

Packet 2

Tossups

1. Geologist M. King Hubbert used the [emphasize] *derivative of* a symmetric example of this function to graph his “peak theory” of oil finding. Besides a certain trig function and ReLU (“rell-oo”), this function is the most common “soft step” used as an activation function in neural networks. This function is the solution to a differential equation that is often written as [read slowly] “ dP/dt equals r times P times the quantity K minus P , divided by K ” and which was formulated by (*) Louis Verhulst (“LOO-ee fur-HOOLST”). The tanh (“tanch”) function, or hyperbolic tangent, is a rescaled form of this function. This function’s standard form equals [read slowly] one over the quantity “one plus e -to-the- x .” It asymptotically approaches one, or the carrying capacity, as x approaches infinity. For 10 points, name this sigmoid function commonly used to model population growth.

ANSWER: **logistic** function [accept **sigmoid** before “activation function”; prompt on **sigmoid** before “sigmoid”]
<Other Science: Math, WA>

2. An avenue in this city was renamed for activist Cecil B. Moore, who helped quell 1964 riots in this city after the rumored police shooting of Odessa Bradford. Richard Nixon required government contractors to hire minorities in a “plan” named for this city. Police Commissioner George Sambor allegedly bombed and allowed the burning of a complex in this city that was owned by the black liberation group (*) MOVE. This city is pioneering the review of harsh sentences for the convicted under its District Attorney Larry Krasner. W. E. B. Du Bois (“doo boyce”) made a pioneering sociological study titled for this city’s “Negro.” Benjamin Rush popularized the idea that black people were immune to yellow fever during a 1793 epidemic in this city. For 10 points, what city preceded Washington, D.C. as the capital of the US?

ANSWER: **Philadelphia** [or **Philly**]
<US History, EL>

3. After working up the product of the reaction between nitriles and alcohol with water, these compounds are produced in the Pinner reaction. These compounds have a chemical shift of between 3.7 to 4.1 ppm on an NMR spectrum. Reacting a ketone with a peroxyacid yields one of these compounds in the Baeyer–Villiger reaction. DMAP catalyzes a DCC-coupled reaction for producing these compounds. The (*) cyclic beta-keto form of these compounds can be produced in the Dieckmann reaction. These compounds are produced when a carboxylic acid is refluxed with an alcohol in the presence of a strong acid. Fischer names a reaction that produces these compounds. For 10 points, name these compounds whose general formula is $RCOOR'$ (“R-C-O-O-R-prime”), known for their fruity smells.

ANSWER: **esters**
<Chemistry, RRP>

4. A mother tries to clean this object to sell at the market instead of her cotton, after which she faints and then wakes up to a feast served on twelve silver plates. A woman is tricked into trading this object for a new, worthless one made of copper, but she gets it back by putting on a dress of diamonds, seducing the African who tricked her, and then poisoning him with wine. The story centering on this object, which is set in China, was added to the collection it is part of by French traveler (*) Antoine Galland (“guh-LAHN”). An African magician gives a truant boy a ring to help him find this object in a booby-trapped cave. After acquiring this object, that boy marries Princess Badroulbadoor (“bah-DROOL-bah-door”), with whom he lives in a palace built by the creature summoned by this object. For 10 points, what magical object does Aladdin rub to summon a genie?

ANSWER: Aladdin’s **lamp** [or the magic **lamp**; or the genie’s **lamp**; or oil **lamp**]
<Misc. Lit, WA>

5. Innovations within this industry in the Caribbean are discussed at the beginning of the essay “Cultural Identity and Diaspora” by Stuart Hall. The “feeling of strangeness” that is characteristic of workers in this industry, as described by Luigi Pirandello, is cited in an essay by Walter Benjamin (“VALL-tur BEN-yuh-meen”). This industry’s products are presented as exemplars of Weimar-era attitudes in a 1947 study by (*) Siegfried Kracauer (“ZEEK-freet CRACK-hour”). Analysis of this industry by Laura Mulvey resulted in her theory of the “male gaze.” The death of André Bazin (“bah-ZANN”), a leading theorist in this industry, occasioned a revival of *The Rules of the Game*. Theorists within this industry postulated a figure who controls all aspects of creation and production called an *auteur* (“oh-TURR”). For 10 points, name this industry in which François Truffaut (“true-FOH”) worked.

