

Bulldog High School Academic Tournament 2016 (XXV): "Pencil and paper ready..."

Written by Yale Student Academic Competitions (Stephen Eltinge, Adam Fine, Isaac Kirk-Davidoff, Moses Kitakule, Laurence Li, Grace Liu, Olivia Noble, Jacob Reed, Basil Smitham, Connor Wood, Haohang Xu, and Cathy Xue)

Edited by Jacob Reed

Packet 1 Tossups

1. **A man wearing *this* color shirt tears off Jesus's clothes in El Greco's *Disrobing of Christ*. A woman holds a black lamb as people walk between sand dunes in the background of a Paul Gauguin painting titled for this color. This is the color of the ceiling in *The (*) Night Café* and the curtain in the background of *The Ambassadors*. This is the color of the woman's dress in the *Arnolfini Wedding*. Henri Matisse painted his wife with her face bisected by a stripe of this color. An apple of this color obscures the face of Magritte's *The Son of Man*. For 10 points, John Constable's *Dedham Vale* uses what color to depict the trees and grass?**

ANSWER: **green** <AF/JR>

2. **A king with this name was supposedly the lover of George Villiers, Duke of Buckingham. Henry Brooke led a failed attempt to replace a king of this name with his cousin Arabella, in the Main Plot. Another king with this name issued the Declaration of Indulgence, which was rejected by the (*) Immortal Seven. That king of this name was the father of Queen Anne. The first English king of this name was targeted by the Gunpowder plot and also ruled Scotland; the second was deposed by William III in the Glorious Revolution. For 10 points, give this name of the Stuart kings who were the father of Charles I and the son of Charles II.**

ANSWER: **James** [accept **James I** or **James II**] <AF>

3. **This man killed the great-grandfather of Achilles by flinging him off the top of a cliff. The Dioscouri kidnapped this man's mother in retribution after he carried off an infant Helen. This son of Aethra journeyed to the Underworld and was rescued from the Chair of Forgetfulness by (*) Heracles, unlike his friend Pirithous. While traveling to meet his father after lifting a rock to retrieve a sword and pair of sandals, this hero killed bandits like Sciron and Procrustes. On his most famous expedition, he was aided by Ariadne and given a ball of string to escape from the Labyrinth. For 10 points, name this Greek hero who ruled Athens and slew the Minotaur.**

ANSWER: **Theseus** <CX>

4. **The speaker of this poem complains that he does not have the "skill in speech...to make [his] will quite clear to such a one." Its speaker laments that the title character did not appreciate his "favour at her breast" or his "gift of a nine-hundred- years-old name" any more than "the dropping of the daylight in the West" or a "bough of cherries." The title character of this poem had a (*) "heart...too soon made glad" and called up a "spot of joy" while being painted by Fra Pandolf. Its speaker describes the title character "looking as if she were alive" in a painting, but insinuates that he had her murdered. For 10 points, name this dramatic monologue by Robert Browning.**

ANSWER: **"My Last Duchess"** <CW/JR>

5. **These molecules are modeled by the equation " V equals V -max- S over K - m plus S ," which uses a steady-state approximation. Their function can be enhanced via cooperativity, and they are usually regulated by feedback inhibition. The function of these molecules is described by the Michaelis-Menten model. These molecules, which often require (*) cofactors, can be inhibited competitively or noncompetitively, or regulated allosterically. Via an induced fit, the active site of one of these molecules binds to its substrate, lowering the activation energy of a reaction. For 10 points, name these proteins that catalyze metabolic reactions.**

ANSWER: **enzymes** [prompt on "proteins"; prompt on "catalysts" before the word "catalyze"] <JR>

6. In one role, this actor confuses a rehearsal for *The Sound of Music* with a Neo-Nazi gang. In another movie, this actor's character rips apart nocturnal space scorpions, having joined an imam and bounty hunters on a planet that falls into an endless night. This actor reprised that role, a bounty hunter with night-vision eyes, in *The Chronicles of (*) Riddick*. He is most well-known for playing the love interest of Letty and mortal enemy of Owen and Deckard Shaw. This actor played the pro-family values leader of a multi-ethnic gang of street racers—Dominic Toretto—in *The Fast and the Furious*. For 10 points, name this movie star with a petroleum-related name.
ANSWER: Vin Diesel [or Mark Sinclair] <IKD>

