**2021 National All-Star Academic Tournament**

**Round 5 – Tossups**

1. An author with this surname used the pseudonyms "Sister Hope" and "Abel Lamb" for their parents in a satirical novel where Timon Lion abandons a commune to join the Shakers. The death of the blacksmith John moves the nurse Tribulation Periwinkle in a book by an author with this surname. An author with this surname described their time with Henry David Thoreau in *Concord Days.* An author with this surname wrote *Behind a Mask* and *A Long Fatal Love Chase* under the pseudonym A. M. Barnard while living with their father Amos. Professor Bhaer marries one of the daughters of a Civil War chaplain who returns for Christmas with the Hummels in a novel by an author with this surname. For 10 points, give this surname of an author who described the March sisters in *Little Women.*  
ANSWER: **Alcott** [accept Louisa May **Alcott** or Amos Bronson **Alcott**]  
<Literature American - Ganon Evans>

2. The VEV **(VEE-EE-VEE)** of a bumblebee model isn't conserved by these operations, so those models are considered in the Standard Model Extension. These operations can be classified as antichronous or orthochronous. Composition of these operations may cause a factor of one-half to appear in the energy of spin-orbit coupling. The spacetime interval is invariant under these operations. A composition of these operations called a Wigner **(VIG-nurr)** rotation can cause Thomas precession. When they do not contain rotations, they are known as boosts. These hyperbolic rotations of Minkowski space are characterized by an eponymous "factor" symbolized gamma. For 10 points, name these transformations that change coordinates between reference frames in special relativity.  
ANSWER: **Lorentz transform**ations [prompt on Wigner rotations or Thomas precession by asking "That results from the composition of what operations?"; prompt on boosts or rotations before read; prompt on Lorentz until after “transformations” is read and accept it outright afterwards]  
<Science Physics - Steven Liu>

3. The Raffelstetten Tolls describes trade between German princes and this city, which relied on the Krivich tribe to transport vast quantities of honey and beeswax. A ruler of this city destroyed the Drevlian capital of Iskorosten by attaching burning sulfur to a tribute of pigeons and letting them return home. Boleslaw the Brave and an army of Pechenegs supported this city's ruler Svitopolk the Accursed in a succession crisis over its control. St. Olga ruled this city, as did her grandson who rejected Islam because of its prohibition of alcohol and was amazed by the Hagia Sophia on a trip to Constantinople during which he gifted the Varangian Guard. For 10 points, name this city ruled by Yaroslav the Wise which converted to Eastern Orthodoxy under Vladimir the Great and was a center of the Rus.  
ANSWER: **Kiev** [accept **Kiev**an Rus; accept **Kyiv**]  
<History European to 1400 - Ganon Evans>

4. Shesha destroyed one of these things during a contest with Vayu **(vie-yoo)**, so seven of them near Tirupati **(tee-roo-pah-tee)** now represent the heads of Shesha. After Narada convinces a god to destroy one of these things, Garuda spends one year protecting it; that one is eventually destroyed by Vayu. Indra destroys the wings of all of these things but the size-changing Mainak; in another story, Krishna uses one to protect a village from Indra. Since he cannot identify Sanjeevani **(sahn-jee-vah-nee)**, Hanuman **(hah-noo-mahn)** keeps the sun under one arm and one of these things under his other to help Lakshmana **(lahk-shmah-nah)**. Vasuki wraps itself around one of these things so that it can be used to churn the ocean of milk. For 10 points, name these landforms that include Meru in Hindu cosmology.  
ANSWER: **mountain**s [or **hill**s; accept **Seshachalam Hills** or **Mount Meru** or **Mount Dunagiri** or **Mahodaya Mountain** or the **Gandhamardan Hills** or **Govardhan Mountain**]  
<RMP Non-Greek/Roman Myth - Vishwa Shanmugam>

5. This thinker illustrated one concept by contrasting the architect, who "raises his structure in imagination before he erects it in reality," with the bee. One of this philosopher's ideas was recast in terms of "property relations" in a 1982 book by John Roemer. This thinker argued that social stratification leads agents to become estranged from their "species-being," and that, by acting on the physical world, individuals experience "objectification." This author of the *Grundrisse* gave an account of exploitation based on the expropriation of "surplus value," and argued that, in the capitalist mode of production, workers are alienated from the products of their labor. For 10 points, name this German author of *Das Kapital*.  
ANSWER: Karl **Marx**  
<RMP Philosophy/Thought - Geoffrey Chen>

