

Packet 9

Tossups

1. **This economist's views on state action, which are laid out in essays such as "State Action and Laissez-Faire," are critiqued in another man's 1960 paper that uses the example of "sparks from engines." This economist names a phenomenon in which deflation stimulates consumption due to the resulting rise in real wealth, also known as the "real balance effect." Policies proposed by this economist are "inappropriate" in dealing with the "divergences between private and social net products" according to (*) Ronald Coase's paper "The Problem of Social Cost," which asserts that such policies do not adequately reduce incidental harm. This student of Alfred Marshall founded the field of welfare economics by writing the book *The Economics of Welfare*. For 10 points, name this British economist who proposed to reduce externalities via his namesake taxes.**

ANSWER: Arthur **Pigou** [accept **Pigou** effect or **Pigovian** taxes]

<Social Science: Economics, WA>

2. **A novel titled for these animals begins "There was death at its beginning as there would be death at its end," referring to an accident in which the protagonist's friend is killed by a truck in the snow. One of these animals states, "he had jumped all at once from a boy to a man" after seeing Joe Green confront a stranger over cruel treatment of them. When introducing one of these animals to an English visitor, a man claims that his most serious rival is (*) Makhotin ("ma-KHOH-teen"), who owns one of these animals named Gladiator. When one of these animals breaks its back during an accident, a woman's concern convinces Karenin that she is having an affair with Count Vronsky. The skills of the Dorrance brothers inspired a bestselling Nicholas Evans novel about their "whisperers." For 10 points, Frou-Frou from *Anna Karenina* and Black Beauty are examples of what animals?**

ANSWER: **horses** [accept **ponies**; accept *The **Horse** Whisperer*]

<Misc. Lit, JC>

3. **When asked why he was qualified to paint war scenes, this artist said that he was not aware that Leonardo "had a ticket of admission to the Last Supper." Men in Prussian helmets fix bayonets as an officer holds a boy whose hands have been severed in one such war painting by this artist, titled *The Germans Arrive*. Paintings of youths by this artist include one of a buck-toothed, bare-chested boy named Paddy Flannigan, and one showing the title number of skinny dippers, titled (*) *42 Kids*. This student of Robert Henri created a painting of tenements with clotheslines titled *Cliff Dwellers* as the leading light of a largely socialist school of realists called the Ashcan School. For 10 points, name this American artist who showed boxers in *Both Members of this Club* and *Stag at Sharkey's*.**

ANSWER: George **Bellows**

<Painting/Sculpture, WA>

4. **This historian referred to Thomas Jefferson as "the most incapable Executive that ever filled the presidential chair." Edmund Morris wrote a trilogy of biographies of this historian, who is the subject of David McCullough's *Mornings on Horseback*. This historian wrote a six-volume history of the frontier titled *The Winning of the West* and criticized Alfred Hazard Perry's actions in his history (*) *The Naval War of 1812*. This man's friend Alfred Thayer Mahan influenced the policies he took as Assistant Secretary of the Navy. This coiner of the term "bully pulpit" signed the Antiquities Act into law to provide for the creation of National Monuments, and he sent the Great White Fleet on a worldwide goodwill expedition. For 10 points, name this advocate of the "strenuous life" who was the 26th US President.**

ANSWER: Theodore **Roosevelt** [or **Teddy Roosevelt**; or **TR**; prompt on **Roosevelt**]

<US History, NB>

5. In 2012, an engineer in this country claimed to have invented a perpetual motion machine in the form of a “water-kit” that turned water into car fuel. Conspiracies from this country hold that the CIA exploited devastating 2005 earthquakes and 2010 floods here to sow chaos; in actuality, the CIA was caught organizing a fake Hepatitis B vaccine program here to get a wanted man’s DNA. Many pundits in this country claim that a neighboring country’s intelligence bureau, the Research and Analysis Wing, created the (*) Lashkar-e-Taiba militia, which is based here. One of the most popular conspiracy theories from this country was boosted by a 2017 state visit to Israel by Narendra Modi, confirming fears of an evil US-backed Zionist-Hindu plot for world domination. For 10 points, name this country where other theories concern the shooting of native Nobel Peace Prize winner Malala Yousafzai.

