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TOSSUPS:

1. A painting of a figure of this name is reproduced in the bottom right of *The Tribuna of the Uffizi* by Johan Zoffany. A nymph uses a mirror to check votive offerings to a statue of this figure in the top right of painting whose bottom left depicts dozens of putti. Giorgione depicted a nude version of this figure reclining on a hillside in a painting alternatively called *Dresden* or (*) *Sleeping* [this figure]. A girl kneels in prayer and a small dog lies sleeping in a Titian painting titled for this figure. Zephyrus blows flowers toward this figure as she covers her genitals with her long hair in a depiction of her standing atop a shell. For 10 points, name this Roman goddess whose birth was painted by Sandro Botticelli.

ANSWER: Venus [accept *Worship of Venus*, *Sleeping Venus*, *Venus of Urbino*, or *Birth of Venus*]

<TH, Painting>

2. An effect driven by dipolar coupling between these structures depends on the cross-relaxation rate and is modeled with the Solomon equations. These structures are stationary in the Born-Oppenheimer approximation, leading to a "clamped" Schrödinger equation. Interactions between the spin of these structures mediate J coupling, and the difference in the precession frequency of these structures' spin is reported as chemical (*) shift. The discovery of this structure was compared to firing a "15-inch shell at a piece of tissue paper and it [coming] back and [hitting] you"; that quote is by Ernest Rutherford, who discovered these structures in his gold foil experiment. Variants of these structures with different mass number are called isotopes. For 10 points what center part of an atom is made up of protons and neutrons?

ANSWER: atomic nuclei [or atomic nucleus]

<JS, Chemistry>

3. It isn't bronze, but this material is the primary component of the mask of Queen Mother Idia, an artifact that the British Museum came to possess following Harry Rawson's 1897 punitive expedition to the Kingdom of Benin. After WWII, the Japanese bought large amounts of this material to make *hankos*, a form of personalized seal. The Kongo Kingdom produced numerous olifants out of this material, which was the main substance utilized for (*) carving on the Loango Coast. Jim Nyamu advocates against the sale of this substance, which had 5% of its global stock destroyed in a massive 2016 bonfire led by Uhuru Kenyatta. For 10 points, name this hard, white material that has fomented much controversy due to it's being harvested from elephant tusks.

ANSWER: ivory

<TM, World History>

4. After primary settling, this substance is fed through microbial communities in the media of rotating biological contactors. C·O·D is usually used to measure the strength of this substance because B·O·D tests can take up to five days. Secchi (“Seck-ee”) disks are used to measure the turbidity of this substance, while another property of it is typically measured against a standard solution of potassium chloride. This substance is (*) purified by applying pressure to force it through a membrane against a concentration gradient. Measuring this substance’s conductivity or its index of refraction are two ways of determining its salinity. For 10 points, name this liquid that is often purified with reverse osmosis or Brita filters before being drunk by humans.

ANSWER: water [accept wastwater; accept salt water; accept fresh water; accept sewage; do not accept “groundwater”]

<JS, Other Science Engineering>

5. Arnolt Schlick is among the German Colorist composers known for early works for this instrument. A series of staccato arpeggios are used in an F minor piece for this instrument that is often used as a recessional at royal weddings; that piece is the fifth of ten “symphonies” for it by Charles-Marie Widor. This instrument provides the nickname to the third symphony of (*) Camille Saint-Saëns. To bring different ranks into play, players of this instrument pull knobs or operate stops. A piece for this instrument that opens with a descending flourish followed by a building diminished seventh chord which resolves to a D major is often associated with horror fiction. For 10 points, name this keyboard instrument used in J.S. Bach’s *Toccatà and Fugue in D minor*.

ANSWER: pipe organ [accept church organ]

<TH, Classical Music>

6. This novel’s final chapter includes a poem in which the narrator tells another character that he must die “because of all you did” and “because of all I did not.” A character in this novel imagines his wife drowning at Hourglass Lake. The mother of this novel’s title character is run over by a car while angrily walking to the mailbox. This novel’s narrator believes he is being (*) followed by a red Aztec convertible. This novel’s narrator and title character stay in a hotel named The Enchanted Hunters, and the title character rehearses for a play of the same name, written by Clare Quilty. This novel’s narrator is obsessed with the “nymphet” Dolores Haze. For 10 points, name this novel by Vladimir Nabokov.

ANSWER: Lolita

<CW, Long Fiction>

7. The Treasury View states that policies described by this adjective have no effect on total economic activity, as they lead to crowding out. Contractatory action described by this term shifts the aggregate supply curve to the left, while the 2009 U.S. stimulus package is an example of an expansionary policy described by this word. This word describes a type of economic policy that involves (*) taxation and spending that is often contrasted with monetary policy. In U.S. government accounting, a period described by this adjective runs from October 1st to September 30th. For 10 points, give this adjective that describes a “year” in which spending and income is measured for a firm or government.