ANSWER: film industry [accept equivalents for film such as cinema, motion picture, moving picture, or movies; accept art film; accept Hollywood; prompt on media; do not accept or prompt on “television” or “art”]

<Social Science: Sociology, WA>

6. *Musical genre and composer required.* An 1896 guide to these pieces “for the amateurs of this country” was written by Sir Charles Grove. Jonathan Del Mar’s Bärenreiter Urtext edition of these pieces has been used in some recent recordings. Barry Cooper reconstructed one of these pieces. Four cycles of recordings of these pieces, including three for Deutsche Grammophon (“DOY-chuh GRAH-moh-phone”), were made by Herbert von Karajan (“KAR-ah-yahn”). (*) Tchaikovsky’s Symphony No. 4 is directly modeled on one of these pieces. The second movement of the seventh of these pieces contains a “LONG, short short LONG, LONG” rhythm. The dedication of the third of these pieces was erased, having originally been made to Napoleon. For 10 points, identify these nine orchestral pieces by a German composer that include the “Eroica.”

ANSWER: symphonies by Ludwig van Beethoven [prompt on symphony]

<Classical Music/Opera, WA>

7. Two characters in this play disagree over whether the story of a tailor made them happy on the day they were engaged. A character in this play owns a black dog that he believes to be white and promises to give another character a sugar-plum if he will listen to his story, despite not having any; that character is upset to learn that there are no more pain-killers and promises to give another character the key to the cupboard if he will “finish” him. A character in this play repeatedly moves a ladder back and forth to look out (*) two windows. This play ends with a handkerchief placed on top of a character, and an alarm clock placed on top of another character inside a garbage can. For 10 points, name this play about Hamm, his servant Clov, and his parents Nagg and Nell, written by Samuel Beckett.

ANSWER: Endgame [or Fin de Partie]

<Drama, BB>

8. In a Jataka tale, the Buddha relates how he was once born as a king of this color who ruled over all the Chaddanta beasts. A mythical three-headed creature of this color was the symbol of the old kings of Laos. A creature of this color guards the entrance to its master’s palace at Svarga Loka and bore that master to meet Krishna at the hill called Govardhana (“go-VAR-dun”). This is the color of (*) Airavata (“EYE-ruh-vut”), the flying mount of Indra. A proverbial phrase about something that is prohibitively expensive and cannot be disposed of is named for a sacred creature of this color that Thai kings would gift to subjects in order to financially ruin them. For 10 points, name this color of a proverbial rare useless elephant.

ANSWER: white [or sveta; accept white elephant]

<Mythology, WA>

9. They’re not Turks, but early modern trade networks involving these people included a group living in Feodosiya called *krymchaks*. The liberties granted to these people in the Statute of Kalisz (“KAH-lish”) were

expanded in a decree by Casimir the Great, who ended the widespread practice of kidnapping these people in his kingdom. Families who followed a leader of these people named (*) Jacob Frank (“YAH-kop FRONK”), who was a Sabbatean (“sab-uh-TEE-un”), produced many 19th-century Polish luminaries. These people comprised most physicians and tailors in the region of Galicia in modern-day Ukraine. Catherine the Great restricted these people to living within the Pale of Settlement. For 10 points, name these people who often lived in *shtetls* and spoke Yiddish.

ANSWER: Jews [or Jewish people or Juden or Yehudim; or Ashkenazi Jews or Ashkenazim; prompt on religious minorities]

<Continental post-600 History, WA>

10. This composer wrote the Levantine-infused song “Le Souk” (“luh SOOK”) while visiting Oberlin College and “Balcony Rock” while at the University of Michigan. This composer’s wife Iola lyricized several of his songs for Carmen McRae to perform in *The Real Ambassadors*. Mount Fuji and zither music inspired this artist’s “Fujiyama” and “Koto Song,” respectively, which are on the album *Jazz Impressions of Japan*. He quoted the song “Turkey in the Straw” at the end of a piece in (*) $7/4$ time. This composer of “Unsquare Dance” incorporated an *aksak* (“AHK-sahk”) time signature of $2 + 2 + 2 + 3$ into a song that he performed alongside Eugene Wright, Joe Morello and Paul Desmond, titled “Blue Rondo à la Turk.” For 10 points, name this jazz pianist whose namesake quartet recorded the album *Time Out*, which includes “Take Five.”

ANSWER: Dave Brubeck

<Other Art: Jazz, BD>

11. A backwards version of this letter called the *apostrophus* was used to write large Roman numerals. This is the [emphasize] *oldest* of the two Latin letters that ultimately derived from a drawing of a throwing stick and a Phoenician letter that resembles a slightly tilted “7.” According to Plutarch, in the 3rd century BC, Ruga taught a new variant of this letter to his elementary school, kicking Z to the end of the alphabet. In English Braille, this letter is represented by two (*) dots on the top row. In Latin alphabets for many Slavic languages and in romanizations of Cyrillic, this letter represents the affricate “ts” (“T-S”). This letter takes a diacritic in the Czech word for “Czech” and the French word for “French”; those diacritics are a háček (“HAH-check”) and a cedilla respectively. For 10 points, name this letter that, according to an English spelling mnemonic, “ei” (“E-I”) usually comes after.