ANSWER: **Pakistan** [or Islamic Republic of **Pakistan**]
<Other/Misc Academic, WA>

6. This author wrote a letter highlighting a stanza from one of his poems that imagines “some future bard” with “similitude grieves to mine” learning of the speaker’s tragic love story, though he later denounced the addressee as “Sappho” in some satires after she laughed at his love confession. That poem by this author yearns for “The world forgetting by the world forgot.” This author drew inspiration from his heartbreak over Lady (*) Wortley Montagu to write a poem that coined the phrase “Eternal sunshine of the spotless mind.” A long, Horace-inspired poem by this author contains many heroic couplets that are the origin of phrases like “Fools rush in where angels fear to tread” and “To err is human; to forgive, divine.” For 10 points, name this author of “Eloisa to Abelard” and “Essay on Criticism.”

ANSWER: Alexander **Pope**
<Non-Epic Poetry, JC>

7. Systems that exhibit this phenomenon have a so-called “universal equilibrium range” that can be split into subranges, according to the “second similarity hypothesis.” This phenomenon’s “closure problem” can be dealt with by using “k-epsilon” and “k-omega” models of stress transport. In systems that exhibit this phenomenon, values of the energy spectrum are proportional to the five-thirds power of the wave number, and energy (*) dissipates from larger to smaller scales in a Richardson cascade. Characteristic velocity, time, and length scales for this behavior are named for Andrei Kolmogorov (“kull-ma-GOR-uff”). It occurs when the ratio of velocity to kinematic viscosity is high, such when inertial forces predominate over viscous ones. For 10 points, a high Reynolds number defines what regime of unstable flow?

ANSWER: **turbulence** [or **turbulent** flow or **turbulent** behavior; prompt on **flow**]
<Physics, WA>

8. Steve Reich’s *Clapping Music* is based on an African pattern named for these objects. These objects name a [emphasize] *compositional style* exemplified by a slow F major piece in 6/4 time in which the right hand cycles rising broken triads, usually “C F A,” while the left hand alternates longer notes of the tonic chord above and below that, as a violin plays a stepwise diatonic melody. These objects name a compositional style exemplified by a piece dedicated to an 18-year-old daughter, *Für Alina*, and (*) *Spiegel im Spiegel* (“SHPEE-gul im SHPEE-gul”). The tierce is tuned a minor third above, and the hum is one octave below, these objects’ perceived strike tone. These objects nickname a Prelude in C-sharp minor by Rachmaninoff. A Latin word for the sound of these objects names Estonian composer Arvo Pärt’s (“pairt’s”) minimalist style, *tintinnabuli*. For 10 points, name these flared metal objects that are rung in churches.

ANSWER: **bells** [accept African **bell** pattern or “The **Bells** of Moscow”; accept **tintinnabuli** or **tintinnabula** or **tintinnabulum** before “tintinnabuli” is read; do not accept or prompt on “mirrors”]
<Classical Music/Opera, WA>

9. NASA studies of cerebral hemodynamics have compared the tight skin around the legs of these animals to a “gravity suit” for its properties of edema prevention. It is contested whether there are one or four species of these animals, but their subspecies rarely interbreed and all have distinct pelage patterns, such as the neighboring “reticulated” and “Rothschild’s” types. Among all animals with a four-chambered stomach, this one has the heart with the greatest mass. These animals frequently use their dental pads to consume (*) acacia (“uh-KAY-shuh”) leaves. A blacksmith strengthening his arms is analogized to these animals continuously stretching one of their body parts to reach leaves in a classic example of Lamarckian (“luh-MAR-kee-in”) theory. Because they are ungulates with spots, these animals were historically also called camelopards (“kuh-MEL-uh-pards”). For 10 points, name these African animals with very long necks.

ANSWER: giraffes [accept any subspecies of the genus Giraffa, such as reticulated giraffe or Rothschild’s giraffe; prompt on ruminants; prompt on ungulates before “ungulates”; prompt on camelopards before “camelopards”]

<Biology, WA>

10. Historically, high-quality vodka that was rated above “good wine” was called these people’s “wine.” An order of precedence among groups of these people complicated the selection of candidates under the *mestnichestvo* (“m’yest-NEE-ch’yest-vah”) system. In part because they had molested him as a child, Ivan the Terrible had a number of these people executed. To undermine the influence of these people, a tsar introduced a system in which collegiate registrars were (*) graded “K-14.” The *okolnichy* (“ah-KAHL-nee-chee”) ranked just below these people in social status. A council of these people who advised the tsar was abolished under Peter the Great, who broke these people’s power by elevating the service gentry via the Table of Ranks. For 10 points, give this name for high-ranking medieval and early modern Russian and other Slavic aristocrats.

