points, name this American artist of *Snap the Whip* and *The Gulf Stream*.

ANSWER: Winslow **Homer**

<Dantzler, Painting & Sculpture> [Ed. Strombeck]

13. This problem is solvable for lossy Turing machines, which randomly lose sections of their tape as they run. For 10 points each:

[M] Name this problem, which asks if it is possible to decide if an arbitrary computer program will continue to run forever or not. Alan Turing proved that a general algorithm to solve this problem does not exist.

ANSWER: the **halting** problem

[H] This function of a number n is defined as the maximum number of 1s that an n -state Turing machine can output before halting. This function grows very quickly, with $n = 5$ being unsolved, only having a lower bound of 4098.

ANSWER: **Busy Beaver** function

[E] The halting problem is not undecidable if a machine has a finite amount of this resource, since then there are only a finite amount of possible states of the machine. This resource’s random access type can be used to store working data.

ANSWER: **memory** [or random-access **memory**; prompt on **RAM**]

<Karthik, Computer Science> [Ed. Bowman]

14. Historian Geoffrey Blainey coined the term for one school of historiography concerning these people contrasted with the “Three Cheers” view. In 2010, these people were promised back the skull of one of their leaders, Pemulwuy (“pem-ul-way”). George Augustus Robinson helped end a war with these people during which a human chain was used to corral them on one island. Over two dozen of these people were killed in the (*) Myall Creek Massacre, which took place not long after the Black War against these people. One country’s National Sorry Day commemorates the removal of these people from their families, who are referred to as the “Stolen Generations.” For 10 points, name these indigenous inhabitants of a country with states like New South Wales and Tasmania.

ANSWER: **Aborigines** [accept Australian **Aborigines**, **Aboriginal** Australians, **indigenous Australian**s, **native Australian**s, **Aboriginal** Tasmanians, or **indigenous Tasmanians**; prompt on **Australians** or **Tasmanians**]
<Prabhakar, World History> [Edited]

14. Poincare’s recurrence theorem appears to contradict this law. For 10 points each:

[E] Name this law which states that the entropy of an isolated system cannot decrease over time.

ANSWER: **second law of thermo**dynamics [prompt on partial answer]

[H] Carathéodory’s formulation of the second law of thermodynamics can be contrasted with this theorem, which states that the line integral of the infinitesimal change in heat over temperature is less than or equal to zero.

ANSWER: **Clausius**’ theorem [or **Clausius**’ inequality]

[M] Boltzman’s formulation of entropy using microstates laid the groundwork for this branch of physics, which considers different ensembles in attempts to solve thermodynamic problems.

ANSWER: **statistical mechanics** [or **stat mech**; accept **statistical thermodynamics**]

<Zhao/Karthik, Physics> [Ed. Bowman]

15. When the WKB approximation is applied to an equation named for these things, one can derive the eikonal equation. An equation describing these things is the prototypical hyperbolic differential equation and can be solved by defining variables equal to x plus or minus ct . These things are described by an equation that states that [read slowly] “the second partial of y with respect to x is proportional to the second partial of y with respect to t .” The envelope of these things travels through space at their (*) group velocity. Because particles within them obey simple harmonic motion, these things are modeled by the equation “ y equals A sine of kx minus ωt .” For 10 points, name these propagating motions that come in transverse and longitudinal types.

ANSWER: **waves** [accept one-dimensional **waves**]

<Karthik, Physics> [Ed. Bowman]

15. This cardinal claimed Liberation Theology was a “singular heresy.” For 10 points each:

[H] Name this cardinal, an archbishop of Munich who published a namesake report criticizing Liberation Theology. His conversation with the neo-Marxist Jürgen Habermas (“YUR-gun HAH-bur-moss”) was published as *The Dialectics of Secularization*.

ANSWER: Cardinal Joseph Aloisius **Ratzinger** [accept Pope **Benedict XVI**; prompt on **Benedict**]

[E] Ratzinger worked closely with this pope in his opposition to Liberation Theology and liberalization of the Church. Some historians claim this Polish pope’s criticism of Marxism played a role in the Soviet Union’s collapse.

ANSWER: Pope **John Paul II** [accept Karol Józef **Wojtyła**; prompt on **John Paul**; do NOT accept or prompt on “John” or “Paul”]

[M] A cardinal from this country, Ernesto Cardenal, responded to the criticism of liberation theology by declaring “I do not think the Pope understands Marxism.” Cardenal earlier opposed this country’s Somoza dictatorship.