7. A substance's bulk modulus has the same units as this quantity, and is equal to "negative volume times the derivative of *this* value with respect to volume." A reference value of 20 millionths of this quantity's SI unit is used to define the decibel in acoustics. This value is equalized in all directions and at all points in a fluid according to (*) Pascal's principle. This value is added to kinetic and potential terms to give a constant in Bernoulli's equation, which implies that this value decreases if a fluid's velocity increases. For 10 points, name this quantity equal to force divided by the area over which it is applied, which is measured in the atmosphere with a barometer.
ANSWER: pressure <SE>

8. This city is home to a pair of steep concrete slides in its Noe ("noh-ee") Valley district. In this city's Richmond District, Cliff House overlooks the ruins of the Sutro Baths. This city held a World's Fair on its artificial "Treasure Island." It was served by the transit hub of Sausalito in (*) Marin County. It's not Rome, but this city's original "Seven Hills" include Twin Peaks, Telegraph Hill, and Nob Hill. This city is home to Pier 39 in its Fisherman's Wharf district. Many Chinese immigrants came to the U.S. via this city's Angel Island. For 10 points, name this city in Northern California, home of the Golden Gate Bridge.
ANSWER: San Francisco [or SF] <JR>

9. A spacecraft named for this person uses a photometer to measure the brightness of stars in the constellations Cygnus, Lyra, and Draco. This man described a model of the universe consisting of nested Platonic solids, one for each planet, in his *Mysterium Cosmographicum*. A spacecraft named for this person has used the "transit method" to discover over 1,000 (*) exoplanets since 2009. A set of postulates named for this man includes the "equal areas in equal time" law and the statement that orbits are ellipses with the sun at one focus. For 10 points, name this one-time assistant to Tycho Brahe, a German astronomer who proposed three laws of planetary motion.
ANSWER: Johannes Kepler [or Iohannes Keplerus] <SE>

10. In the fifth scene of this play, a character declares, "a good man yields when he knows his course is wrong, and repairs the evil. The only crime is pride." A king in this play is warned that he will lose "a son of his own loins." Later in this play, the king's son, (*) Haemon, stabs himself. The title character of this play is forbidden from sprinkling earth on her brother and is the sister of Eteocles and Ismene. It follows *Oedipus at Colonus* as the third Theban Play. This play revolves around Creon's refusal to allow Polyneices to be buried. For 10 points, name this play about a daughter of Oedipus, which was written by Sophocles.
ANSWER: Antigone ("an-tih-guh-NEE") <LL>

11. **In the D.C. area, much late nineteenth- and early twentieth-century work in this art form was done by Beatrix Farrand. The English style of this art form was refined by Capability Brown. Its most famous practitioner created the Emerald Necklace, collaborated with Calvert Vaux, and wrote *The (*) Cotton Kingdom*.** A lot of imagery of Apollo and a famous *Orangerie* were created by André Le Nôtre, who deployed this art form at Versailles. The most famous practitioner of this art form designed The Ramble and Lake, and The Great Lawn and Turtle Pond. For 10 points, name this art form used by Frederick Law Olmsted to create Central Park. ANSWER: **landscaping** [or **landscape architecture**; accept close equivalents involving shaping **landscapes**; prompt on answers like "gardening," any kind of "planning," or "park creation"; do **not** accept or prompt on just "architecture"] <JR>

12. **Many of the earliest manuscripts of this book have survived in Kufic and Mashq scripts. Contradictions within this book have been resolved with "abrogation," or *naskh*. This book ends with the section "Mankind," or "*an-nas*," which is about Shaitan. It begins with "The Opening" or the (*) *fatihah*.** People who have memorized this text are called *hafiz*, and they practice *tajweed*. Most sections of it begin with the *Basmala*. This text was standardized by Uthman. In *tafsir* and *fiqh*, this text is supplemented with the Hadiths. It is divided into *suras*. For 10 points, name this holy book of Islam. ANSWER: the **Quran** [accept similar-sounding answers like "**Koran**"] <JR>

13. **A poem from this movement repeatedly calls for a "rebirth of wonder." Another poem from this movement begins "Let's go, come on, let's go, empty our pockets and disappear." A poet from this movement collected "I Am Waiting" and "Junkman's Obligation" in *A Coney Island of the Mind*, published by his City (*) Lights Bookstore. A poem from this movement declares "I'm with you in Rockland," endlessly describes "Moloch," was dedicated to Carl Solomon, and was published by Lawrence Ferlinghetti. For 10 points, name this literary movement of the 1950s, including a poet who "saw the best minds of my generation destroyed by madness," Allen Ginsberg. ANSWER: the **Beat** Generation [accept **beatniks**; accept reasonable equivalents like "**Beat** poets" or "**Beat** movement"] <JR>**