ANSWER: boyars [prompt on nobles or nobility or Russian nobility or aristocracy or gentry by asking for the specific Russian word; do not accept or prompt on “service gentry”]

<Continental post-600 History, WA>

11. The decree “Vigilanti,” which was issued in response to events associated with this man, forbade booksellers from exclusively offering books to the celebrants of Masses. In Acts, the story of this man’s conversion is immediately followed by the story of an Ethiopian eunuch baptized in a pond. According to Acts, the residents of Samaria called this man the “Great Power of God” at the time of Philip’s arrival. After this man’s baptism, he asks (*) Peter for the ability to confer the Holy Spirit through the Laying on of Hands and is told “May your money perish with you.” Pope Gregory VII excommunicated the Holy Roman Emperor Henry VI in 1076 for participating in sins named after this man as part of the Investiture Controversy. For 10 points, name this man who names the sin of buying and selling church offices.

ANSWER: Simon Magus [accept Simon the Magician, Simon the Sorcerer, or equivalents; prompt on Simon or simony]

<Religion, BB>

12. This leader granted a constitution modeled on the Meiji constitution to replace the old law called the *Fetha*. Hamid Idris Awate began a three-decade-long struggle for independence by starting a rebellion against this leader in a majority Tigrayan coastal region. This leader abolished slavery in his country a decade after ascending to the title of *negus*, thus succeeding his country’s last female monarch. This man died in Alem Bekagn (“AH-lem beh-KAH-gun”) prison after being deposed during a (*) famine at the peak of the 1970s oil crisis; he was then briefly succeeded by his son Amha. This first chair of the Organization of African Unity was deposed by a junta of Marxist officers who were led by a man named Mengistu and called themselves the Derg. For 10 points, name this “Lion of Judah” and final emperor of Ethiopia.

ANSWER: Haile Selassie I [or Haile I or Ras Tafari Makonnen; prompt on Haile]

<World History, WA>

13. **“Cool Black” and “Happy Green” are two varieties of this structure’s *kawaii* mascot designed by the Japanese company Sanrio. The firm RWDI designed a large steel sphere that features prominently in this structure, which is the largest of its kind in the world. The façade of this structure uses a double chamfered step to reduce crosswind oscillations; its other façade elements include emblems resembling money boxes and coins. The architect (*) C. Y. Lee designed this building, whose tuned mass damper is visible from an observation deck on the 88th and 89th floors. The building had the fastest elevator until 2016, when it was claimed by the Shanghai Tower. For 10 points, name this skyscraper, the world’s tallest from 2004 until 2011, located in the capital city of Taiwan.**

ANSWER: **Taipei 101** [accept **Taipei World Financial Center**]

<Other Art: Architecture, NB>

14. **In a story from this country, a woman fleeing a religious riot has her nipples examined for a rash by the medical student Chika. In another story from this country, a man earns a 20-pound “egg-rasher” reward for turning over some rebel currency, but later gives the money to thieves. In that story from here, a bicycle taxi business is operated by a man who celebrates his “happy survival” of a war. This country is home to the authors of the collection (*) *The Thing Around Your Neck* and the story “Civil Peace.” A writer from here gave the speech “We Should All Be Feminists,” which was sampled by Beyoncé. This country is the setting of a novel in which a man hangs himself to avoid trial by missionaries, thus violating Umuofia’s customs. For 10 points, name this home of Chimamanda Adichie (“chee-mah-MAN-duh uh-DEE-chee”) and Chinua Achebe.**

ANSWER: **Nigeria** [or Federal Republic of **Nigeria**] (The first story is Adichie’s “Private Experience.”)

<Short Fiction, WA>

15. **Walsh et al. proposed that this object’s migration accounted for the differential distribution of “s type” and “c type” objects. A class of objects with periods less than 20 years are referred to as this object’s “family.” The mass gap of 40 percent between this object’s L4 and L5 swarms is not fully accounted for by the Nice (“neese”) model. Scattering by this object caused most (*) NEOs (“N-E-O’s”) to take eccentric orbits. Orbital resonances with this body in ratios such as 2:1 (“two to one”), 3:1, 5:2, and 7:3 are the location of Kirkwood gaps. Two Lagrange points in this object’s orbit are the locations of most trojans. For 10 points, most asteroids are found between Mars and what largest Solar System planet?**

ANSWER: **Jupiter** [accept **Jupiter** family comets]

<Other Science: Astronomy, WA>

16. **Waterfalls flow into the Korana River in this country’s Plitvice (“plit-VEE-tseh”) Lakes region. A submerged range that ran parallel to this country’s Velebit Mountains forms the Zadar Archipelago, whose southern portion makes up Kornati National Park. A prominent mountain range takes its name from Dinara, a peak found in this country. A hard sheep milk cheese originated from this country’s Pag Island, which is south of a port city on the (*) Kvarner Gulf called Rijeka (“REE-yeh-kah”). A city developed by Roman refugees who fled this modern-day country’s town of Salona was built around the Palace of Diocletian; that city in this country, Split, lies in the Dalmatia region along the Adriatic Sea. For 10 points, name this Balkan country which contains Dubrovnik and Zagreb.**