6. The abusive Bonaparte Blenkins appears in a feminist novel titled for one of these places which follows the lives of Waldo and Lyndall. Chief Matenge disrupts Gilbert's efforts to improve one of these places in Bessie Head's novel *When Rain Clouds Gather*. A novel ends with a man's burial in one of these places after the protagonist's liberal son Terry flees the country. An Olive Schreiner novel is titled for *The Story of an African* one of these places. A corpse is found in one of these places purchased by the businessman Mehring in the novel *The Conservationist.* In a memoir, the author has an affair with the hunter Denys Finch Hatton while running one of these places. For 10 points, *Out of Africa* is set in what kind of place where Isak Dinesen directed the harvesting of coffee?  
ANSWER: **farm**s [accept **plantation**s; or **coffee farm**s; or **coffee plantation**s; accept *The Story of an African* ***Farm***]  
<Literature World / Classical / Misc - Joseph Krol>

7. Ella Baker collaborated with Marvel Cooke on a 1935 expose analyzing the terrible working conditions of a "slave market" in this city. The International Peace Mission movement was founded by a man from this city who claimed to be a reincarnation of God, Father Divine. The death of Lino Rivera, a boy who was caught stealing a penknife, sparked 1935 race riots in this city that are considered the "first modern race riots." Philip Payton's Afro-American Realty provided hundreds of apartments to African-Americans in this city. Adam Clayton Powell Jr. was a minister at this city's Abyssinian Baptist Church. This city's Cotton Club was the venue for such performers as Duke Ellington. For 10 points, name this city where the Wall Street bombing took place.  
ANSWER: **New York** City [or **NYC**]  
<History American (1865-1945) - Hari Parameswaran>

8. This composer adapted the folk tune "I come from the poplars, mother" to start a neoclassical chamber concerto whose sloppy premiere earned the ire of Wanda Landowska. Arthur Rubinstein was the dedicatee of this composer's piano showpiece *Fantasia Baetica*. A section of one of this composer's ballets is often performed as the stand-alone piano piece "Ritual Fire Dance." This composer wrote a piece for piano and orchestra that includes movements titled for "A Distant Dance" and the Generalife near the Alhambra. A miller's wife is pursued by a corregidor in a ballet by this composer of *Love the Magician*. For 10 points, name this composer of *The Three-Cornered Hat* and *Nights in the Gardens of Spain* who frequently drew from Andalusian music.  
ANSWER: Manuel de **Falla** [Manuel de **Falla** y Matheu]  
<Arts Music - Matt Weiner>

9. A team led by Jeroen Raes showed that the production of a metabolite of this compound was positively correlated with the presence of members of the genera *Coprococcus* and *Dialister*. Levels of this compound can be increased by Sinemet **(SI-nuh-met)** and entacapone **(en-TA-kuh-pown)**, which inhibit its breakdown by AADC and COMT respectively. In vesicles, this compound's namesake beta-hydroxylase transforms it into norepinephrine. This catecholamine is transported away from the ventral tegmental area in the mesolimbic pathway. Cogwheel rigidity, tremors, and a shuffling gait may indicate that production of this compound in the substantia nigra is impaired. For 10 points, name this neurotransmitter that is underproduced in Parkinson's disease.  
ANSWER: **dopamine** (the metabolite mentioned in the leadin is DOPAC)  
<Science Biology - Vishwa Shanmugam>

10. Antenor Firmin argued for the relative unimportance of these things in a book titled after a treatise on the same subject by Arthur de Gobineau. A.W.F. Edwards argued in favor of using these things in science in a paper titled "Lewontin's Fallacy." In practice, "realism" regarding these things is synonymous with the acronym HBD. The research of Samuel Morton, who was a polygenist regarding these things, is critiqued in a heavily disputed analysis in *The Mismeasure of Man* that especially critiques Morton's craniometry studies. Gene Weltfish co-authored a pamphlet about these things with Ruth Benedict arguing differences between them are cultural rather than biological. For 10 points, name these groupings of people that include "Asian," "white," and "black."  
ANSWER: human **race**s [prompt on skin colors; do not accept "ethnic groups" or "ethnicities"]  
<Social Science Anthropology - Clark Smith>