ANSWER: Republic of **Nicaragua**

<Karthik, Other History> [Edited]

16. An 30-volume encyclopedia called “The Method of Medicine” was written by a court physician in this modern-day country. A poetry collection whose name translates to “Son of Psalms” was written by the Jewish vizier Samuel HaNagid, who lived in this modern-day country. al-Hakam II compiled over 400,000 volumes at the library of one city in this country. Emirs from the (*) Nasrid dynasty constructed a grandiose palace in the south of this country. Commentaries on Aristotle were written by a philosopher from this country, Averroes (“ah-VAIR-oh-eez”). Many scientific advances were made in the Caliphate of Córdoba in this country. The Muslim-dominated al-Andalus was based in, for 10 points, what modern-day Iberian country whose capital is Madrid?

ANSWER: Kingdom of **Spain** [accept Reino de **España**]
<Prabhakar, British/European History> [Edited]

16. This company’s chief legal officer, Tony West, advocated for the passage of Proposition 22 in 2020. For 10 points each:

[M] Name this company currently led by Iranian immigrant Dara Khosrowshahi (“DAH-rah COSE-row-shah-hee”). Proposition 22 reclassified workers in this company’s industry as independent contractors.

ANSWER: **Uber** [or **Uber** Technologies, Inc.]

[E] Proposition 22 was passed by voters in this state. Before assuming the vice presidency, Kamala Harris served as the junior senator from this state.

ANSWER: **California**

[H] Despite representing parts of Silicon Valley, this congressman opposed Proposition 22, refuting claims that it would allow greater flexibility to workers. This Justice Democrat also co-chaired Bernie Sanders’s 2020 campaign.

ANSWER: Ro **Khanna** [or Rohit **Khanna**]

<Nageswaran, Current Events> [Edited]

17. Per Thorén, a former competitor in this sport, invented the Euler. A teardrop shape is formed in the Biellmann in this sport. "Troika" and "the 3A's" are nicknames for a dominant group of three athletes in this sport, all of whom were coached at the Sambo 70 club by Eteri Tutberidze (“eh-TAIR-ee toot-bur-EED-zuh”). Spirals in this sport can transition from the inside to outside (*) edge. *Spiegel im Spiegel* was used in Kamila Valieva’s Picasso-inspired program in this sport. The ISU governs this sport in which the short program requires a spin combination and an Axel jump. Yuzuru Hanyu and Michelle Kwan competed in, for 10 points, what sport in which participants use boots with toe picks on the blade to glide over ice?

ANSWER: **figure skating** [prompt on ice skating; do NOT accept or prompt on “speed skating”]

<Lei, Other> [Edited]

17. One chemical that produces this taste, stevioside, is extracted from the *Stevia rebaudiana* plant. For 10 points each:

[E] Name this taste, perceived when TAS1R2 binds substances like aspartame or saccharin.

ANSWER: **sweetness** [accept **sugary**]

[M] This molecule is released by taste buds upon binding a sweetener, and then binds to P2X2 and P2X3 receptors on neurons. Purinergic (“pure-in-ergic”) neurotransmission involves the release of this molecule, which is the substrate of adenylyl (“uh-DEN-ill-ill”) cyclase.

ANSWER: **ATP** [or **adenosine triphosphate**]

[H] The sweet sensation is carried to the brain by this cranial nerve, which transmits taste information from the front two-thirds of the tongue. Dysfunction of this nerve causes Bell’s Palsy.

ANSWER: **facial** nerve [or cranial nerve **VII**]

<Karthik, Biology> [Ed. Lei]

18. One of this author’s characters twice recites an “old song” in which he tells “King Hal” to “take back your Paris fair” because “I love much mo my dear.” In a play by this author, one character tells another to take this handkerchief and “cover that bosom because the flesh is weak.” One of this author’s characters is sued by another after harshly critiquing his love sonnet. In one of this author’s plays, eviction orders carried by (*) Monsieur Loyal convince Madam Pernelle of the title character’s treachery. One of this author’s plays ends with two characters chasing after Alceste after his rejection by Celimene, and another ends with the title character being deprived of his blackmail and arrested by the troops of Louis XIV. For 10 points, name this author of *The Misanthrope*, who wrote of Orgon being fooled by the title character in *Tartuffe*.