ANSWER: **Croatia** [or Republic of **Croatia**; or Republika **Hrvatska**]

<Geography, BD>

17. **Because a certain property of these molecules does not follow a Boltzmann distribution, negative peaks are formed on NMR spectra in a technique used to study reactions involving these molecules called CIDNP (“kid-nip”). DPPH is used as a standard for position and intensity in another technique used to analyze these molecules. They form moderately stable compounds with nitrones and nitroso compounds. Triphenylmethyl**

and (*) TEMPO are stable versions of these molecules that have orbitals called SOMOs. ESR spectroscopy is used to analyze these molecules, which are produced via homolysis of covalent bonds. Reactions involving these molecules often feature fish-hook arrows and proceed through initiation, propagation, and termination steps. For 10 points, name these high-energy molecules with unpaired electrons.

ANSWER: free **radicals**

<Chemistry, RRP>

18. A child proves his membership of this family by finding deadly snakes in a bag of flour and kneading it into the bread regardless. The namesake founder of this family is born after a wish-maiden drops an apple onto his mother's lap and he spends six years in the womb. That founder of this family owns a hall with a great oak tree, into which a one-eyed stranger sticks a sword. After being falsely accused of adultery, a daughter of this family named (*) Svanhild is trampled to death by horses. A member of this family wields the sword Gram and learns of his foster father's impending betrayal after slaying Fafnir. An Icelandic poetic cycle named for this family tells of a man who crosses a wall of fire to rescue Brynhild. For 10 points, name this mythical family that lends its name to the saga describing the adventures of Sigurd.

ANSWER: **Völsung** family [accept **Völsunga** saga]

<Mythology, JC>

19. The skin of this novel's protagonist burns when water suddenly heats up in a shower, after which she sees a man lustfully gazing at her from outside. A character in this novel confuses the sound of his wife's indigestion with the sound of cannons; when his wife dies, the smell at her funeral is so nauseating that few guests attend. A mother in this novel is unable to produce milk due to shock at her husband's death, so she has a servant raise her daughter. This novel begins by stating that, to avoid tears from (*) onions, one should place an onion on one's head. The protagonist of this novel, who is courted by Doctor Brown, makes people sick at a wedding by crying into the batter for the cake that she bakes with her caregiver Nacha. A recipe begins each of the twelve sections of this novel, which centers on Tita de la Garza ("TEE-tah de la GAR-sah"). For 10 points, a sweet substance titles what novel by Laura Esquivel ("LAO-rah ESS-kee-vell")?

ANSWER: ***Like Water for Chocolate*** [or ***Como agua para chocolate***]

<Long Fiction, WA>

20. According to a widespread rumor, one of these people kidnapped Napoleon and took him to New Orleans before he died. After a community of these people moved from Mexico into Texas, their colony of Campeche ("cam-PAY-chay") grew into the city of Galveston. A "General History" of these people was authored by Charles Johnson. One of these people named Abraham Blauvelt founded the settlement of (*) Bluefields in present-day Nicaragua. After a number of these people got drunk in Calabar, their leader Bartholomew Roberts was killed. These people were usually brought into government employment using letters of marque and reprisal. In the 17th century, a large community of these people lived on Tortuga. For 10 points, identify these people who include Henry Morgan, the namesake of a rum brand.

ANSWER: **pirates** [or **privateers** or **buccaneers**; prompt on **outlaws** or **sailors**]

<British/CW History, WA>

Bonuses

1. This man often paraphrased political philosopher Eric Voegelin with his slogan “Don’t immanentize the eschaton (“ESS-kuh-tawn”),” referring to what he considered unattainable ideological utopias. For 10 points each:

[10] Name this conservative and one-time mayoral candidate for New York whose residence of Sharon, Connecticut, became the center of the founding of the Young Americans for Freedom.

ANSWER: William F. **Buckley, Jr.**

[10] Citing the influence of publications such as *The Nation* and *The New Republic* in bringing about the New Deal, Buckley founded this conservative magazine in 1955.

ANSWER: ***National Review***

[10] Buckley was also the host of this talk show for over 30 years, on which he once told Noam Chomsky that he might “smash [him] in the goddamn face” in reference to his debate with Gore Vidal a year earlier.