11. An artist born in this country who painted many scenes showing St. Bartholomew splayed as if coming out of the frame during his *Martyrdom* also painted a club-footed boy holding a paper asking for alms. That artist from this country formed the Cabal of Naples with an Italian and a Greek painter. A painter from this country depicted a pure white lamb with its feet bound in *Agnus Dei* and painted a saint wearing plain white robes while chained to a barely-visible tree trunk in *The Martyrdom of Saint Serapion*. An artist from this country reused the model from his *Christ in the House of Martha and Mary* for a painting of an old woman frying eggs. That artist from this country showed Cupid holding a mirror to the title *Rokeby Venus*. For 10 points, name this home country of Diego Velazquez.  
ANSWER: **Spain** [accept Kingdom of **Spain** or Reino de **España**] (the other unmentioned painters are Jusepe de Ribera and Francisco de Zurbarán, respectively)  
<Arts Painting - Hari Parameswaran>

12. The partial pressure of water in these substances is termed water activity and is commonly monitored as a critical control point in the HACCP system. These substances are the most common substances to be stored using "modified atmosphere packaging." Serial dilution of these substances is regularly used to determine the most probable number of coliforms. Wilbur Atwater found the constants used in the 4-4-9 method for calculating the theoretical energy content of these substances, which has largely replaced direct estimation via bomb calorimetry. Good manufacturing practice encompasses government regulations on the production of drugs, cosmetics, and these substances. For 10 points, name these substances made of carbohydrates and fats.  
ANSWER: **food**s [or **beverage**s; accept logical equivalents like **drink**s or **eatable**s; anti-prompt on specific foods or categories of food like meats or vegetables with "what more general category are those in?"]  
<Science Chemistry - Geoffrey Chen>

13. Festivals of this ethnic group's music occur annually at the Blackham Coliseum and open with a "National Anthem" about Jolie Blonde. Reverend Jules Daigle created the first dictionary of this ethnic group's dialect, which frequently uses the conjunction "mais" **(may)** and non-purposive **(PUR-puh-siv)** subjunctive clauses. This people's folklore includes the Grunch and people who break Lent seven years in a row and turn into the werewolf-like *rougarou* **(roo-guh-roo)**. This ethnic group's "joy of living" culture is characterized by zydeco music and their phrase "let the good times roll." Onion, celery, and bell pepper form the "Holy Trinity" of this people's cuisine, whose dishes include boudin **(boo-dan)** balls and gumbo. For 10 points name these descendents of exiled Acadians who settled in Louisiana.  
ANSWER: **Cajun**s [accept **Cadien**s; prompt on French Louisianans; prompt on Acadians or Laurentians with "What ethnic group are their descendants?"; do not accept or prompt on creole]  
<Geography - Ganon Evans>

14. In 2010 people in this region rallied against a plan to transfer a small amount of forest land to a "shrine board." The Hurriyat Conference and the Plebiscite Front advocated the independence of this region. This region's National Conference, led by Sheikh Muhammad Abdullah, negotiated the end of the Dogra Dynasty here and the creation of Article 370 regarding its "special status." A conflict over this region was ended by the Tashkent Declaration following its invasion in Operation Gibraltar. The Siachen and Kargil wars were fought over this region, which was "locked down" in 2019 by the BJP government. The Line of Actual Control divides, for 10 points, what disputed area on the India-Pakistan border?  
ANSWER: **Kashmir** [or Jammu and **Kashmir**]  
<History World - Matt Weiner>

15. After feeling that he has been betrayed, one character in this novel says, "there is no just God that governs earth righteously, but a God of lies." Another character in this novel states, "I like the working-folks, and their victuals, and their ways" while crying after declining an offer to "improve her life." Dolly Winthrop invites the protagonist of this novel to come to church on Christmas, but he responds by saying he's only been to a chapel and offering Dolly's son a piece of cake. That title character of this novel goes to the Rainbow Inn to seek help after a robbery and is framed for theft at Lantern Yard. Near the end of this novel, the protagonist adopts Godfrey's daughter Eppie. For 10 points, name this novel about the title "weaver of Raveloe," by George Eliot.  
ANSWER: ***Silas Marner****: The Weaver of Raveloe*  
<Literature British - William Grossman>