ANSWER: fiscal [accept fiscal policy; accept fiscal year]

<TH, Economics>

8. In this mountain range, cave diver Gennadiy Samokhin set successive world records for depth into the earth reached by a human by descending into the extremely deep Krubera Cave. One branch of this mountain range separates the Nakhchivan exclave from the mainland of its country. The disputed region of (*) Nagorno-Karabakh lies within this mountain range. The breakaway regions of Abkhazia and South Ossetia are both found within this mountain range. The highest peak in Europe, Mount Elbrus, lies in this range. For 10 points, name this mountain range that stretches from the Black Sea to the Caspian Sea, which is found in Azerbaijan, Georgia, Armenia, and Russia.

ANSWER: Caucasus Mountains [accept The Caucasus; accept Gagra Range; accept Greater or Lesser Caucasus]
<TH, Geography>

9. A dream-vision laden novel by this author that features a deceased husband complaining about the unpleasant features of his ex-wife at length is called *The Crow*. A pastoral novel by this author features seven nymphs representing the virtues who describe their sexual encounters to the title youth, *Ameto*. In a story by this author, the depraved monk Rustico teaches Alibech about “putting the devil back in hell,” a euphemism he uses for sex. This author wrote a collection in which (*) Griselda is tested by her doubting husband. That work’s frame story features three men and seven women who tell some bawdy tales over ten nights while avoiding the plague in late medieval Florence. For 10 points, name this Renaissance-era Italian author who wrote *The Decameron*.

ANSWER: Giovanni Boccaccio
<TH, Mixed Lit>

10. According to the *Aitareya Brahmana*, Prajapati had sex with his daughter the Dawn in the form of this animal before being killed by Rudra. The hermit Saint Giles lived for years in the wilderness with one of these animals as his only companion. The giant brothers Otus and Ephialtes killed each other by throwing spears at a goddess in the form of these animals. To gain favorable winds for the Greek fleet (*) Agamemnon sacrificed one of these animals instead of his daughter Iphigenia. In Norse myth, four of these animals nibble at the leaves of Yggdrasil. During his third labor, Hercules was tasked with catching one of these creatures in Ceryneia. Artemis transformed Actaeon into, for 10 points, what creature sacred to her?

ANSWER: deer [accept stag; accept hind; accept buck or doe]
<TH, Mythology>

11. In a play written in this language three friends argue over what constitutes art when one of them purchases an expensive all-white painting. Yasmina Reza writes in this language, which was also used for a play in which the protagonist is called to appear before a tribunal after he insults a heartfelt love sonnet. This language was used to write a play in which Argas gives a man a (*) casket full of incriminating letters. A 17th-century comic playwright used this language in a play in which Orgon eventually find out about the lechery of the title religious hypocrite. For 10 points, name this language used in the plays *The Misanthrope* and *Tartuffe*, both by Moliere.

ANSWER: French [accept Français]
<TH, Drama>

12. A former army surgeon and resident of Broadmoor Asylum used a system of note cards to work on a project of this type, during which time he cut off the tip of his penis. Simon Winchester's book *The Professor and the Madman* documents the collaboration between James Murray and William Minor on a work of this type. A (*) satirical work of this type calls habit "a shackle for the free" and calls an egoist "a person of low taste, more interested in himself than in me." A 1755 book of this type had its creation documented by James Boswell, who wrote a biography of its maker. Ambrose Bierce created one of these works belonging to "the devil." For 10 points, name type of reference work famously compiled by people like Samuel Johnson and Noah Webster.

ANSWER: **dictionaries** [accept *Oxford English Dictionary*; accept *The Devil's Dictionary*]

<TH, Other Academic>

13. A terrorist group based on this island is divided into Traditional, Historic, and Resistenza factions. A separatist leader had to flee this island in 1996 after extorting a golf course and bombing several buildings. Claude Erignac was acting as prefect of this island when he was killed by members of the FLNC. Much earlier, the British government considered intervening into affairs on this island after the defeat of a guerrilla army at Battle of Ponte Novu. In the 1750s, Pasquale (*) Paoli led this island's independence movement against the Republic of Genoa. A leader born on this island won major victories at Austerlitz and Jena during his namesake wars. For 10 points, name this French island in the Mediterranean where Napoleon Bonaparte was born.

ANSWER: **Corsica** [accept **Corse**]

<TH, European History>

14. This is the first word in the title of a 1979 book by a neo-pragmatist thinker which endorses behavioral epistemology, in which knowledge is experienced as social practice. Elizabeth I translated a book partly titled for this academic discipline, which described how the author coped with his unjust imprisonment at the hands of Theodoric the Great. This discipline must begin (*) "in media res" according to *Skepticism and Animal Faith* by George Santayana. This discipline is paired with "the mirror of nature" in a book by Richard Rorty, and Boethius wrote a book about the "consolation" provided by this discipline. For 10 points, name this discipline, whose Greek roots translate as a "love of wisdom."