ANSWER: ***Firing Line***

<US History, AK>

2. This poet advised “boys, be in nothing so moderate as in love of man” in a poem in which he remembers “the flower fades to make fruit, the fruit rots / to make earth.” For 10 points each:

[10] Name this poet of “Shine, Perishing Republic.” This proponent of Inhumanism in poetry said that he “made stone love stone” in building his poem “Tor House.”

ANSWER: Robinson **Jeffers** [or John Robinson **Jeffers**]

[10] In “Be Angry at the Sun,” Jeffers tells critics of America that “you are not [this poet] you know, / to lampoon these crude sketches of Caesar.” This ancient poet wrote an elegy for his lover’s pet sparrow.

ANSWER: **Catullus**

[10] Jeffers wrote “God built our peace and plastered it with wars” in a poem about this war, which is the subject of Wilfred Owen’s poem “Dulce et Decorum est.”

ANSWER: **World War I** [or **WWI**; accept the **Great War**]

<Non-Epic Poetry, EL>

3. While the ethnographic accounts of Gerald of Wales generally denigrate Ireland in most ways, they do offer praise for the Irish use of this instrument. For 10 points each:

[10] Identify this common type of instrument exemplified by the Irish *cláirseach* (“KLAR-shuck”), which was found on an older version of the Irish flag.

ANSWER: **harps** [or Celtic **harp**; prompt on **string** instrument]

[10] This blind harper is frequently regarded as “Ireland’s last bard” and as Ireland’s national composer. Irish harper Gráinne (“GRON-yuh”) Yeats, who married W. B. Yeats’s son Michael, wrote a biography of this composer of airs such as “The Fairy Queen.”

ANSWER: Turlough O’**Carolan** (“TUR-lock oh-CAROL-in”)

[10] Though they were written for harp, many of Carolan’s airs are often arranged for this other Celtic instrument. This woodwind provides the dominant sound of Scottish military bands.

ANSWER: **bagpipes** [or **pipes**; or Great Highland **bagpipes**]

<Other Art: Misc Auditory, WA>

4. Every Möbius transformation can be thought of as translations and rotations of this object. For 10 points each:

[10] Identify this object named for a German mathematician. Stereographic projections map this object to the complex plane.

ANSWER: **Riemann sphere** [prompt on **sphere**]

[10] The Riemann sphere is composed of the complex plane plus a point representing this value located at the pole opposite zero. In complex analysis, a function's pole is the point at which the function has this value because its reciprocal is zero.

ANSWER: **infinity**

[10] Möbius transformations can be categorized as hyperbolic, parabolic, loxodromic, or as a function described by this term that maps circles centered about the origin to themselves. A doubly-periodic meromorphic function is also described by this term.

ANSWER: **elliptic** [or **elliptic** Möbius transformation; or **elliptic** functions]

<Other Science: Math, AK>

5. Belgian journalist Paul Lévy supposedly came up with the design for this symbol after viewing a statue of the Virgin Mary. For 10 points each:

[10] Identify this non-national flag that has a blue background and a circle of twelve golden stars in the middle.

ANSWER: **European** flag [or flag of **Europe**; or flag of the **EU**; or flag of the **European Union**]

[10] It's not Cyprus, but the design of this European country's flag is partly inspired by that of the EU flag, as it has a blue background, a gold map of the country itself at the middle, and several white stars above it.

ANSWER: **Kosovo** [or Republic of **Kosovo**; or Republika e **Kosovës**]

[10] This architecture firm proposed an EU flag design based on barcodes, since it would enable new member countries to be added to the symbol easily. This firm run by Rem Koolhaas created the "Image of Europe" exposition as part of its research on how to rebrand Europe.

ANSWER: **OMA** [or **Office of Metropolitan Architecture**]

<Other/Misc Academic, WA>

6. Answer the following about the plays of the medieval author Hrosvitha of Gandersheim, for 10 points each.

[10] Like the bestselling medieval collection *The Golden Legend*, most of Hrosvitha's plays are hagiographies, meaning that they are biographies of these holy people.

ANSWER: **saints** [or **sanctus** or **sancti**]

[10] The plays in Hrosvitha's collection *The Book of Drama* are intended as imitations of this Roman playwright, who used Menander's comedies as the basis for his plays *The Self-Tormentor* and *The Eunuch*.

ANSWER: **Terence** [or Publius **Terentius** Afēr]

[10] Hrosvitha's plays are all examples of plays of this type, which were commonly written by women who were barred from performing on stage in pre-modern Europe. This type of play, which is intended for private reading rather than public production, is exemplified by John Milton's *Samson Agonistes*.