ANSWER: C

<Other/Misc Academic, KL>

12. The gain of a laser’s medium is defined as the spatial derivative of the log of this quantity. For an AC circuit, multiplying the “apparent” variety of this quantity by either sin or cosine of the phase angle gives its “real” and “reactive” components, respectively. For an electromagnetic wave, this quantity can be expressed as the [read slowly] “area times *E* times *B*, divided by vacuum permittivity,” or as the spatial double integral of the Poynting vector. A given laser’s (*) output per pulse equals the pulse duration times this quantity. In general, for a wave, this quantity equals intensity times the area. The amount of this quantity transferred by a circuit equals the current times the voltage, or “*I* times *V*.” For 10 points, name this quantity that equals work over time, and which is measured in watts.

ANSWER: power [or laser power; accept optical power or peak power or average power; accept wattage or watts before “watts”; prompt on P; prompt on energy output, but do not accept or prompt on “energy”]

<Physics, WA>

13. T. S. Eliot claimed to experience a “shudder” while reflecting on a passage in this poem about “waiting for a hand / A hand that can be clasp’d no more.” This poem rejects the idea that Earth is “so careful of the type” and states “A thousand types are gone: / I care for nothing, all shall go,” reflecting the author’s knowledge of geological catastrophism. This poem’s seventh section opens in a “long unlovely street” in front

of a **“Dark house, by which once more I stand.”** Later descriptions of (*) Darwinism evoked the brutality of natural selection with this poem’s line about “nature, red in tooth and claw.” This poem, which contains 132 sections in an A-B-B-A rhyme scheme, states “’Tis better to have loved and lost / Than never loved at all.” For 10 points, name this poem on the death of Arthur Henry Hallam, written by Alfred, Lord Tennyson.

ANSWER: **“In Memoriam, A. H. H.”**

<Non-Epic Poetry, WA>

14. **This figure chastised a disrespectful action of Abu Jahl and was taught a repetitive, 100-line prayer after the refusal of a request for a servant to help grind corn. That prayer named after this figure is often counted using a beaded *misbaha*, begins with 34 recitations of the *takbir*, and ends with 33 recitations of the *tasbeeh* (“toss-BEEH”). The most common epithet used for this figure is “al-Zahra” or “the shining one.” In Shia Islam, this is the only (*) female member of the “people of the house,” or *ahl al-Bayt* (“AH-hull ull-BAIT”), while she is the youngest female member of that group in Sunni Islam. This woman’s eldest son was martyred at the Battle of Karbala and was named Husayn. Descent from Muhammad through this woman was claimed by a namesake of a 10th-century Egyptian caliphate. For 10 points, name this wife of Ali, a daughter of Muhammad.**

ANSWER: **Fatimah** al-Zahra

<Religion, AK>

15. **A recent analysis of this work by George Garnett found that it contains 93 penises. This work appears to borrow heavily from the *Gesta* of William of Poitiers (“pwaht-YAY”), though it contradicts the *Gesta* regarding the treatment of Conan. It is widely accepted that the final *titulus* of this work, “Et fuga verterunt Angli,” is spurious and was added in 1814 out of anti-British sentiment. According to legend, this work was created at night by a woman named (*) Matilda, though it was probably commissioned by Odo, the brother of Matilda’s husband. Restorations of this work contributed to the likely-false idea that a certain king died of an arrow to the eye. Its first scene shows Edward the Confessor sending Harold Godwinson to Normandy. For 10 points, name this artwork that chronicles the Norman conquest of England.**

ANSWER: **Bayeux Tapestry**

<British/CW History, WA>

16. **A novel set in this country opens with the arrest of a man reading the Book of Revelation who impresses the arresting officers by bringing his Bible along. A traditional liquor from this country that “gives you sight” is corrupted by the establishment of a brewery and Brewers Union. This country’s police force is called the “maker of its modernity” by Inspector Godfrey, whose investigations into the burning of the (*) Sunshine Lodge frame a novel set here. A plane crash sparks the reconstruction of Ilmorog in this country, which is also the setting of a novel framed around Uhuru, this country’s independence day. For 10 points, name this African country, the setting of the novels *Petals of Blood* and *A Grain of Wheat* by Ngugi wa Thiong’o (“GOO-gee wah thee-ON-go”).**

ANSWER: **Kenya** [or Republic of **Kenya**]