ANSWER: **philosophy** [accept *philosophiae*; accept *Philosophy and the Mirror of Nature*; accept *Consolation of Philosophy*]

<LL, Philosophy>

15. W. L. Russell found ethyl-nitroso-urea to be a strong inducer of this process in mouse spermatogonia while conducting specific-locus tests. Tajima's relative rate test is done to verify that this process satisfies the molecular clock hypothesis. Luria and Delbruck hypothesized their experiment would exhibit a Poisson distribution because this process occurs at a (*) constant rate after the introduction of a selective agent. Reverse genetic screens identify gene function by inducing this process and then studying the resulting phenotype. Gene knockout can be used to perform the point type of this process where a single nucleotide is inserted, changed, or deleted. For 10 points, name this permanent change of an organism's genetic material.

ANSWER: **mutagenesis** [or **mutations**; accept **site-directed mutagenesis**; accept **site-specific mutagenesis**; accept point **mutation**]

<JS, Biology>

16. After a monk named Fra Mauro (“MAO-roh”) created one of these things for Afonso V that featured additional depictions of the four elements, he received the sobriquet “*incomparabilis*” for his unmatched prowess in making these things. Muhammad Al-Idrisi created one of these things for Roger II of Sicily, which was accompanied by a large silver disk that has since been lost. Types of these objects include the T and O type, as well as the Macrobian variety, which were divided into five (*) climes. Referencing the serpent imagery found upon some of these items from the Middle Ages, the phrase “here be dragons” has been used to refer to unexplored territory on them. For 10 points, name these navigational tools that were produced by men such as Gerardus Mercator (“mur-KAY-tor”).

ANSWER: world maps [accept mappa mundi; accept planisphere, as some of the clues pertain to maps that functioned as planispheres; prompt on navigational charts or nautical charts; do NOT accept or prompt on “globe”]
<TM, Other History>

17. Schild’s ladder approximates this kind of transport with affinely parametrized geodesics, and that transport described by this adjective moves a vector in a manifold without changing any components. Bloch walls separate regions of material where the spins of adjacent atoms have this relationship, and two of the states in a triplet state have spins with this relationship. Branches in a circuit with this relationship have an equal (*) voltage drop. The equivalent capacitance of two capacitors connected in this way is the sum of each capacitance. For 10 points, name this relationship that two lines possess when they never intersect.

ANSWER: parallel [accept parallel transport; accept parallel spins; accept parallel circuit; accept parallel lines]
<LL,Physics>

18. A sloping ramp from the waterfront to the roof is present in an iceberg-inspired building of this type in Oslo, designed by the firm Snøhetta. Le Corbusier called a building of this type “a lying art.” That building of this type featuring a green copper false dome and a sculpture by Jean-Baptiste Carpeaux was designed by Charles Garnier during Baron Haussmann's redesign of Paris. Apocryphally, the designer of a building of this type had the idea of casting distinctive roof segments as section of a sphere while peeling an (*) orange. One of these structures contains the Joan Sutherland Theater and had its design awarded to Danish architect Jorn Utzon. Iconic white sail-like roof parts top, for 10 points, what type of building overlooking Sydney Harbor?

ANSWER: Opera House [prompt on concert hall or music venue; prompt on theater before mentioned]
<TH, Architecture>

19. At a campaign rally, this politician wielded a tripod like a gun a shouted “let’s shoot this *petralhada*,” a term referring to opposition party voters. In a 2011 interview with *Playboy*, this politician claimed he’d rather his son die in an accident than be gay. Sergio Moro, the judge who convicted this man’s foremost political opponent, is serving as this man’s Minister of Justice. This former (*) army captain has referred to his country’s 1964 to 1985 military dictatorship as a “very good” period. This politician defeated Workers’ Party Candidate Fernando Haddad in the 2018 General Election, and supporters of this man wear the yellow shirts of their country’s soccer team. For 10 points, name this far-right politician and current president of Brazil.

ANSWER: Jair Bolsonaro
<JM, Current Events>

20. While lying down, the speaker of a poem by this author reflects “the stain of love is upon the world. Yellow, yellow, yellow!” A long love poem written by this author of “Love Song” makes numerous references to *The Iliad* - such as “All women are not Helen [...] but have Helen in their hearts” - after recalling a time when the speaker was “cheered / when I first came to know there were flowers also in hell.” This author of (*) “Asphodel, that Greeny Flower” wrote an epic about a New Jersey town in *Paterson*, and framed another poem as an apology note mentioning some plums in the icebox that were “so sweet and so cold.” For 10 points, name this American poet who wrote “This Is Just to Say” and about an object “glazed with rain water / beside the white chickens” in “The Red Wheelbarrow.”

ANSWER: William Carlos Williams

<TH, Poetry>

21. In her memoir, *Coming of Age in [this state]*, Anne Moody claimed that she “began to hate people” at age 15, following a 1955 event that was covered by many photos in *Jet* magazine. Many similarly-named “Schools,” “Libraries,” and “Houses” were built by a campaign in this state that received attention following the brutal murders of Chaney, Goodman, and Schwerner. While carrying (*) T-shirts that read “Jim Crow Must Go,” a civil rights activist in this state was murdered in his driveway by Byron de la Beckwith. The Freedom Summer occurred in this state, as did the murder of Medgar Evers, and the lynching of Emmett Till. For 10 points, James Meredith was the first African-American to be enrolled at which Southeastern state’s flagship college in Oxford?