ANSWER: **Molière** [or Jean-Baptiste **Poquelin**]

<Karthik, Drama> [Ed. Leahy]

18. In one novel, a man simply referred to as “the Gangster” reveals that he is engaged to the sister of a leader of this country, causing the Elvises to beat Beli to death in a canefield. For 10 points each:

[M] Name that country. An overweight nerd whose family is affected by the *fukú* curse likens the history of this country to *The Lord of the Rings* in that Junot Díaz novel.

ANSWER: The **Dominican Republic** [accept **República Dominicana**]

[E] This author documented the aftermath of the assassination of that Dominican leader, Rafael Trujillo, in his novel *The Feast of the Goat*. Pedro Camacho writes a series of radionovelas in this author’s *Aunt Julia and the Scriptwriter*.

ANSWER: Mario **Vargas Llosa** [prompt on partial last name]

[H] This author wrote about the assassination of the Mirabal Sisters by Trujillo in her novel *In The Time of the Butterflies*. She also wrote *How the García Girls Lost Their Accents*.

ANSWER: Julia **Alvarez**

<Kala, Long Fiction> [Ed. Leahy]

19. A work by Georg Friederich Knapp titled for the “State Theory of [this thing]” began the chartalist school. The “drain” of a certain value may affect the multiplier for this thing, which is normally defined as the reciprocal of the reserve ratio. A proposed alternative to quantitative easing is named for the “helicopter” type of this thing. Interest rate is determined by the intersection of the M/P line with the (*) demand for this thing according to the Hicks-Hansen model, which plots the relationship between investment saving and the supply of this thing. In a liquidity trap, changes in the supply of this thing have no effect on price level. The fiat example of this thing has no intrinsic value. For 10 points, name this thing exchanged in transactions.

ANSWER: **money** [or **cash**; accept **money** injection or **cash** injection; prompt on **currency**]

<Nageswaran, Economics> [Ed. Ashbrook]

19. Answer the following about some child prodigies in the world of composing, for 10 points each.

[M] After writing several string symphonies at only age 14, this composer pioneered the genre of string octet with a mature piece he completed at 16.

ANSWER: Felix **Mendelssohn** [or Jakob Louis Felix **Mendelssohn** Bartholdy]

[E] Despite being only 11, this composer was invited to collaborate with Beethoven on the Diabelli Variations. This virtuoso pianist caused a namesake “mania” during his many concert tours and wrote many *Hungarian Rhapsodies*.

ANSWER: Franz **Liszt** [accept **Lisztomania**]

[H] Though he made waves at age 11 with his cantata *Gold*, this Austrian composer later moved to America and transitioned from classical music to film scores like *The Adventures of Robin Hood* and *Kings Row*.

ANSWER: Erich **Korngold**

<Dantzler/Strombeck, Classical Music> [Ed. Strombeck]

20. The TRiC complex is responsible for around ten percent of this process done in the cell. It's not glycosylation, but the membrane-bound protein calnexin modulates this process. To create a chevron plot of this process, the sample undergoes the reverse of this process by dilution with guanidinium (“guan-ih-DIN-ium”) chloride. Part of this process is carried out by (*) protein disulfide isomerase in the endoplasmic reticulum. The tertiary structure of proteins arises as a result of this process. For 10 points, name this process carried out by chaperones in which a peptide chain assumes a 3D structure, problems with which may lead to prion-related diseases.

ANSWER: protein **fold**ing [accept word forms like **folded**; prompt on denaturation with “what is the reverse of denaturation?”]

<Valan, Biology> [Ed. Lei]

20. The speaker of this poem laments that “Thirty years now I have labored / To dredge the silt from your throat.” For 10 points each:

[H] Name this poem. This poem begins “I shall never put you together entirely,” before describing a being that is “pithy and historical as the Roman forum.”

ANSWER: “**The Colossus**”

[E] “The Colossus” is a poem by this author, who also described being “through” with “a man in black with a Meinkampf look” in her poem “Daddy.”

ANSWER: Sylvia **Plath**

[M] Plath described dying as “an art, like everything else” in a poem partially titled for this name. This is also the surname of an author who featured “huddled masses yearning to breathe free” in her poem “The New Colossus.”

ANSWER: **Lazarus** [accept “**Lady Lazarus**”; accept Emma **Lazarus**]

<Kala, Poetry> [Edited]