16. In a film by this director, a mysterious boy named Ismael foretells an old woman knocking over a lamp, causing a fire that kills the protagonist's abusive step-father. Andrei Tarkovsky frequently mimicked this director's usage of sparse sound, and later hired this director's cinematographer for his film *The Sacrifice*. After being threatened with boiling water, a previously mute actress begins speaking to her nurse in a film by this director that stars his frequent collaborator Bibi Andersson. A film by this director of *Fanny and Alexander* ends with a *Danse Macabre* on a hill after the knight Antonius Block loses to Death in a game of chess. For 10 points, *Persona* and *The Seventh Seal* are films by what Swedish director?  
ANSWER: Ingmar **Bergman** [or Ernst Ingmar **Bergman**; do not accept or prompt on "Ingrid Bergman"]  
<Arts Film - Tim Morrison>

17. This man names a theorem whose proof often uses the result that certain locally uniformly bounded families of functions are normal, called Montel's theorem. The Möbius transformations are the automorphisms of an object named for this man, on which any rational function can be extended to a continuous function. This man is the alphabetically-later namesake of the equations "*u*-sub-*x* equals *v*-sub-*y*" and "*u*-sub-*y* equals negative *v*-sub-*x*" that give necessary conditions for a complex function to be holomorphic. This man names a function given by the infinite series "one over *n* to the *s*," whose "critical strip" contains all of its nontrivial zeros. For 10 points, a Millennium Prize Problem concerns what German's namesake zeta function?  
ANSWER: Bernhard **Riemann** [or **Riemann** mapping theorem; or **Riemann** sphere; or Cauchy-**Riemann** equations; or **Riemann** zeta function]  
<Science Math - Tim Morrison>

18. A family of Kenites **(keh-nites)** refuse Jeremiah's invitation to perform this action in order to honor a vow made by their forefather Rechab **(reh-cahb)**. Lemuel's **(leh-moo-el)** mother tells him that kings should not perform this action, shortly before describing the "virtuous woman." Habakkuk **(ha-bah-kuhk)** proclaims woe on those who make their neighbor perform this action. Ephesians **(eh-fee-see-ans)** contrasts the result of this action with being "filled with the Spirit." Ham sees his sleeping father Noah's nakedness right after Noah performs this action, leading Noah to curse Ham's son Canaan **(cay-nan)**. At Belshazzar's **(bell-shuh-zars)** feast, he performs this action with gold and silver vessels from the temple. For 10 points, what action is performed alongside eating bread in the Eucharist **(YOO-kuh-rist)**?  
ANSWER: drinking **alcohol** [or consuming **alcohol**; or getting **drunk**; or drinking **wine** or **beer**]  
<RMP Christian/Bible Religion - Clark Smith>

19. The first White House state dinner was held in honor of a ruler of this kingdom and occurred during that man's 1874 tour of the United States. Claus Spreckels established one of the largest plantations in this kingdom after its king signed an 1875 Reciprocity Treaty with the United States. An officer in the Italian army named Robert Wilcox opposed this kingdom's "Reform Government" in an 1889 rebellion. John L. Stevens, the U.S. minister to this kingdom, conspired with the Committee of Safety to overthrow its ruler. A ruler of this kingdom was forced at gunpoint to sign the Bayonet Constitution, which ceded power to sugar and pineapple magnates. For 10 points, name this kingdom which was ruled by Queen Liliuokalani **(lil-EE-oh-kuh-LAH-nee)** before it became the 50th U.S. state.  
ANSWER: Kingdom of **Hawai'i**  
<History American (1865-1945) - Hari Parameswaran>