<Long Fiction, JC>

17. **This thinker, who considered the Boeotian (“bee-OH-shin”) oracle Trophonius as an example of a “subterranean man,” wrote “Come back, my unknown god!” in the poem “Ariadne’s Lament.” This thinker, who quipped “Plato is boring,” wrote eight *Idylls from Messina*, nine dithyrambs (“DITH-uh-rams”), and a work that condemns Euripides for reducing the role of the chorus and eliminating music. A figure postulated by this thinker dreams of a child coming to him with a mirror, which he discusses while living in a cave with his two friends, a (*) snake and an eagle. He praised Aeschylus and Sophocles for effectively combining the orgiastic, chaotic side of humanity with the orderly one, which he termed “Dionysian” and “Apollonian.” For 10 points, name this author of *The Birth of Tragedy* and *Thus Spake Zarathustra*.**

ANSWER: Friedrich Nietzsche (“NEE-chuh”) (The first clue is from *Daybreak*, also known as *Dawn*.)
<Thought, WA>

18. This artist, whose time in New York was sponsored by Harry Holtzman, created an oval composition of criss-crossing fragments to evoke a *Pier and Ocean*; the principles informing that painting would cause him to oppose Elementarism. This artist’s Theosophy-inspired early Cubist phase included his painting *The Gray Tree*. This artist later opposed the formal notions of a compatriot’s (*) *Counter-Compositions* with his “lozenges” (“LOZZ-un-jizz”). The word “Victory” partially titles his unfinished last painting, which updates a painting that features an irregular, largely yellow grid representing both syncopated music and the streets of Manhattan. He put forth his “new plastic idea” of Neo-Plasticism with Theo van Doesburg (“TAY-oh fon DOOSE-burkh”). For 10 points, name this Dutch modernist who helped found De Stijl (“duh style”).

ANSWER: Piet Mondrian
<Painting/Sculpture, AK>

19. The biomarker Fox-3 is used to track the process of creating these cells. Gradients of Wnt (“wint”) proteins guide the growth direction of projections from these cells. Fred Gage of the Salk Institute confirmed the findings of Samuel Weiss and Brent Reynolds that these cells can be grown in adult mice, and that their growth is triggered by prolactin. Three-dimensional cultures of these cells can be used to model FAD caused by mutations in the genes for presenilin and (*) amyloid precursor protein. The highest known rate of their growth occurs in the dentate gyrus region of the hippocampus. NSCs are a type of stem cell that can differentiate into glial (“GLEE-ul”) cells or these cells. For 10 points, name these specialized cells that transmit signals between their soma and their synaptic terminals via an axon.

ANSWER: neurons [prompt on nerve cells]
<Biology, SO>

20. This country purchased over a million Chinese bicycles as part of a five-year trade agreement that it signed in 1991. It’s not France, but the Chilean ambassador to this country, Jorge Edwards, was declared *persona non grata* despite Salvador Allende’s attempt to thaw relations. In 1993, this country began to take the dollar as legal tender after a collapse in foreign aid led to a crisis called the “Special Period.” It sent troops to support (*) Mozambique’s FRELIMO and Angola’s MPLA in their respective struggles. In 2000, this country became the northernmost member of the Bolivarian Alliance for the Americas. Weapons were taken out of this country in exchange for American removal of Jupiter missiles from Turkey. For 10 points, name this country that asked the Soviets deploy missiles in 1961.

ANSWER: Cuba [or Republic of Cuba; accept Cuban Missile Crisis]
<World History, WA>

Bonuses

1. A “faint scar” is the only remainder of this deformity after a surgery is successfully performed on Hassan in Khaled Hosseini’s novel *The Kite Runner*. For 10 points each:

[10] Identify this physical deformity of a title character who builds a rickshaw to carry his sick mother to Prince Albert, and who is later taken by soldiers to a rehabilitation camp.

ANSWER: **hare lip** [or **cleft lip** or **cleft palate**] (The latter novel is *Life and Times of Michael K.*)

[10] A character known as Hare-Lip refuses to reveal his name to Rubashov, who is a fellow prisoner held and interrogated by “Number One” in this novel named for an event during Christ’s crucifixion.

ANSWER: **Darkness at Noon** [accept **Sonnerfinsternis**] (by Arthur Koestler)

[10] Another character called Harelip warden a captive airman in “Prize Stock,” a short story by this Nobel Prize-winning Japanese author of *A Personal Matter* and *The Silent Cry*.