ANSWER: Mississippi

<CW, American History>

22. A song by this artist inspired by a love affair with Marianne Ihlen notes “I used to think I was some kind of Gypsy Boy / before I let you take me home.” Another song by this artist declares “You who wish to conquer pain / You must learn to serve me well” over fast guitar arpeggios. This singer of “So Long Marianne” and “Avalanche” employed his training as a poet on early albums like (*) *Songs from a Room* and *Songs of Love and Hate*. This singer died shortly after the release of a 2016 album including the songs “Treaty” and “You Want it Darker.” His most famous song begins “I heard there was a secret chord / that David played and it pleased the lord.” For 10 points, name this Canadian singer-songwriter who wrote “Hallelujah.”

ANSWER: Leonard Cohen

<TH, Pop Culture Music>

23. Rob Nixon wrote about how environmental degradation disproportionately affects the poor in his book on a “slow” form of this process. In the first chapter of *The Wretched of the Earth*, which is titled for this thing, Frantz Fanon argues that decolonization is by definition a process defined by *this*. It’s not unemployment, but Johan Galtung popularized the usage of the (*) “structural” form of this phenomenon, which is defined as any social structure that prevents people from fulfilling their needs. In *The Better Angels of Our Nature*, Steven Pinker argues that this phenomenon has reduced over time. The widely used WHO definition of this process states that it can cause “injury, death [or] psychological harm.” For 10 points, name this intentional use of physical force.

ANSWER: violence [accept violent acts; accept *Slow Violence and the Environmentalism of the Poor*; prompt on physical force until mentioned]

<TH, Sociology>

24. Along with Zadok the Pharisee, Josephus blamed a leader of this name for causing the first Jewish-Roman War by founding the “fourth sect” of 1st century Judaism, the Zealots. Father Papias gives an account of the death of a figure with this name, who died after becoming immensely bloated with pus. An apocryphal Gospel named for a man of this name compares God to a “cloud of light” and is structured as a 16 chapter dialogue. According to Matthew, this man (*) hung himself out of remorse in a place known as “the Field of Blood.” This apostle kissed his teacher in the Garden of Gethsemane to identify him to a crowd that had come to arrest him. For 10 points, name this wicked apostle who betrayed Jesus for 30 pieces of silver.

ANSWER: **Judas** [accept **Judas** Iscariot; accept **Judas** of Galilee; accept **Judas** of Gamala]

<TH, Religion>

BONUSES:

1. Alfred Thayer Mahan's magnum opus attributed large aspects of Great Britain's general dominance of the world to the strength of its military branch of this type. For 10 points each:

[10] Name this broad branch of a country's armed forces that may include destroyers and cruisers. The advent of the *HMS Dreadnought* completely changed how power within these military branches was viewed.

ANSWER: **navy** [accept **maritime** force; prompt on **ships**, **boats**, or other more specific watercraft]

[10] After the leaders of this naval force received word of an earthquake in Sicily, they rushed to Messina, whereupon its sailors managed to save the American consul from collapsed rubble. This force inspired Australia to construct its own navy after stopping there on its 1907 world tour.

ANSWER: **Great White Fleet**

[10] Teddy Roosevelt, the constructor of the Great White Fleet, viewed it as part of his personalized theory of foreign diplomacy known by this name, which is characterized by peaceful negotiation backed up by military strength.

ANSWER: **Big Stick** ideology [accept **Big Stick** diplomacy; accept **Big Stick** policy; prompt on **gunboat diplomacy** with "What was Roosevelt's personal theory of foreign diplomacy that included gunboat diplomacy?"]

<TM, American History>

2. The Five Pillars of Islam are summarized in the Hadith of Gabriel. For 10 points each:

[10] This pillar of Islam mandates giving alms to the needy. It requires that the money be given back to the community from which it was taken and that the amount given should be proportional to income.

ANSWER: **zakāt**

[10] The Hajj is the pillar of Islam that requires a visit, from all who are able, to this holiest city in Islam. On the Hajj, pilgrims symbolically stone the devil and touch the black stone of the Kaaba.

ANSWER: **Mecca**

[10] This branch of Sh'ia Islam believes in 7 pillars rather than five. This group, rising to highest prominence during the Fatimid Caliphate, is currently led by the imam Aga Kahn IV.

ANSWER: **Ismā'īlites** [accept **Nizaris** or **Ismā'īlism** or the **Ismā'īli**]

<BK, Religion>

3. The New Laws, which replaced the Law of Burgos in 1542, abolished hereditary inheritance of the land managed in this system. For 10 points each:

[10] Name this system of colonial control in Spanish Peru. In it, indigenous people were forced in labor in exchange for lessons in Christianity and Spanish by European administrators, who were given grants by the Spanish Crown.