ANSWER: **closet** drama

<Drama, WA>

7. Anti-psychiatry activists often compare this book to the medieval witch-hunting treatise *Malleus Maleficarum*. For 10 points each:

[10] Name this book published by the American Psychological Association that provides a standard list of symptoms for mental disorders.

ANSWER: **DSM** [or **Diagnostic and Statistical Manual** of Mental Disorders; accept **DSM-5**]

[10] This 1961 book by Thomas Szasz ("soss") criticizes the attempts to use tools such as the DSM to diagnose mental disorders in a way analogous to medicine, and compares psychiatry to alchemy and astrology.

ANSWER: *The **Myth of Mental Illness***

[10] Followers of this French psychotherapist have also expressed opposition to the DSM, preferring to base their methods on a "return to Freud." This theorizer of the "mirror stage" pioneered the use of variable-length sessions.

ANSWER: Jacques **Lacan**

<Social Science: Psychology, WA>

8. Variables that occupy opposite corners of the thermodynamic square have this relation. For 10 points each:

[10] Give this relation in thermodynamics between two variables whose product has units of energy, such as temperature and entropy.

ANSWER: **conjugate** variables

[10] In the definition of internal energy, this quantity multiplies the differential of its conjugate variable, volume. In simple phase diagrams, temperature is often on the x -axis and this quantity is measured in pascals on the y -axis.

ANSWER: **pressure** [or **P**]

[10] The expression for the differential internal energy in terms of its conjugate variables relies on the Maxwell relation that the [read slowly] negative partial derivative of pressure with respect to entropy at constant volume equals this partial derivative at constant entropy.

ANSWER: **partial** derivative of **temperature** with respect to **volume** [or **dT** over **dV**]

<Chemistry, AK>

9. French composers distinguished between “petit” types of these pieces accompanied only by continuo and “grand” types with choir and orchestra, the latter of which was a favorite of Jean-Baptiste Lully (“loo-LEE”). For 10 points each:

[10] Name this genre of sacred vocal piece that originated in medieval Europe. Classical era examples of this genre include Mozart’s *Ave verum corpus*.

ANSWER: **motets**

[10] Most of this composer’s sacred music output consists of *petit motets*, such as his three settings of the Tenebrae service for Holy Wednesday. A treatise by this composer contains eight preludes and an *allemande*.

ANSWER: **François Couperin** (“coop-RAN”) [or **Couperin le Grand**; prompt on **Couperin**]

[10] Many of Lully and Couperin’s motets were commissioned by this French monarch, who employed Lully for most of his life. His patronage of music contributed to his reputation as the “Sun King.”

ANSWER: **Louis XIV** [prompt on **Louis**]

<Classical Music/Opera, WA>

10. Answer the following about Greek myths set in North Africa, for 10 points each.

[10] Classical myths held that a member of this civilization named Dido founded the North African city of Carthage. Greeks credited the invention of the alphabet they used to this ancient Levantine civilization.

ANSWER: **Phoenicians** [or **Punic** people or **Ponnim**; or **Canaanites** or **Kan’anim**]

[10] This nymph was raised on the shores of the mythical Lake Tritonis in Libya. Athena created a small wooden idol named in honor of this nymph that protected Troy as long as it was within the city’s walls.

ANSWER: **Pallas** [do not accept or prompt on **Palladium**]

[10] Herodotus considered this god to be one of the few Greek gods to have names that were not of Egyptian or Pelasgian (“pell-AZ-jee-in”) origin. This god fathered the North African giant Antaeus by Gaia and two children by Libya.

ANSWER: **Poseidon**

<Mythology, WA>

11. The imitation of Eastern Han designs by Baekje (“pek-cheh”) kings in this country is illustrated by the *seoksu* (“suck-soo”) animals buried in King Muryeong’s (“moo-ryung’s”) tomb, which dates to its Three Kingdoms Period. For 10 points each:

[10] Name this non-China country that has designated many popular archaeological sites, such as the Cheomseongdae (“chum-sung-day”) Observatory built by Silla (“shill-lah”) kings, as National Treasures.

ANSWER: South **Korea** [or Republic of **Korea**; or **Hanguk** or **Daehan Minguk**; do not accept or prompt on “North Korea” unless something crazy with unification happens]

[10] The National Treasures include a copy of this text carved into over 80,000 wooden blocks stored at Haeinsa (“heh-een-sah”) temple. Many Buddhist masters, such as a 7th-century man who visited monks in Harsha’s empire, were given this text’s name as an honorary title.