ANSWER: Kenzaburo **Ōe** [accept names in either order]

<Long Fiction, BB>

2. This document was partly proven to be a forgery based on its anachronistic use of the word “satrap” to describe Roman rulers. For 10 points each:

[10] Name this document that purported to grant imperial authority to Sylvester I (“the first”).

ANSWER: **Donation of Constantine** [or **Donatio Constantini**]

[10] The donation granted the Pope control over the four principal sees, including this Egyptian city home to a magnificent library built by Ptolemy I.

ANSWER: **Alexandria** [or **Eskendereya**; accept Great Library of **Alexandria**]

[10] After Lorenzo Valla proved that the Donation of Constantine was a forgery, this pope quit issuing bulls referring to it. This pope was an avid man of letters who sought to promote Rome as a literary center, and he issued the bull “Dum Diversas,” which sanctioned the murder of Saracens and the purchase of slaves from infidels.

ANSWER: **Nicholas V** [or Tommaso **Parentucelli**; prompt on **Nicholas**]

<Continental post-600 History, EL>

3. In Brazil, this movement gave rise to units called Base Ecclesial Communities, in which a clergy member was responsible for addressing community needs. For 10 points each:

[10] Name this Catholic movement that began in Latin America and aimed to provide assistance to the poor. The name of this movement was coined by Gustavo Gutiérrez.

ANSWER: **liberation** theology [or *A Theology of Liberation*]

[10] As a cardinal in the ’80s, this pope sharply criticized the growing Marxist influence of liberation theology on the Catholic Church. He was succeeded by Pope Francis after he resigned in 2013.

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

[10] The teachings of liberation theology often stress the need to provide one of these specific things for the poor. Upon coming into office, Pope Francis used this specific phrase in his 2013 address *Evangelii gaudium*.

ANSWER: preferential **option** (for the poor)

<Religion, AK>

4. These diagrams illustrate a system’s stability by labeling the phase and gain margins, and a simple rule used to create these diagrams holds that zeros and poles respectively increase and decrease the slope by 20 units. For 10 points each:

[10] Name this set of two diagrams that plot a system’s frequency response on a logarithmic scale.

ANSWER: **Bode** plots

[10] The y-axis of the magnitude Bode plot is also logarithmic because it usually represents the magnitude in these units, which are used in logarithmic scales of loudness.

ANSWER: **decibels** [or **dB**]

[10] One of these devices can be constructed using an RC with a resistor in series with the load and a capacitor in parallel with the load. The magnitude Bode plot for one of these devices is a flat line up until a cutoff frequency, after which it slopes down.

ANSWER: **low-pass filter** [or **LPF**; prompt on **filter**]

<Physics, AK>

5. Wikileaks exposed British and American conversations which concluded that establishing this archipelago as a Marine Protection Area was the “most effective long-term way to prevent” its indigenous community from resettling. For 10 points each:

[10] Name this archipelago whose largest island, Diego Garcia, was forcibly depopulated to make room for a US naval base.

ANSWER: **Chagos** (“CHAY-guss” or “CHAH-gose”) Archipelago

[10] The Chagos Archipelago often features in the politics of this country. Since its independence, it has been led by multiple generations of the Ragnauth and Ramgoolam families.

ANSWER: **Mauritius**

[10] Diego Garcia was originally settled by this European country, which still controls the Indian Ocean island of Martinique as one of its overseas departments.

ANSWER: **France** [or **French Republic**]

<Geography, EL>

6. The first book of Ovid’s *Metamorphoses* begins by describing this character as a “raw confused mass.” For 10 points each:

[10] Name this character from classical mythology. Hesiod (“HEE-see-id”) does not give a parent for this character, whom he lists as the mother of Erebus and Nyx, but Hyginus says that Caligine (“KAH-lee-GEE-nay”) is this character’s mother.

ANSWER: **Chaos**

[10] The Greek word *chaos* means “open mouth” or “yawn,” a mythological concept that is also reflected in the “yawning gap” or Ginnungagap (“GIN-ung-uh-GAP”) in which this primeval giant is born.

ANSWER: **Ymir** [do not accept or prompt on “Aesir”]

[10] The Egyptian Ogdoad (“OG-doh-add”) and the Orphic creation myth exemplify a mythological trope in which one of these objects is laid in the primordial chaos. In a Chinese creation myth, Pangu emerges from one of these objects.

ANSWER: **eggs**

<Mythology, WA>

7. Architectural historian Charles Jencks claimed that “modern architecture died in” this city “on July 15, 1972, at 3:32 p.m.” For 10 points each:

[10] Name this US city where the crime-ridden Pruitt-Igoe housing project was demolished after residents began to move out. Luther Ely Smith promoted architecture projects to revive this city’s economy during the Depression.