ANSWER: **encomienda** system

[10] This Dominican priest had a hand in convincing King Charles to pass the New Laws. He wrote *A Short Account of the Destruction of the Indies* and debated the morality of colonialism with Juan Ginés de Sepúlveda in the Valladolid Debate.

ANSWER: Bartolome **de las Casas**

[10] A military leader with this surname killed the Spanish Viceroy Blasco Nuñez Vela at the Battle of Añquito in retaliation for Vela's enforcement of the New Laws. A different leader with this surname led "the Famous Thirteen."

ANSWER: **Pizarro** [accept Gonzalo or Francisco **Pizarro**]

<TH, Other History>

4. The UBV photometric system was normalized to the spectral energy distribution of Vega, a star in this constellation. For 10 points each:

[10] Name this constellation that contains the Ring Nebula. A class of variable stars named for a star in this constellation are much fainter than Cepheid variables, so they are mostly used to study globular clusters.

ANSWER: **Lyra** [accept Alpha **Lyrae**; accept RR **Lyrae** variable]

[10] Astronomers can measure the period of variable stars to determine their absolute magnitude and then use them as one of these objects. These objects are any astronomical object with a known luminosity.

ANSWER: **standard candles**

[10] Standard candles are useful for measuring this quantity between objects. This length between two objects is commonly measured in parsecs or light-years.

ANSWER: **distance** [accept comoving **distance**; accept proper **distance**; accept **distance** modulus; accept cosmic **distance** ladder]

<LL, Other Science Astronomy>

5. This poem describes a “swagman” who grabs a jambuck drinking at a water-hole “with glee.” For 10 points each:

[10] Name this bush ballad by Banjo Paterson. It describes a character who “camped in the Bilabong / under the shade of the Coolabah tree.”

ANSWER: “**Waltzing Matilda**”

[10] Banjo Paterson is a poet from this country, whose other poets include Henry Lawson and Les Murray. Traditional bush ballads describe incidents that occur in the Outback of this country.

ANSWER: **Australia**

[10] In “Waltzing Matilda,” the swagman dies in this manner after being confronted by policemen “one, two, and three.” John Milton’s “Lycidas” is an elegy for Edward King, who died in this manner.

ANSWER: **drowning** yourself [accept word forms of **drown**; accept **shipwreck**; accept “**sprang into the billabong**” similar descriptions]

<TH, Poetry>

6. In October 2018, this leader announced she would step down as head of the CDU and not run for re-election as Chancellor in 2021. For 10 points each:

[10] Name this current Chancellor of Germany, the longest-serving incumbent head of state in the European Union.

ANSWER: Angela **Merkel**

[10] Merkel’s use of the word *alternativlos* to refer to her policies concerning the European sovereign debt crisis inspired the naming of this far-right German party led by Jörg Meuthen and Alexander Gauland.

ANSWER: **Alternative for Germany** [accept **AfD**; accept *Alternative für Deutschland*]

[10] In December, this politician was elected to replace Merkel as the leader of the CDU. The media has described this woman as a “mini-Merkel” due to her extremely similar policy positions.

ANSWER: Annegret **Kramp-Karrenbauer** [accept **AKK**]

<DG, Current Events>

7. One story set in this country sees a babysitter attempt to confront her feelings of homesickness and anxiety by finally driving on a road with other cars, which sadly ends when she crashes into a telephone pole. For 10 points each:

[10] Name this country where the story “Mrs. Sen’s” is set. A different story set here describes a man who always gives the young Lilia candy before dinner, partly out of his yearning to see his own seven daughters.

ANSWER: United States of America [accepts United States or equivalents]

[10] “Mrs. Sen’s” and “When Mr. Pirzada Came to Dine” are two stories in the collection *Interpreter of Maladies*, a book by this Indian-American author, whose work often focuses on Indian immigrants to the United States.

ANSWER: Jhumpa Lahiri

[10] In another story from *Interpreter of Maladies*, newlyweds Sanjeev and Twinkle argue after finding religious items in one of these places. Nathaniel Hawthorne titled a novel for one of these structures with seven gables.

ANSWER: house [accept “This Blessed House”; accept *The House of the Seven Gables*]

<TM, Short Fiction>

8. Examples of these drugs like di-phen-hy-dramine and chlor-phen-iramine may cause drowsiness after binding to H1 receptors in the central nervous system. For 10 points each:

[10] Name this type of drug that blocks the binding of a certain vaso-dilator. Fexo-fen-adine is one of these drugs that does not cross the blood-brain barrier.

ANSWER: antihistamines

[10] Histamine is an active amine formed from histidine, one of these compounds. Other examples of these building blocks of proteins include glycine and lysine.

ANSWER: amino acids

[10] The antihistamine drug ci-me-ti-dine binds to H2 receptors to inhibit stomach acid secretion and reduce the severity of these things. These sores appear on the inner lining of the digestive tract.