14. **A capriccio for one of these instruments ends with a "fugue in imitation of the posthorn" and is titled for the "departure of a beloved brother." J.S. Bach's first four publications were a series of "exercises" for these instruments that included six partitas, a French Overture, and an (*) Italian Concerto.** Bach wrote sets of fifteen two- and three-part inventions for these instruments. He also wrote a set of forty-eight preludes and fugues in all the major and minor keys for a "well-tempered" one of them. For 10 points, name this class of instruments that includes the clavichord, harpsichord, and piano. ANSWER: **keyboard** instruments [or **Clavier**; accept **harpsichord**, **clavichord**, or **pianoforte**, but do **not** accept or prompt on "Organ"; accept **Clavier-übung**; accept *The Well-Tempered Clavier*] <JR>

15. **One holder of this title was persuaded to pursue it by his wife Tanaquil after an eagle took off his hat and then put it back on his head. Another holder of this title created the *Compitalia* festival and had his corpse run over by his daughter Tullia. That holder of this title divided his citizens into the *classis* and the *infra classem*, and also divided his capital into four urban tribes. One of the (*) seven holders of this title was kicked out of town by Lucius Junius Brutus after his son raped Lucretia. Holders of this title included Numa Pompilius, Servius Tullius, and Tarquin the Proud. For 10 points, name this title given to monarchs from a city founded by Romulus. ANSWER: **Kings of Rome** [or **Rex Romae**] <LL>**

16. **One of these elements is ionically bonded to a large heterocycle in an intercalating agent that is often used in gel electrophoresis. Another of these elements is found in a roughly 75-25 mix of its isotopes 35 and 37. A compound of one of these elements turns starches dark blue, and is named for Lugol. Within each period, these elements have the second-lowest atomic (*) radii and the second-highest ionization energy. This group contains elements that are solids, liquids, and gases at room temperature. These elements have the highest electronegativity, since they are only "missing" one valence electron. For 10 points, name these elements that include bromine and chlorine.**

ANSWER: **halogens** [or **group seventeen**; or **group seven-A**] <JR>

17. **This philosopher discussed the role of "communal sense" in reflective judgments, and coined the term *Weltanschauung* ("VELT-ahn-show-ung"). This philosopher claimed to be most awed by "the starry sky above me and the moral law within me." He noted that we cannot think without notions of quantity, quality, relation, and modality. This philosopher argued that the way we perceive the world is what creates the constructs (*) "space" and "time." His most famous work attempts to prove that synthetic *a priori* propositions are possible. His moral philosophy centers on the "categorical imperative." For 10 points, name this German Idealist philosopher who wrote *Critique of Pure Reason*.**

ANSWER: Immanuel **Kant** <JR>

18. **A famous short poem in this language begins "Above all summits is calm" and ends "just wait, soon you till will rest." Another short poem in this language claims that the title object "still burns like a streetlamp dimmed." This language of "Wanderer's Nightsong II" was used for a poem that compares the eyes of the title object to apples ripening and ends "You (*) must change your life." This language, used to write "Archaic Torso of Apollo," was also used in a collection that begins "Who, if I cried out, would hear me among the Angels' Orders?," the *Duino Elegies*. For 10 points, name this language of Rainer Maria Rilke and Johann Wolfgang von Goethe.**

ANSWER: **German** [or **Deutsch**] <JR>

19. **This civilization used provinces called *sepat* or *nome*. Its literature included the *Story of Sinuhe*. One of its earliest documents is the Narmer Palette. This civilization was briefly ruled from Sais ("SAH-eess") and Meroë ("meh-ROH-eh"). They believed in a life-force called *ka*. It was invaded by the *hyksos* and was the largest civilization to be raided by the (*) Sea Peoples. Its history includes three "intermediate periods." This civilization's agriculture was aided by its main river flooding at roughly the same time every year. They often used canopic jars and pioneered the growing of papyrus. For 10 points, name this ancient civilization that developed hieroglyphics.**