ANSWER: **St. Louis**, Missouri

[10] This New Formalist architect designed the Pruitt-Igoe project and the concrete-shelled Terminal 1 of Lambert International Airport, both of which are found in St. Louis.

ANSWER: Minoru **Yamasaki**

[10] After Yamasaki’s crowning achievements, the Twin Towers, were destroyed in 2001, Daniel Libeskind won a contest to design this skyscraper, though his design was later discarded in favor of David Childs’ design. At 1,776 feet, this is the tallest building in the Western Hemisphere.

ANSWER: **One World Trade Center** [or **Freedom Tower**; prompt on **World Trade Center**]

<Other Art: Architecture, BD>

8. This is the outermost region of the lithosphere. For 10 points each:

[10] Identify this layer of the Earth composed mostly of hard rock. The Moho discontinuity separates this layer from the mantle.

ANSWER: Earth's **crust**

[10] The Earth's crust is strongest at a zone where the probability of this type of fracture is greater than the probability of a brittle fracture. In materials science, this word describes the ability of a material to undergo bending and other plastic deformation.

ANSWER: **ductile** ("DUCT-ull") [accept word forms such as **ductility**; accept brittle-**ductile** transition zone]

[10] Coulomb's criterion gives the conditions under which a rock or other material experiences fracture, while this statistician and physicist's criterion gives the conditions under which it experiences ductile fracture.

ANSWER: Richard **von Mises** ("REEK-hart fon MEE-ziss") [accept **von Mises** criterion or **von Mises** failure]

<Other Science: Earth, WA>

9. This poet asks "where are Whitman's wild children" and tells poets "don't wait for the Revolution / or it'll happen without you." For 10 points each:

[10] Name this poet of "Populist Manifesto" who described a "real live barking democratic dog" "with something to say about ontology" in another poem.

ANSWER: Lawrence **Ferlinghetti**

[10] Ferlinghetti's poem "Underwear" uses the line "Do not go naked into that good night," referring to this Welsh poet's "Do not go gentle into that good night."

ANSWER: Dylan **Thomas**

[10] In another poem, Ferlinghetti calls this location "a beautiful place" but "right in the middle of it / comes the smiling / mortician." William Wordsworth declares "I'd rather be / a pagan suckled in a creed outworn" in a sonnet about being tired of this place.

ANSWER: the **world** [accept "The **World** is a Beautiful Place" or "The **World** is Too Much With Us"]

<Non-Epic Poetry, EL>

10. Milman Parry of the Parry-Lord thesis postulated that this epic's use of phrases like "wine-dark sea" expedited its transmission through oral tradition. For 10 points each:

[10] Name this Greek epic that follows the title hero's twenty-year journey home to Ithaca after the Trojan War.

ANSWER: The ***Odyssey***

[10] Homer makes heavy use of this literary device during climactic scenes or to highlight certain characters. This device consists of an extended comparison to an event outside of the narrative.

ANSWER: **epic simile** [accept **Homeric simile**; prompt on **simile**]

[10] These characters provide the *Odyssey*'s only use of the Iliadic epithet "great glory of the Achaeans," reminding Odysseus and the audience about the allure of past heroic exploits. These characters claim to "know everything... did and suffered in wide Troy through the gods' despite."

ANSWER: the **Sirens** [or **Seirenes**]

<Misc. Lit, JC>

11. This general and Walt Rostow recommended countering insurgent activity by using patrol dogs and defoliants. For 10 points each:

[10] Name this general whom John F. Kennedy appointed to head the investigation into the failure of the Bay of Pigs Invasion. He earlier led the "Screaming Eagles" during World War II and wrote the book *Uncertain Trumpet* criticizing the New Look policy of the Eisenhower administration.

ANSWER: Maxwell **Taylor**

[10] The US took Taylor and Rostow's advice and used the defoliant Agent Orange in this conflict to help smoke out guerillas during Operation Rolling Thunder and other aerial campaigns.

ANSWER: **Vietnam** War

[10] Agent Orange was first used in warfare by the British in this modern-day Asian country, where it was used to help fight Communist insurgents led by Lai Teck and Chen Ping in a so-called "Emergency."

ANSWER: **Malaysia** [accept **Malaya** or **Malayan** Emergency]

<US History, NB>

12. Johann Tobias Krebs is sometimes credited as the composer of a set of "Eight short" examples of these two genres of pieces. For 10 points each:

[10] Name both musical genres that title a certain composer's A minor organ piece in the *stylus phantasticus*. Many two-part pieces by Dietrich Buxtehude ("BOOKS-tuh-HOO-duh") contain both of these musical genres.