20. When this character drinks from a glass while staying with his lover, he thinks of her other lover drinking from the same glass in her "real world.'' This character falls in love with a woman after he forgets his cigarette case at her house. The narrator of a book worships the pink hawthorn blossoms on a path to this character's house. In a book, the narrator's mother reads him a George Sand novel after this man's arrival keeps the narrator from receiving his usual goodnight kiss. While playing in the Champs-Élysées **(SHOM-zeh-LEE-zay)**, the narrator falls in love with this man's daughter Gilberte **(zheel-BAIRT)**. This man associates Vinteuil's **(van-TUY's)** Violin Sonata with his relationship with Odette de Crécy. For 10 points, name this man whose "way" titles the first volume of Marcel Proust's *In Search of Lost Time.*  
ANSWER: **Charles** **Swann** [accept either underlined portion]  
<Literature European - Shan Kothari>

21. In this city, the message "Mr. Amos kept his promise from the fifth-third" alerted Alexander Zusia Friedman's correspondents of raids. Emanuel Ringelblum and other members of Oneg Shabbat buried records from this city in milk cans. A wooden bridge crossing Chłodna **(HOO-load-na)** Street split a neighborhood in this city between its "Large" and "Small" districts. Mordechai Anielewicz **(AN-yell-uh-vich)** led the ŻOB against Jürgen Stroop's divisions before dying at the bombing of Mila Street in this city. Jewish citizens of this city could either join library "burning" groups or be deported to nearby Treblinka after the liquidation of the largest Jewish ghetto in Europe. For 10 points, an "Uprising" occurred against Nazi occupation in what capital of Poland?  
ANSWER: **Warsaw** [or **Warszawa**; accept the **Warsaw** Uprising or the **Warsaw** Ghetto Uprising]  
<History European 1914-present - Ganon Evans>

**2021 National All-Star Academic Tournament**

**Round 5 – Bonuses**

1. The Yale-Brown scale is used to diagnose this disorder, whose extreme subtypes include excoriation disorder. For 10 points each:  
[10] Name this mental disorder in which repeated intrusive thoughts drive a person to perform repeated behaviors such as counting or hand-washing.  
ANSWER: **obsessive-compulsive** disorder [or **OCD**]  
[10] OCD is sometimes treated with this specific class of drugs, whose brand names include Lexapro, Prozac, and Zoloft.  
ANSWER: **SSRI**s [or **selective serotonin reuptake inhibitor**s; prompt on antidepressants]  
[10] The related but contentious obsessive-compulsive personality disorder is placed in this cluster of "anxious" disorders alongside avoidant and dependent personality disorders. In the common naming scheme, this cluster is contrasted with the "odd" and "dramatic" clusters.  
ANSWER: cluster **C** disorders   
<Social Science Psychology - Clark Smith>

2. After inventing this system, its creator coined the term 'gyroscope' to describe a more practical device that demonstrated the same physical principle. For 10 points each:  
[10] Name this system. Using a rotating reference frame, it can be shown that this system gains a geometric phase factor, disrupting the underlying planar motion with frequency 'root g over l'.   
ANSWER: **Foucault pendulum** [or **Foucault's pendulum**; prompt on pendulum]   
[10] The Foucault **(foo-COH)** pendulum has a period of one day over this function of latitude. Pendulums are modeled as simple harmonic oscillators under the approximation that this function of theta equals theta for small angles.  
ANSWER: **sin**e theta  
[10] The trick of moving to a rotating reference frame can also be used to derive this phenomenon with frequency equal to minus the gyromagnetic ratio times magnetic field strength.   
ANSWER: **Larmor precession** [prompt on partial, prompt on Larmor frequency]  
<Science Physics - Joseph Krol>

3. In this novel, Nyasha suffers from an eating disorder after returning from England and struggling to gain independence from her traditional family. For 10 points each:  
[10] Name this novel in which Tambu enters a missionary school run by her uncle Babamukuru after her brother Nhamo's death.  
ANSWER: ***Nervous Conditions***  
[10] Tsitsi Dangarembga **(tuh-SIT-see dan-gar-EMB-gah)** set her novel *Nervous Conditions* in this country home to NoViolet Bulawayo. Authors from this country have satirized corruption by its Prime Minister Robert Mugabe.  
ANSWER: Republic of **Zimbabwe**  
[10] The title of *Nervous Conditions* comes from Jean-Paul Sartre's introduction to this Frantz Fanon book which analyzes the dehumanizing effects of colonization and the revolt of the lumpenproletariat.  
ANSWER: *The* ***Wretched of the Earth*** [or *Les* ***Damnés de la Terre***]  
<Literature World / Classical / Misc - Noah Sheidlower>