ANSWER: ulcers [or peptic ulcers; accept duodenal ulcers; accept gastric ulcers; accept stomach ulcers; accept peptic ulcer disease; prompt on PUD]

<TH, Biology>

9. In a copy-cat crime in 1995, a mentally-ill man hijacked ANA Flight 857 via threats he made utilizing chunks of clay, which he claimed to be plastic explosives, and a bag of water, which he claimed to be this substance. For 10 points each:

[10] Name this toxic gas that was tested in Matsumoto, 9 months before being used in a more infamous attack on a subway by members of the doomsday cult Aum Shinrikyo.

ANSWER: sarin [accept GB]

[10] Aum Shinrikyo perpetrated their subway attack in this capital city. A truck and a dagger were used by a disaffected youth to commit a 2008 mass murder in this capital city’s Akihabara District.

ANSWER: Tokyo [accept Chiyoda City]

[10] One of Japan’s most massive unsolved cases involves a person or group, known as “The Monster with 21 Faces,” kidnapping and ransoming the president of Glico, a company of this type. A description is acceptable.

ANSWER: food production [it’s a confectionary, specifically, but it makes other things too, so accept synonyms to the main answerline]

<LL, World History>

10. The two-masted Pinisi (“peh-NIS-ee”) ship is widely used to transport goods between the many islands of this nation, where they frequently make stops at port trading hubs like Surabaya and Makassar. For 10 points each:

[10] Name this country which shares the island of Timor with East Timor and the island of New Guinea with Papua New Guinea.

ANSWER: Republic of **Indonesia**

[10] The Pinisi ships are thought to have been first built by the Konjo tribe from this Indonesian Island. This island lies east of Borneo and south of the Philippines and features four prominent peninsulas.

ANSWER: **Sulawesi** [accept **Celebes**]

[10] A Pinisi ship is featured on the old 100-note denomination of this currency of Indonesia. Sukarno appears on the obverse of the 100,000-note denomination of this currency.

ANSWER: **rupiah** [accept **Rp**; accept **IDR**; accept **perak**]

<TH, Geography>

11. There is argument over whether the first appearance of this musical idea occurred in its creator’s Violin Concerto No. 1 or his Symphony No. 10, where it alternates with a different theme named for one the composer’s students, Elmira. For 10 points each:

[10] Name this melodic figure that often recurs in the works of a Soviet composer. Perhaps it’s most famous appearance is in the opening bars of a work “dedicated to the victims of fascism and the war”.

ANSWER: **DSCH** motif [accept the notes “**D** - **E_b** - **C** - **B**” in that order; accept “**D natural**”, “**E flat**”, “**C natural**”, and “**B natural**”, as substitutes for the notes “**D**”, “**E_b**”, “**C**”, and “**B**”, respectively; do NOT accept or prompt on enharmonic equivalents of the notes listed, as the “play on German notation” would no longer function]

[10] The DSCH motif appears in that aforementioned work, its composer’s famed String Quartet No. 8, where it is first played by this instrument, whose virtuosos include Mstislav Rostropovich (“ROSS-tro-poe-VITCH”).

ANSWER: **cello** [accept violon**cello**; do NOT accept or prompt on “violin”]

[10] Along with the 8th, 12 other of this composer’s 15 string quartets were premiered by the Beethoven Quartet. This man’s other works include his jazzy Waltz No. 2, and his Symphony No. 7, “Leningrad.”

ANSWER: Dmitri Dmitriyevich **Shostakovich**

<TM, Classical Music>

12. One painting set in this U.S. state depicts the art collectors Fred and Marcia Weisman against a bright blue background with a totem pole to the right. For 10 points each:

[10] Name this state where the painting *American Collectors* is set. Another massive painting set in this state depicts a yellow diving board in front of a disturbed swimming pool despite no swimmers being present.

ANSWER: **California**

[10] This British artist painted *American Collectors* and *A Bigger Splash* while teaching at UCLA. This artist also painted *Mr and Mrs Clark and Percy*.

ANSWER: David **Hockney**

[10] David Hockney primarily belonged to this art movement, whose other British artists included Richard Hamilton. American members of this movement included the painter of 32 *Campbell’s Soup Cans*, Andy Warhol.

ANSWER: **Pop** Art

<CW, Painting>

13. Theology student Paul Pennyfeather is kicked out of school for running through campus pantsless in this author's novel *Decline and Fall*. For 10 points each:

[10] Name this author who wrote about Tony Last's divorce with his wife Brenda in *A Handful of Dust*. Another novel by this author describes Charles Ryder's relationship with the Flyte family.

ANSWER: Evelyn **Waugh** [accept Arthur Evelyn St. John **Waugh**] (That novel is *Brideshead Revisited*)

[10] Both Paul Pennyfeather and Charles Ryder attend this British university. This university is the oldest in the English-speaking world and has historically been a major rival of Cambridge.