ANSWER: **Tripitaka** [or **Tipitaka** or **Daejanggyeong** or **Sānzàng**; prompt on **Three Baskets**]

[10] Among the treasures are the Seokguram (“suck-goo-rahm”) grottoes, where many of these objects are found, just like in China’s Longmen (“long-mun”) grottoes. Several of these objects exemplifying Gandharan art were dynamited in 2001 on the orders of Mullah Omar.

ANSWER: **Buddha statues** [or equivalents; accept **Daibutsu**; prompt on **Buddha** or **butsu** or **Bamiyan Buddhas** or **statues** or **sculptures**]

<Archaeology, WA>

12. The namesake “constant” of these materials is directly proportional to a material’s relative permittivity. For 10 points each:

[10] Give this term for an insulating material that can be polarized by an electric field. Inserting one of these materials between two parallel plates in a capacitor will increase the capacitance.

ANSWER: **dielectric** material

[10] The “electric” variety of this dimensionless quantity represents the response of a dielectric material to an applied electric field; its similar “magnetic” variety provides the same for a magnetic field.

ANSWER: **susceptibility** [accept electric **susceptibility** or magnetic **susceptibility**]

[10] Consider a dielectric material with electric susceptibility equal to x . Express the material’s [emphasize] *relative* permittivity in terms of x . You have ten seconds.

ANSWER: **$x + 1$** [or **$1 + x$** ; do not accept or prompt on any other answer]

<Physics, WA>

13. Answer the following related to Amrita Sher-Gil, a pioneering modernist artist of Sikh ancestry, for 10 points each.

[10] Most of Sher-Gil’s works are set in Indian examples of these places, such as a painting of people from one of these places “going to a market,” and a “scene” set in one that fetched 6.9 crore at auction. A different modernist painting titled for one of these places reflects the artist’s memory of Vitebsk and contains an upside-down violinist.

ANSWER: **villages** [accept **Village Scene** or **I and the Village**]

[10] Sher-Gil was actually born in this country, where her family lived. An artist from this country was called the “eye of Paris” by Henry Miller for his nighttime photographs and took his mononym from this country’s town of Brassó (“BRAW-sho”).

ANSWER: **Hungary** [or **Magyarország**] (The artist is Brassai.)

[10] Sher-Gil is often compared with this other pioneering female modernist, the wife of Diego Rivera who painted self-portraits such as *The Broken Column*.

ANSWER: Frida **Kahlo**

<Painting/Sculpture, WA>

14. Answer the following related to the Taungoo (“TOWN-goo”) Empire, an early modern state in Southeast Asia, for 10 points each.

[10] The Taungoo Empire and its successor states, including the Konbaung dynasty, were both based out of this modern-day country later governed from Mandalay by the British.

ANSWER: **Burma** [or **Myanmar**]

[10] The Taungoo sent aid to the Sri Lankan kingdoms of Kandy and Kotte to help them deal with the advances of this country, which lost its holdings in Calicut in 1526. This country’s forces captured Malacca in 1511.

ANSWER: **Portugal** [or Kingdom of **Portugal**]

[10] The westernmost territories of the Taungoo were in this modern-day state in eastern India, which was once a princely state governed from Kangla Fort. This state's native brand of small ponies were ridden by horsemen who developed the modern rules of polo and threw poisoned *arambai* darts against their foes.

ANSWER: **Manipur**
<World History, WA>

15. This philosopher qualifies his notion of transcendentalism with the word “weak,” a stance critiqued by Karl-Otto Apel, with whom this philosopher developed a theory of discourse ethics. For 10 points each:

[10] Name this critical theorist who wrote *Theory of Communicative Action*.

ANSWER: Jürgen **Habermas**

[10] In the framework of Habermas, communicative and/or emancipative rationality are contrasted with this sort of rationality, which refers to a strategic use of rationality for an end, as in science. Max Horkheimer linked the triumph of this kind of rationality to the triumph of the bureaucratic state.

ANSWER: **instrumental** rationality [or **instrumental** reason; accept *Critique of Instrumental Reason*]

[10] The concept of “instrumental rationality” was first elucidated by this German philosopher and sociologist, who contrasted it with “value rationality.” He wrote *The Protestant Ethic and the Spirit of Capitalism*.

ANSWER: Max **Weber**
<Thought, WA>

16. A poetic genre named for this profession holds an annual National Gathering in Elko, Nevada, and includes such poems as “Reincarnation” by Wallace McRae and “Vegetarian’s Nightmare” by Baxter Black. For 10 points each:

[10] Identify this profession that is the focus of novels like Larry McMurtry’s *Lonesome Dove* and Owen Wister’s *The Virginian*.