ANSWER: Ancient **Egypt** <JR>

20. **Rumors of an extramarital affair prevented this position from being taken by Bob Livingston. One man in this position claimed Ronald Reagan was "Herbert Hoover with a smile" and was succeeded by Jim Wright. Another man in this position founded the organization American Solutions for Winning the Future. That man in this position was officially reprimanded for providing false information to an (*) ethics committee and co-wrote the Contract with America. This position has recently been held by Tip O'Neill, Newt Gingrich, and John Boehner ("BAY-nur"). For 10 points, name this presiding officer of the U.S. House of Representatives.**

ANSWER: **Speaker** of the United States **House** of Representatives <LL>

Tiebreaker

21. A group of Swiss cantons allied with this organization were defeated in the Sonderbund War. This organization expressed "burning anxiety" about Nazi Germany in *Mit brennender Sorge*. This organization was supported by the "Centre Party." A set of laws aimed at this institution were released in May (*) 1873 and named for education minister Adalbert Falk. This institution, which issued the "Syllabus of Errors," was targeted by Otto von Bismarck's *Kulturkampf*. For 10 points, name this institution recently led by the German Joseph Ratzinger, also known as Benedict XVI.

ANSWER: the Roman **Catholic Church** [accept answers like "the **Pope**," "the **Papacy**," or "the **Vatican**"; prompt on answers like "the Church" or "Christianity"] <JR>

Packet 1 Bonuses

1. Answer some questions about the cytoskeleton, for 10 points each.

[10] The smallest components of the cytoskeleton are microfilaments composed of *this* protein. Cofilin twists this protein, which forms muscle fibers with an alphabetically-*later* protein.

ANSWER: **actin** [accept **F-actin**] (the other protein is myosin)

[10] Microtubules, the largest component of the cytoskeleton, are traversed by two motor proteins that transport cellular cargo. Name *either*.

ANSWER: **kinesin** OR **dynein**

[10] The intermediate filaments of the cytoskeleton frequently contain keratin. Keratin is also the major component of both hair and *these* hard coverings of the ends of fingers and toes.

ANSWER: **nails** [accept fingernails or toenails] <AF>

2. This book has the most verses in the Bible and contains both its longest and shortest chapters. For 10 points each:

[10] Name this Biblical book with one hundred-fifty chapters.

ANSWER: Book of **Psalms** [or **Tehilim**]

[10] Many psalms begin by claiming to have been written by *this* King of Israel. He seduced Bathsheba and used a sling to kill the Philistine giant Goliath.

ANSWER: King **David**

[10] Psalm 23 begins by making this claim, which is followed by the line "I shall not want."

ANSWER: "The **Lord is my shepherd**" [accept close equivalents indicating that **God** is the speaker's **shepherd**; if an answer is given in a foreign language, ask for an English translation] <ON>

3. Answer some questions about the Pankhurst family, for 10 points each.

[10] Sylvia and Adela Pankhurst were estranged from their mother Emmeline due to their opposition to *this* war. This war resulted in the ouster of H.H. Asquith and the ascendancy of David Lloyd George.

ANSWER: **World War I** [accept "The **Great War**"]

[10] Emmeline, Sylvia, Adela, and Christabel Pankhurst all supported this cause, which called for giving women a certain right. The goal of this cause was achieved with the Equal Franchise Act of 1928.

ANSWER: women's **suffrage** [accept equivalents that mention the right to **vote**]

[10] During World War I, Emmeline and Christabel Pankhurst shamed young men not serving in the military by handing them this small soft item. It is a traditional symbol of cowardice in Britain.

ANSWER: white **feathers** <LL>

4. Identify the following about famous debates in science, for 10 points each.

[10] In 1920, astronomers Harlow Shapley and Heber Curtis threw down over *these* things. Shapley thought that the Milky Way one of them was the whole universe, but Curtis argued that Andromeda was a separate "island universe."

ANSWER: **galaxies**

[10] Alfred Wegener was accused of having "wandering pole plague" after he proposed *this* geological theory. This theory became widely accepted once the seafloor spreading that drives it was understood.

ANSWER: **continental drift** [prompt on "plate tectonics"]

[10] In 1860, the Oxford University Museum was the site of a heated argument between the English bishop Samuel Wilberforce and *this* biologist, who vigorously defended natural selection.