4. The "Big Five" businesses in this industry included Wilson and Cudahy, who were investigated with the Neill-Reynolds Report. For 10 points each:  
[10] Name this industry accused of sending "embalmed" products to soldiers in the Spanish-American War.   
ANSWER: **meat**packing industry [or **beef** or **pork** industry; or **slaughterhouse**s; prompt on the food industry]  
[10] This Ohio city, named indirectly for a Roman dictator, was nicknamed "Porkopolis" after Elisha Mills established the first large-scale pork-packing plant here in 1818. Macedonian immigrants to this city invented a form of chili popularized by the Skyline chain.  
ANSWER: **Cincinnati** [or **Cincinnati** chili]   
[10] Joel Tiffany and Andrew Chase secured separate patents after modifying William Davis's original design for this invention, which more than doubled the income of the Swift and Armour meatpacking companies.  
ANSWER: **refrigerated train car**s [or **refrigeration** inside **rail**road **car**s; prompt on partial answers]  
<History American (1865-1945) - Ganon Evans>

5. An artist replaced the flowered dress of a woman who died during this event with terracotta in a painting inspired by Pablo Picasso's *Portrait of Gertrude Stein*. For 10 points each:  
[10] Name this event which may have caused an artist to leave his mother's hands unfinished in his painting *The Artist and his Mother*.  
ANSWER: the **Armenian Genocide** [or the **Armenian Holocaust** or **Medz Yeghern**; prompt on genocide; do not accept or prompt on "Holocaust" alone]  
[10] A copy of Arshile **(ahr-sheel)** Gorky's *The Artist and his Mother* is held at the Whitney, but the version with terracotta patterning is displayed in this city's National Gallery. The Smithsonian Institute is found in this city.   
ANSWER: **Washington**, **D.C.** [accept either underlined part]  
[10] After his mother died, Gorky moved to America and lived with this artist, the subject of his *Portrait of Master Bill*. This artist included a piece modeled on the *Venus of Willendorf* and a collage using a cutout from a cigarette ad in one series.  
ANSWER: Willem de **Kooning** (That is his *Woman* series)  
<Arts Painting - Ganon Evans>

6. This thinker criticized the "ultrafeminine theme" of her breast cancer experience in her essay *Welcome to Cancerland*. For 10 points each:  
[10] Name this thinker who authored *Death of a Yuppie Dream* with her husband John. Her book *Bait and Switch* followed up on a book analyzing effects of the 1996 welfare reform bill through the author’s experiences in Florida, Maine and Minnesota.  
ANSWER: Barbara **Ehrenreich** (The last book described is *Nickel and Dimed*)  
[10] In one chapter of *Nickel and Dimed*, Barbara Ehrenreich takes a low-wage job at a Minnesota store of this Arkansas-based company. This retailer is the world's largest company by revenue.  
ANSWER: **Walmart**  
[10] Barbara Ehrenreich discusses her cancer survivorship in a 2009 book critical of this genre of writing. Dale Carnegie and Stephen R. Covey are best known for books in this genre.  
ANSWER: **self-help** books [accept **self-improvement** books]  
<Other Academic - Shan Kothari>

7. This organism is used in an assay of protein-protein interactions in which proteins are selected as bait and prey and have fragments of a transcription factor fused onto them. For 10 points each:  
[10] Name this model organism in which that two-hybrid assay is most commonly performed.  
ANSWER: Baker's **yeast** [or **Saccharomyces** or **S**accharomyces **cerevisiae**]  
[10] Normal two-hybrid assays don't work on membrane proteins, as the fused transcription factor can't enter the nucleus. For those proteins, a variant in which this protein is "split" into Cub and Nub domains is used instead.  
ANSWER: **ubiquitin** [accept split **ubiquitin** two-hybrid assay or similar answers]  
[10] The most common transcription factor used in 2-hybrid assays, GAL4, codes enzymes that aid in metabolizing one of these compounds, galactose. A reporter gene for two-hybrid assays breaks down lactose, another of these compounds.  
ANSWER: **sugar**s [or **carbohydrates**; accept **monosaccharides** or **disaccharides**]  
<Science Biology - Vishwa Shanmugam>