ANSWER: **cowboys** [accept **cowboy** poetry; prompt on cattle ranchers or ranch hands]

[10] This author of *Border Trilogy* and *No Country for Old Men* included an epilogue about the closing of the frontier in his novel *Blood Meridian*.

ANSWER: Cormac **McCarthy**

[10] The title character of this classic of cowboy poetry by Robert W. Service tells its speaker after the title event that “Since I left Plumtree, down in Tennessee, it’s the first time I’ve been warm” while its speaker is caught in a snowstorm in the Yukon.

ANSWER: “The **Cremation of Sam McGee**”

<Misc. Lit, JC>

17. One explanation for the existence of nullomers involves their inclusion of hypermutable sequences containing these two nucleobases. For 10 points each:

[10] Name these two nucleobases. Sites containing these two nucleobases are the primary locations for DNA methylation in humans.

ANSWER: **cytosine** AND **guanine** [or **C** AND **G**; accept **CpG** sites or **CG** sites or **CG** sequences]

[10] The methylated cytosine in a CpG site can spontaneously undergo this type of reaction to become a thymine. Guanine can also undergo this type of reaction to become xanthine.

ANSWER: **deamination** [accept answers indicating **removing** an **amine** or **NH₂** group]

[10] In humans, the ammonia produced by a deamination reaction is typically combined with CO₂ to form this compound in the liver. This compound, which names a cycle whose intermediates include citrulline and ornithine, is excreted in urine.

ANSWER: **urea** [or **(NH₂)₂CO**]

<Biology, JL>

18. These three theologians, who are named for the region they came from, pushed back against the Arianism revived by Eunomius by emphasizing Tertullian's notion of "one substance in three persons." For 10 points each:
[10] Give the collective name in the Eastern Orthodox Church for the saints Basil of Caesarea, Gregory of Nyssa, and Gregory of Nazianus.

ANSWER: **Cappadocian** Fathers [or Three **Cappadocians**]

[10] Gregory of Nazianus became the Ecumenical Patriarch of this Eastern Roman capital. This city is named for the Roman Emperor who extended religious toleration to Christians with the Edict of Milan.

ANSWER: **Constantinople**

[10] While not a Cappadocian Father, a "golden-mouthed" orator of this name is one of the three Holy Hierarchs. Another saint of this name is known as the "forerunner" and is held to be the last Old Testament prophet in Eastern Orthodox Christianity.

ANSWER: **John** [accept St. **John** Chrysostom or St. **John** the Baptist]

<Religion, AK>

19. People who complied with these things were granted "right of escort" in the Holy Roman Empire. For 10 points each:

[10] Identify these inconveniences. The term "robber barons" originally referred to German nobility and knights who imposed these things in a lawless manner, prompting a hundred cities along the Rhine to form a league to oppose them.

ANSWER: **tolls** [or **Maut**; prompt on **taxes** or **river taxes** or **fees** or **tribute**]

[10] Robber barons would construct "toll" examples of these fortifications in order to guard key areas and make sure that tolls were actually collected. Neuschwanstein ("NOYSH-von-shtyne") is a German one of these fortifications.

ANSWER: **castles** [or **Schloss**]

[10] The influence of Robber barons in the Rhineland peaked during the lengthy interregnum that ensued after Innocent IV ("the fourth") had this emperor deposed. Elsewhere, this emperor issued the Constitutions of Melfi.

ANSWER: **Frederick II** [or **Friedrich II**; prompt on **Frederick** or **Friedrich**]

<Continental post-600 History, WA>

20. This author created a character who learns from a Captain that a "great scroll" written above contains knowledge of all events. For 10 points each:

[10] Name this author of *Jacques the Fatalist* who was the chief editor of the first *Encyclopedia*, compiled by his fellow *philosophes* in France.

ANSWER: Denis **Diderot**

[10] The structure of *Jacques the Fatalist* is based on this novel, whose phrase "every ball has its billet" was also reused by Diderot. A character in this novel describes it as "a story about a Cock and a Bull."

ANSWER: **Tristram Shandy** [or *The Life and Opinions of **Tristram Shandy**, Gentleman*]

[10] Diderot claimed that Laurence Sterne, *Tristram Shandy's* creator, was the English version of this author. A friar created by this author defends his precious wine by shaping a large wooden cross into a cudgel and lance, then using those weapons to brutally murder his enemies.

ANSWER: François **Rabelais** (The character is Friar John of the Goblets and Funnels.)

<Long Fiction, WA>