ANSWER: T.H. **Huxley** [Thomas Henry Huxley] <SE>

5. Answer some questions about the death of Marat in art, for 10 points each.

[10] By far the most famous painting of *The Death of Marat* is by this French artist. This artist also created massive history paintings like *The Oath of the Horatii*.

ANSWER: Jacques-Louis **David**

[10] This artist's *Death of Marat* shows a naked red-headed woman in front of Marat's corpse, next to a bowl of fruit and a candle. This painter of *The Sick Child* also painted an ecstatic, topless *Madonna* with a red halo.

ANSWER: Edvard **Munch**

[10] This man's *Death of Marat* served as the frontispiece for a work by Benjamin Peret. Earlier, this artist painted six circus performers in the rose-colored *Family of Saltimbanques*.

ANSWER: Pablo (Ruiz y) **Picasso** [Pablo Diego José Francisco de Paula Juan Nepomuceno María de los Remedios Cipriano de la Santísima Trinidad Ruiz y Picasso] <AF>

6. Answer some questions about the short stories of Nikolai Gogol, for 10 points each.

[10] The first substory of Gogol's "Nevsky Prospekt" focuses on a quixotic man who aspires to this profession. In the Oscar Wilde novel, one of these people named Basil Hallward creates the title *Picture of Dorian Gray*.

ANSWER: **painter** [prompt on "artist"; if they answer with "portraitist," anti-prompt by asking "Could you be less specific?"]

[10] Gogol's most famous story is *this* one about the poor clerk Akaky Akakievich, who seemingly dies of embarrassment after being vituperated by a "person of consequence."

ANSWER: "The **Overcoat**" [or "**Shinel**"; accept "The **Cloak**" or "The **Mantle**"]

[10] In Gogol's "The Nose," Kovalyov first sees the title well-dressed body part while it's doing a two-part action. Name either part of that action; a description is fine.

ANSWER: **getting out of a carriage** and **going into a mansion** [accept **either** underlined part; accept rough equivalents] <JR>

7. This enormous ash tree had three roots, which were constantly gnawed by the dragon Nidhogg. For 10 points each:

[10] Name this world tree in Norse mythology. Odin used his spear to hang upside down from this tree in order to obtain the runes.

ANSWER: **Yggdrasil**

[10] Bifrost, a rainbow bridge guarded by Heimdall, connects Midgard with this realm of the gods, which is home to Odin's hall for fallen warriors, Valhalla.

ANSWER: **Asgard**

[10] Heimdall supposedly had this many mothers. Odin hung on Yggdrasil for this many days. Thor will take this many steps after killing Jormungandr. There are this many worlds in Norse mythology.

ANSWER: **nine** <CX/AF>

8. These peoples include the Luba and the Kikuyu. For 10 points each:

[10] Give this general term for many of the peoples of sub-Saharan Africa. Their ancestors settled much of that area in a namesake "migration" or "expansion," which started around four thousand years ago.

ANSWER: **Bantu** peoples

[10] The Bantu migration took place south of this geographical feature. It got its name from a kingdom in modern-day Angola that was eventually Christianized.

ANSWER: **Congo** River

[10] Another of the Bantu peoples was this ethnic group, who fought a series of wars against Britain in modern-day South Africa. Their most famous leader was Shaka.

ANSWER: ama**Zulu** people <JR>

9. Answer some questions about the reaction quotient, for 10 points each.

[10] If the equilibrium constant is greater than the reaction quotient, then the equilibrium will favor *this* side. The products of a chemical reaction are written on this side.

ANSWER: the **right**-hand side [or **forward** side]

[10] If you work with the reverse reaction, you have to make *this* mathematical change to the equilibrium constant and the reaction quotient.

ANSWER: take its **reciprocal** [accept **one over**; prompt on "inverse," "flip it," or "invert it"]

[10] Give the *numerator* of the expression for the reaction quotient of the following: "N-2 plus 3-H-2 is in equilibrium with 2-N-H-3." Express the concentration of a compound by just giving the formula of the compound.

ANSWER: "**N-H-3-squared**" [or "**N-H-3 to the second** power"; do **not** accept or prompt on "two-N-H-3"] <JR>

10. Quentin Compson commits suicide while at this institution. For 10 points each:

[10] Name this institution where Quentin tells the story of *Absalom, Absalom!* to Shreve.

ANSWER: **Harvard** University [accept **Harvard College**]

[10] Quentin Compson and *Absalom, Absalom!* were created by this American author.