ANSWER: University of **Oxford** [accept **Hertford College**]

[10] This other British author coined the portmanteau "Oxbridge" in his novel *The History of Pendennis*. This author also wrote about an indebted Irish man named Redmond who fights for both the British and Prussian armies during the Seven Years War in *The Luck of Barry Lyndon*.

ANSWER: William Makepeace **Thackeray**

<CW, Long Fiction>

14. One way to measure this quantity is by using a cavity resonator to measure the frequency and wavelength of an electromagnetic wave independently. For 10 points each:

[10] Name this quantity that is about 300 millions meters per second. This quantity squared times mass equals the energy of a stationary object.

ANSWER: **speed of light** in vacuum [accept **c**]

[10] This word describes a velocity that is allowed to exceed the speed of light since it does not transmit information. Plane waves are given by the equation $A \times \text{the exponential of } k \cdot r \text{ minus } \omega t \text{ plus } \phi$, where ϕ accounts for a "shift" described by this word.

ANSWER: **phase** [accept **phase** velocity; accept **phase** shift; accept **phase** factor]

[10] Two answers required. The electromagnetic wave equation connects the speed of light to these two constants. One over the square root of these two constants is equal to the speed of light.

ANSWER: **permittivity** of free space and **permeability** of free space [accept **epsilon-naught** and **mu-naught**; accept vacuum **permittivity** and vacuum **permeability**; accept all answers in either order]

<LL, Physics>

15. For 10 points each, answer the following about crowd psychology:

[10] This French psychologist, the developer of contagion theory, claimed in his *The Crowd: A Study of the Popular Mind* that crowds unite around a simple idea propounded by a leader, turning individuals into automata.

ANSWER: Gustave **Le Bon**

[10] Theodor Adorno criticized Le Bon and this psychologist's characterization of crowds in *[this man's] Theory and Fascist Propaganda*. This psychologist explained the formation of crowds through his concept of the ideal ego, which he had earlier developed in his *The Ego and the Id*.

ANSWER: Sigmund **Freud**

[10] This phenomenon studied in crowd psychology is a type of diffusion of responsibility in which people's responses to some situations varies based on the presence of others. This phenomenon is cited in the case of the murder of Kitty Genovese.

ANSWER: **bystander** effect

<JS, Psychology>

16. Despite most of their squad dying in a plane crash, Zambia made it to the final match of the 1994 iteration of this competition. For 10 points each:

[10] Name this competition held by CAF (“caf”) every two years. After going down 1-0 when Elneny beat their keeper at the near post, Cameroon came back to win the 2017 iteration of this tournament against Egypt.

ANSWER: CAF **Africa Cup of Nations** [accept **CAN** or **AFCON**; accept **Total Africa Cup of Nations**; do not accept or prompt on partial answer]

[10] This Egyptian winger made the team of the tournament at the 2017 AFCON (“afcon”). This Liverpool player is currently tied for second top scorer in the Premier League with Aubameyang, Kane, and Mané.

ANSWER: Mohamed **Salah** Hamed Mahrous Ghaly [accept محمد صلاح]

[10] Cameroon’s team is named for some of these animals that are “indomitable” or “untameable.” Three of these animals are used to refer to the England national team, and the Orlando Pride in the NWSL take their nickname from a group of these animals.

ANSWER: **lions** [accept Untameable **Lions** or Indomitable **Lions**; accept Three **Lions**]

<JS, Pop Culture Sports>

17. Louhi turned herself into an eagle in order to retrieve this item stolen from her. For 10 points each:

[10] Name this producer of grain, salt, and gold that was smashed and lost at sea, turning the waters salty.

ANSWER: the **Sampo** [accept **Sammás**]

[10] The Sampo was forged by Ilmarinen, a figure with this profession. In Greek myth, Hephaestus was sacred to workers who had this job.

ANSWER: black**smith** [accept user of the **forge**; accept any kind of **metalworker**]

[10] Ilmarinen forged the Sampo as part of the 50 songs of this Finnish epic written by Elias Lonnrot.

ANSWER: **Kalevala**

<JF, Mythology>

18. This concept is the cause of all reality, and Soul and *Nous* are emanations from it. For 10 points each:

[10] Plotinus (“plo-TINE-us”) elucidates this concept as “Generative of all, [this concept] is none of all; neither thing nor quantity nor quality nor intellect nor soul; not in motion, nor at rest, not in place, not in time” in book VI of the *Enneads* (“EN-ceeds”).

ANSWER: The **One** [accept The **Good**; accept The **First**; accept *To heis* (“tow is”)]

[10] Plotinus developed The One from this Greek philosopher’s concept of “the Idea of the Good.” This philosopher also described a series of ideal solids named for him and wrote the dialogues *The Apology* and *Crito*.

ANSWER: **Plato**

[10] This student of Albertus Magnus built on the Platonists’ view that what is held in common among multiple things must be reduced to one source to argue for *ante rem* universals in *De Potentia*. This 13th century theologian also first formulated the ethical principle of double effect.