8. Zygmunt Krasiński **(ZIG-moont krah-SHIN-skee)**, a poet from this broad movement, imagined a doomed pan-European revolution in his play *The Undivine Comedy*. For 10 points each:  
[10] Name this literary movement associated with the "Three Bards" of Polish poetry. Their interest in the natural world was partly inspired by this movement's British members like Byron and Wordsworth.   
ANSWER: **romantic**ism   
[10] In this Polish romantic poem, the title character falls in love with Zosia, a member of a rival family. It somewhat counterintuitively opens "O Lithuania, my homeland!"  
ANSWER: ***Pan Tadeusz*** **(pahn TAH-day-oosh)** [or ***Master Thaddeus***] (by Adam Mickiewicz)  
[10] The orphan Tadeusz is raised by his uncle Soplica, who has this profession. In a play, a man with this profession declares Grusha and not the Governor's Wife to be Michael's true mother.  
ANSWER: **judge**s [accept **magistrate**s] (The play is Brecht’s *The Caucasian Chalk Circle*)  
<Literature European - Joseph Krol>

9. Vahyazdata pretended to be a ruler with this name and even went so far as to appoint his own satrap of Arachosia. For 10 points each:  
[10] Give this name of Cambyses II's younger brother. Darius the Great prevented a Magian named Gaumata from taking the Persian throne by claiming that he was a "false" person with [this name].   
ANSWER: **Bardiya** [or **Smerdis**]  
[10] An image of the false Smerdis kneeling before Darius the Great can be found on this rock inscription in Kermanshah Province. Henry Rawlinson was the first to translate the writing on this rock relief.  
ANSWER: **Behistun** Inscription [accept the **Bisutun** Inscription; or the **Bisotun** Inscription; or the **Bagastana** Inscription; or the **Bisitun** Inscription]  
[10] In *The Histories*, this historian argued that Darius came to power with the help of six other conspirators, including Megabyzus and Hydarnes, who overthrew Gaumata. This Greek historian is considered to be the "father of history."   
ANSWER: **Herodotus**  
<History World - Hari Parameswaran>

10. The goddess Eirene **(eye-ree-nee)** was frequently depicted with one of these objects, one of which was created from the horn of the goat Amalthea **(ah-mahl-thee-ah)**. For 10 points each:  
[10] Name these objects also associated with gods like Plutus **(ploo-tuss)**, the god of wealth.   
ANSWER: **Cornucopia** [prompt on horn of plenty]  
[10] Eirene was depicted bestowing clothing and garlands on various mythological women, including this wife of Epimetheus **(eh-pi-mee-thee-us)** who opens a jar releasing all evils into the world.  
ANSWER: **Pandora**  
[10] An altar on the Campus Martius **(kam-poos mar-tee-oos)** and a new temple known as this goddess's forum were built by Augustus in honor of this Roman equivalent of Eirene, who was depicted as bringing children and crops during a period instituted by Augustus.  
ANSWER: **Pax** [prompt on Peace; prompt on Ara Pacis]  
<RMP Greek/Roman Myth - Matt Weiner>

11. A medieval anti-English slur originates from the legend of a village that didn't listen to the first holder of this religious office and were given tails as a curse. For 10 points each:  
[10] Name this office first held by a Saint Augustine who wasn't from Hippo. It was also held by the martyred Thomas à Becket.  
ANSWER: **Archbishop** of **Canterbury** [prompt on archbishop]  
[10] Archbishop Thomas Arundel is largely known as an opponent of this movement, whose members were depicted on misericords as foxes in priestly garb preaching to geese. They were founded by John Wycliffe.  
ANSWER: **Lollard**s [accept word forms]  
[10] The Lollards may have gotten their name from a member of this other proto-Protesant group named Lolhard. A Milton sonnet commemorates the Piedmontese Easter, in which these advocates of voluntary poverty were massacred.  
ANSWER: **Waldensian**s [or **Waldenses**; or **Vallenses**; or **Valdesi**; or **Vaudois**]  
<History European to 1400 - Clark Smith>