ANSWER: William (Cuthbert) **Faulkner**

[10] At the end of *Absalom, Absalom!* Quentin tells Shreve that he doesn't hate this region. Faulkner often wrote about the lasting impact of losing the Civil War on this region.

ANSWER: the **South**east <JR>

11. Insurance companies often rely on amusing advertising to attract attention. Name some of those companies, for 10 points each.

[10] This car insurance company has used various characters in their commercials throughout the years, including a pig, a caveman, and a gecko.

ANSWER: **GEICO**

[10] This company used quarterback Aaron Rodgers to advertise their "Discount Double Check" service. Newer commercials from this company feature a wife who's suspicious of phone calls from "Jake, from" this company.

ANSWER: **State Farm** Insurance

[10] Commercials from this company feature character actor J.K. Simmons. It's recently produced a series of ads that feature a "hall of claims," like a "stag pool party."

ANSWER: **Farmers** Insurance Group <ON>

12. Name some things about angles in optics, for 10 points each.

[10] This is the name given to the angle an incoming ray makes with the surface, as contrasted with the angle of refraction for the outgoing ray.

ANSWER: **incident** angle [accept angle of **incidence**]

[10] At Brewster's angle, perfectly polarized light is transmitted without *this* phenomenon happening. Fiber optics depend on the "total internal" type of this phenomenon, which "traps" light inside the cable.

ANSWER: **reflection** [accept **total internal reflection**]

[10] Across a polarizer, this quantity is multiplied by the cosine squared of the angle between the polarization and the polarizer axis, according to Malus's Law.

ANSWER: **intensity** <AF>

13. Answer some questions about English theorists of liberty, for 10 points each.

[10] John Locke formulated three "natural rights," including liberty; they were later reformulated as "unalienable rights" in the Declaration of Independence. Name the other *two* rights in either version.

ANSWER: **life** AND the **pursuit of happiness** [or **life** AND **property**]

[10] This philosopher stated that liberty should only be taken away to prevent harm to other people in his treatise *On Liberty*.

ANSWER: John Stuart **Mill**

[10] The poet John Milton responded to the Licensing Order of 1643 with this "speech...for the Liberty of Unlicensed Printing." This work attacks censorship and staunchly defends the freedom of the press.

ANSWER: ***Areopagitica*** <JR>

14. Answer some questions about *Sense and Sensibility*, for 10 points each.

[10] *Sense and Sensibility* was the first published novel by this English author, who also wrote *Pride and Prejudice*.

ANSWER: Jane **Austen**

[10] The title traits of *Sense and Sensibility* are characteristic of the two main characters, who are sisters in the Dashwood family. Name both of them.

ANSWER: **Elinor** (sense) and **Marianne** (sensibility) Dashwood

[10] Marianne first falls in love with Willoughby after she has an accident while performing *this* activity with Margaret.

ANSWER: **running** home [more specifically, running down a hill in the rain] <JR>

15. Late in his life, this composer wrote two sonatas for clarinet or viola, a B-minor clarinet quintet, and several sets of "Intermezzi" for solo piano. For 10 points each:

[10] Name this composer, who wrote three piano trios, a trio in A minor for clarinet, cello and piano, and a trio in E-flat major for horn, violin, and piano.

ANSWER: Johannes **Brahms**

[10] Brahms wrote a popular set of sixteen pieces in this genre for piano duet. This most famous ballroom dance, which is traditionally associated with Vienna, took Europe by storm in the early 1800s.

ANSWER: (Viennese) **waltzes** [or **walzer**]

[10] This set of twenty-one pieces for piano duet, several of which were later orchestrated, contains several of Brahms's most famous pieces. The fifth one of these pieces in F-sharp minor was based on a *csárdás* ("CHAR-dahsh") by Béla Kéler.

ANSWER: ***Hungarian Dances*** [or ***Ungarischer Tänze***] <JR>

16. Answer the following about the interaction of Greek and Levantine culture in the first century, for 10 points each.

[10] For Greek patrons, Flavius Josephus wrote a history of these people called *Antiquities of [them]*. Josephus himself was one of these people, though he wrote in Greek rather than Hebrew.

ANSWER: **Jews** [accept reasonable equivalents; accept more specific answers like "Roman Jews" or "Greek Jews"]

[10] This Greek dialect, the vulgarized successor to Classical Greek, was spoken around the eastern Mediterranean in the Hellenistic and Roman periods. The New Testament is written in it.