ANSWER: **preludes** AND **fugues** [accept *Eight Short Preludes and Fugues* or **Prelude and Fugue** in A minor; accept **praeludium** in place of "prelude"; accept **fuga** in place of "fugue"]

[10] This composer wrote the aforementioned Prelude and Fugue in A minor. He wrote a Toccata and Fugue in D minor for organ.

ANSWER: Johann Sebastian **Bach**

[10] A standalone Fugue in B minor for organ by Bach is based on a theme by this composer. The Opus 5, No. 12, violin sonata in D minor by this composer consists of variations on "La Folia."

ANSWER: Arcangelo **Corelli**

<Classical Music/Opera, WA>

13. Five people have won this award twice – including its first female winner, Margaret Leech, who won it for *Reveille in Washington* and *In the Days of McKinley*. For 10 points each:

[10] Name this award whose 2018 winner was *The Gulf: The Making of an American Sea*, a book by Jack E. Davis. Its other winning authors include James Macpherson and C. Vann Woodward.

ANSWER: **Pulitzer** Prize for **History** [prompt on **Pulitzer** or **Pulitzer Prize** by asking "in what subject?"; do not accept or prompt on "Pulitzer Prize for Nonfiction"]

[10] The 1928 Pulitzer Prize for History went to Vernon Parrington for his book examining Hamiltonian and Jeffersonian intellectual history, whose title begins with these two words. A Polish book whose English title begins with these two words dissects its title ideology as the "greatest fantasy of the 20th century."

ANSWER: **main currents** [accept **Main Currents** in *American Thought* or **Main Currents** of *Marxism*; do not accept or prompt on anything else]

[10] The first Pulitzer in History went to a diplomat and historian from this country for the book *With Americans of Past and Present Days*. This country and the US fought the Quasi-War.

ANSWER: **France** [or **French Republic** or **République française**]

<Historiography, WA>

14. John Singleton Copley modeled the flailing Brook Watson in *Watson and the Shark* after this sculpture. For 10 points each:

[10] Name this Ephesian sculpture signed by Agasias depicting a swordsman. It was part of a namesake Italian art collection until it was sold to the French Empire under pressure from Napoleon.

ANSWER: the **Borghese Gladiator** [or **Borghese Warrior**]

[10] This neoclassical Italian sculptor moved to France under commission from the Borghese ("bor-GAY-zay") family, sculpting a semi-nude Pauline Borghese as *Venus Victrix*. He sculpted *Napoleon as Mars the Peacemaker*.

ANSWER: Antonio **Canova**

[10] Canova and many other neoclassical sculptors worked using the Carrara variety of this white rock in order to emulate Greco-Roman artistic ideals.

ANSWER: **marble**

<Painting/Sculpture, BD>

15. A character compares his repeated exposure to this substance to almost killing a bully who would not stop pinching him, before concluding that this substance was worse because he did not know who to hit. For 10 points each:

[10] Identify this title substance of a story in which Pickard tries to use it to commit suicide. The Lieutenant promptly strips after being the only one to reach safe haven from this substance.

ANSWER: **rain** [accept “The Long **Rain**”; prompt on precipitation or water; do not accept or prompt on “acid rain”]

[10] In a story collection, “The Long Rain” directly precedes “The Exiles,” a story in which Edgar Allen Poe and Ambrose Bierce are killed during one of these events. In another novel, Mrs. Phelps cries upon hearing “Dover Beach” read by a man whose job is to orchestrate these events.

ANSWER: **book burnings** [accept equivalents; prompt on fires or burnings]

[10] “The Exiles” and “The Long Rain” appear in *The Illustrated Man*, a short story collection by this author who wrote about Guy Montag’s book burnings in *Fahrenheit 451*.

ANSWER: Ray **Bradbury**

<Short Fiction, EL>

16. The “house” named for this country, a former control center for its southern regions, is no longer within its borders thanks to the 1865 Treaty of Sinchula that it signed with Britain. For 10 points each:

[10] Name this country whose rule by the Wangchuck dynasty, a branch of the long-influential Dorji family, began in 1907 after its reunification.

ANSWER: **Bhutan** [or Kingdom of **Bhutan**; or **Druk Gyal Kap**; accept **Bhutan** House]

[10] The name “Bhutan” is a Sanskrit term that refers to the “end of” this region, which is known as Bod in its own language. This Himalayan region’s distinct form of Vajrayana Buddhism has influenced Bhutan over centuries.

ANSWER: **Tibet** [accept **Tibetan** Buddhism]

[10] Records of Bhutan do not exist before the 8th century, which is when this man is said to have flown to Bhutan and landed on the ground where the Tiger’s Nest monastery was later founded. The *Testament of Ba* records the founding of Tibetan Buddhism by this probably-historical figure, who is the subject of *namtar* biographies.