ANSWER: **St. Thomas Aquinas** [accept either underlined portion; accept **Doctor Angelicus**; accept **Doctor Communis**]

<JS, Philosophy>

19. This thinker closed an essay by noting that “in place of a hermeneutics we need an erotics of art.” For 10 points each:

[10] Name this thinker who argued that attempting to find the “meaning” of a work of art is futile, instead advocating appreciating the “sensuous surface” of an artwork in the essay “Against Interpretation.”

ANSWER: Susan **Sontag**

[10] Another Sontag essay lists Tiffany lamps and old Flash Gordon comics as examples of this aesthetic sensibility that emphasizes artifice and the unnatural. That essay is titled “Notes on” *this thing*.

ANSWER: **camp** [accept **campiness**; accept being **campy**]

[10] A 1977 collection of essays by Sontag discusses this artistic medium, famously practiced by Diane Arbus and Ansel Adams.

ANSWER: **photography** [accept **photographs**]

<TH, Mixed Academic>

20. Thomas Newcomen made improvements to one of these devices nicknamed the “Miner’s Friend.” For 10 point each:

[10] Name this type of device, first patented by Thomas Savery in 1698. Savery’s device of this type was used primarily to remove water from the bottom of mines.

ANSWER: steam **engines** [accept heat **engine**]

[10] This Scottish inventor made improvements to the Newcomen steam engine by separating the steam and condensation processes into separate cylinders. He developed the unit of horsepower to describe the power of his engines, which were widely used in the textile industry.

ANSWER: James **Watt**

[10] Watt’s improvement to the steam engine was a key moment in this period in the UK, which is characterized by a change from by-hand production methods to ones dominated by machines. It lasted roughly from the 1780s to the 1840s.

ANSWER: **Industrial Revolution**

<TH, European History>

21. Answer some questions about the dramatic technique of the play-within-a-play, for 10 points each:

[10] Characters such as “the Mother” and “the Father” rehearse a play titled *Mixing It Up* in this Italian author’s play *Six Characters in Search of an Author*.

ANSWER: Luigi **Pirandello**

[10] This author’s play *The Real Thing* opens with a play within a play about Max accusing his wife Charlotte of adultery. He is also wrote *Arcadia*.

ANSWER: Tom **Stoppard**

[10] This author’s play *Noises Off* features a play within a play called *Nothing On*. He also wrote *Copenhagen*, centering on a discussion between Niels Bohr and Werner Heisenberg.

ANSWER: Michael **Frayn**

<JH, Drama>

22. Name some notable primatologists, for 10 points each:

[10] This primatologist and author of *In the Shadow of Man* is considered to be the world's leading expert on chimpanzees, having studied them for 55 years in Tanzania.

ANSWER: Jane **Goodall**

[10] When this woman wanted to study gorillas, Louis Leakey convinced her to get her appendix removed, for no other reason than to see if she would. Her death, likely at the hands of poachers, was portrayed in the movie *Gorillas in the Mist*.

ANSWER: Dian **Fossey**

[10] With Fossey and Goodall, this researcher makes up the last third of the so-called "Trimates." This Lithuanian-Canadian author of *Reflections on Eden* largely pioneered work on orangutans.

ANSWER Birutė **Galdikas**

<BK, Anthropology>

23. Answer the following about the thermite reaction in which (*read slowly*) ferric oxide and aluminum react to yield aluminum oxide and molten iron. For 10 points each:

[10] The thermite reaction is a redox reaction between ferric oxide and aluminum. Which of the reactants is the oxidizing agent?

ANSWER: **ferric oxide** [or **iron (III) ("three") oxide**; accept **Fe₂O₃**]

[10] The thermite reaction is this type of reaction since it releases heat to the surroundings.

ANSWER: **exothermic**

[10] In demonstrations, the thermite reaction is often ignited by reacting a sodium salt of this polyatomic ion with glycerine or acetone. The central transition metal of this polyatomic ion is in a plus 7 oxidation state.

ANSWER: **permanganate** [accept **MnO₄**; accept potassium **permanganate**]

<JS, Chemistry>

24. This musical opens with the title politician reading comic books over the radio during a newspaper strike. For 10 points each:

[10] Name this Broadway musical by Sheldon Harnick and Jerry Bock. It features the song "On the Side of the Angels" and follows a mayor of New York who opposes Tammany Hall.

ANSWER: ***Fiorello!***

[10] *Fiorello!* was produced by Hal Prince, who has won more of these awards than any other individual. These yearly awards for excellence in Broadway theater make up the "T" in the EGOT distinction.

ANSWER: **Tony** Award [accept **Antoinette** Perry Award for Excellence in Broadway Theatre]

[10] Hal Prince and the rest of the *Fiorello!* production shared the 1960 Tony Award for Best Musical with this other production. It was the last musical written by Rodgers and Hammerstein and it features the songs "Climb Ev'ry Mountain" and "Do-Re-Mi."

ANSWER: *The **Sound of Music***

<JF, Musicals>