ANSWER: **Koine** Greek

[10] Jesus and his friends in the Levant spoke this language, the source of the Syriac language and the modern Hebrew alphabet. More surprisingly, its Phoenician-derived alphabet is the also the source of the Thai alphabet.

ANSWER: **Aramaic** <CW>

17. This author defined a clarinet as an instrument "the only thing worse than which is two." For 10 points each:
[10] Name this American author of *The Devil's Dictionary*.

ANSWER: Ambrose (Gwinnett) **Bierce**

[10] Bierce disappeared south of the border during this country's revolution. Authors from this country include Octavio Paz.

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

[10] One of the masterpieces of Mexican literature is *this* novel, in which Juan Preciado looks for his father in a town full of ghosts. It was written by Juan Rulfo.

ANSWER: **Pedro Páramo** <JR>

18. A February 2016 outbreak of this disease in Dallas is believed to have originated from sexual transmission. For 10 points each:

[10] Name this viral disease with symptoms similar to dengue fever. A 2015-16 outbreak in Latin America may be linked to an increased prevalence of microcephaly among infants there.

ANSWER: **Zika** fever [or **Zika** virus disease]

[10] The Latin American Zika outbreak began in May 2015 in this country. It has infected an estimated 1.5 million people here, raising concerns about this country's ability to host the 2016 Summer Olympics.

ANSWER: Federative Republic of **Brazil** [or República Federativa do **Brasil**]

[10] Several countries have responded to the Zika outbreak by urging women to avoid becoming pregnant. This Central American country has taken the most extreme stance, telling women to wait until 2018 before conceiving.

ANSWER: Republic of **El Salvador** [República de **El Salvador**] <SE>

19. Benvenuto Cellini ("cheh-LEE-nee") mainly worked in this material, and Lorenzo Ghiberti ("ghee-BEAR-tee") first trained in smithing it. For 10 points each:

[10] Name this precious metal. "Leaf" made from it was often used for the background of medieval paintings.

ANSWER: **gold** [accept **gold leaf**]

[10] Goldsmiths were the pioneers of *this* artistic technique, which was used by Albrecht Dürer to produce works like *Knight, Death, and the Devil*, and *Melencolia I*.

ANSWER: **engraving** [accept more specific answers like "copperplate **engraving**"; prompt on "print" or "printmaking"; do **not** accept or prompt on "woodcut"]

[10] In *Melencolia I*, one of *these* objects symbolically hangs above the title figure, to the left of a magic square. The Devil carries one of them in *Knight, Death, and the Devil*.

ANSWER: an **hourglass** <JR>

20. They founded Mount Sinai Hospital and often went to City College, due to prohibitive quotas elsewhere. For 10 points each:

[10] Name these often-liberal people of a certain religion, including Bernard Baruch, Rose Schniederman and Abraham Cahan, who make up much of the Upper West Side.

ANSWER: **Jews** [accept reasonable equivalents; accept more specific answers like **New York City Jews**, **Ashkenazi Jews**]

[10] Abraham Cahan was the author of the Bintel Brief advice column of this left-wing, Yiddish newspaper, of which he was the founding editor. Named after the SPD's newspaper, it was a voice for Jewry in New York.

ANSWER: *Yiddish Daily* **Forward** [or **Jewish Daily Forward**; or **Forverts**]

[10] The *Forverts* was a major funder and later owner of WEVD, the radio station owned by this political party. The station was named after Eugene V. Debs, a five-time presidential candidate for this third party.

ANSWER: **Socialist** Party of America [accept **SPA**] <IKD>

Tiebreaker

21. Many algorithms used in this field have been developed by Joseph Felsenstein. For 10 points each:

[10] Name this subfield of taxonomy that aims to construct a namesake "tree of life" displaying evolutionary relationships.

ANSWER: **phylogenetics** [accept word forms, including **phylogeny**]

[10] When phylogenetic trees include branch lengths, they usually use this technique. This technique assumes a relatively constant mutation rate to estimate when species or varieties diverged.

ANSWER: **molecular clock** [accept **gene clock** or **evolutionary clock**]

[10] Another crucial tool for phylogenetic analysis is the maternally-inherited DNA found in *this* organelle. This organelle is the site of cellular respiration, and thus "powers" the cell.

ANSWER: **mitochondria** [or **mitochondrion**; accept **mitochondrial DNA**] <JR>