ANSWER: Guru **Rinpoche** [or **Padmasambhava**; prompt on Lotus-Born by asking for the Sanskrit name]

<World History, WA>

17. Common methods of maintaining this quantity on a macroscopic level include countercurrent exchange and selective constriction of blood vessels. For 10 points each:

[10] Identify this quantity that, uniquely among mammals, is not constant throughout the body of a naked mole rat. An increase in progesterone results in a small increase in this quantity during ovulation.

ANSWER: body **temperature** [or **body heat**; prompt on heat]

[10] Body temperature regulation is part of this process, an organism’s maintenance of the stability of its internal environment.

ANSWER: **homeostasis**

[10] Larger organisms can more easily regulate body temperature in the cold due to a lower surface-to-volume ratio, which may explain this ecological rule. It states that the body mass of organisms of the same species tends to be larger in colder climates than in warmer ones.

ANSWER: **Bergmann**’s rule

<Biology, WA>

18. A fashion designer from this country played the guitar and sang along in French during his Spring 2018 ready-to-wear show. For 10 points each:

[10] Name this country served by the male fashion magazine POPEYE. VAN Jacket, the Comme des Garçons (“kum day gar-SAWN”), and the clothing store UNIQLO (“YOO-nee-kloh”) were all founded in this country, whose otaku fashion culture is centered in Akihabara (“ah-kee-hah-bah-rah”).

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

[10] Shōichi Aoki spent twenty years photographing this Tokyo district’s fashion currents for his magazine FRUiTS. A Bathing Ape, or Bape, was founded in this district-slash-train station, the hotbed for eclectic and hypercreative styles such as Lolita gothic and retro Yankee.

ANSWER: **Harajuku** [accept Ura-**Harajuku**; prompt on **Shibuya**]

[10] Around 2015, America rediscovered this seminal 1965 photo compilation published by VAN Jacket that brought the preppy style of the title American subculture into mainstream prominence in Japan.

ANSWER: **Take Ivy** (A pun on the fact that “aibii,” meaning Ivy/Ivy League prep, sounds like “faibu,” or Five. As one of the authors put it, “Someone who knows English never would have thought of that name!”)

<Other/Misc Academic, JC>

19. Robert Putnam’s book *Our Kids* explains how changes in this phenomenon’s patterns are rooted in social capital, and argues that it has increased in recent generations by assortative mating trends. For 10 points each:

[10] Identify this socioeconomic phenomenon that Joseph Stiglitz wrote about the “price of.” A French philosopher attributed the “origin” of this concept to the first man who fenced off a piece of land and claimed “this is mine.”

ANSWER: **inequality** [accept social or economic **inequality**; accept *The Price of **Inequality***; do not accept or prompt on “equality”]

[10] Jacob Hacker and Paul Pierson pointed the finger at Washington politics for rising inequality in a book whose title includes this three-word phrase. A similar phenomenon of runaway salaries was described in a book by Robert Frank and Philip Cook titled for a “society” described by this phrase.

ANSWER: **winner-take-all** [accept **Winner-Take-All** *Politics* or *The **Winner-Take-All** Society*]

[10] Hacker and Pierson downplayed the influence of this phenomenon as a contributor to inequality. Stiglitz wrote about the “discontents” of this phenomenon, which is the increasing internationalization of world economies.

ANSWER: **globalization** [accept **Globalization** *and its Discontents*]

<Social Science: PoliSci, WA>

20. Answer the following about the intersection of organometallic chemistry and medicine, for 10 points each.

[10] Hemoglobin, probably the most important organometallic compound in medicine, contains this metal. The first organometallic sandwich compound to be synthesized, ferrocene, also contains it.

ANSWER: **iron** [or **ferrum**; or **Fe**]

[10] Removing toxic metals from the body is often accomplished by a therapy named for this process. For a compound to participate in this process, it must have a denticity of at least two.

ANSWER: **chelation** (“kee-LAY-shun”) [accept word forms such as **chelate** or **chelating**; prompt on answers like **bond formation** or **coordination**]

[10] The ligands (“LIG-unds”) of cisplatin, an organometallic compound used in chemotherapy, are chloride and this compound. It is typically listed as slightly stronger than pyridine (“PEER-uh-deen”) and slightly weaker than ethylenediamine (“ethylene-diamine”) on the spectrochemical series.

ANSWER: **ammonia** [or **ammine** ligand; do not accept or prompt on “ammonium”]

<Chemistry, WA>