12. A poet of this ethnicity wrote about falling in love with Trevor on a tobacco farm in a 2019 novel in the form of a letter to their mother Rose. For 10 points each:  
[10] Name this ethnicity of the author of *On Earth We're Briefly Gorgeous.* An author of this ethnicity wrote a novel in the form of a spy's confession after his capture, titled *The Sympathizer.*  
ANSWER: **Vietnam**ese [or **Vietnam**ese-American] (Those authors are Ocean Vuong and Viet Thanh Nguyen.)  
[10] The protagonist of *The Sympathizer* consults for a work in this medium called *The Hamlet*, which is a reference to a work in this medium, Francis Ford Coppola's *Apocalypse Now.*  
ANSWER: **film** [or **movie** or **cinema** or **motion picture**]  
[10] The Vietnamese cook Binh works at the home of these *two* real-life people in Monique Truong's novel *The Book of Salt.* One of these two people imagines writing *The Wives of Geniuses I Have Sat With* before writing about their time with the other person.  
ANSWER: Gertrude **Stein** and Alice B(abette) **Toklas** [accept in either order; prompt on partial answers] (The second sentence refers to *The Autobiography of Alice B. Toklas*)  
<Literature American - Tim Morrison>

13. Paul Banks first noted the similarities between this symphony's second movement and the scherzo third movement of Hans Rott's Symphony in E Major. For 10 points each:  
[10] Name this symphony composed several years after Rott's death. This symphony's *Blumine* **(bloo-MEEN)** movement was removed after its first edition.  
ANSWER: ***Titan*** *Symphony* [accept but do NOT otherwise reveal Symphony No. **1** by Gustav **Mahler** or Gustav **Mahler**'s **First** Symphony]  
[10] Hans Rott was called "a musician of genius" by this composer of the *Titan Symphony* who studied with him in Vienna. This composer incorporated lieder from his *Des Knaben Wunderhorn* in symphonies like *Resurrection*.  
ANSWER: Gustav **Mahler**  
[10] Despite the sonic similarity to Rott's scherzo, the second movement of the *Titan Symphony* is actually one of these German dances. Mahler later used this dance in the second movement of his Ninth Symphony.  
ANSWER: **ländler**s  
<Arts Music - Ethan Strombeck>

14. The dissolution of alkali metals in ammonia produces a deep blue color as these species become solvated. For 10 points each:  
[10] Name these particles, which are the smallest possible anions. The energy to release one of these particles is the ionization energy.  
ANSWER: solvated **electron**s [or **e**- **(e-minus)**; prompt on electrides]  
[10] This scientist found that exposing benzene derivatives to solvated electrons, typically derived from sodium, would produce the corresponding cyclohexadienes while developing the first synthesis of an androgen steroid.  
ANSWER: Arthur (John) **Birch** [accept **Birch** reduction]  
[10] Substituting a group with this property to an arene allows the Birch reduction to target the ipso and para position rather than the ortho and meta. In general groups with this property have a negative mesomeric effect.  
ANSWER: **electron-withdrawing** groups [or **EWG**; accept **deactivating** groups]  
<Science Chemistry - Steven Liu>

15. Cornelis Lely designed a project of this type that helped lead to the creation of the Flevoland province and ran concurrently to the Delta Works Project. For 10 points:  
[10] Name this type of campaign exemplified by the Zuiderzee Works project. The district of Fontvieille in Monaco, as well as much of the rest of the country, was the subject of a project of this type.   
ANSWER: **land reclamation** [accept descriptive answers that convey taking underwater land and **making it useable land**]  
[10] During the Renaissance, the Dutch built polders that used these buildings to pump water into canals called bosoms. Fantails are used in these types of buildings to help them account for environmental conditions.  
ANSWER: wind**mill**s   
[10] The Delta Works were funded by the discovery of natural gas in Dutch waters and this program. This program was designed to provide American aid to Europe after World War II.  
ANSWER: **Marshall** Plan [or the **European Recovery Program**; or **ERP**]  
<History European 1914-present - Ganon Evans>

16. The future Pope Clement XII withdrew from funding this thinker's major work, whose frontispiece shows a ray of light from the "eye of providence" piercing a woman representing metaphysics. For 10 points each:  
[10] Name this 18th-century thinker, who proposed that mankind arose from a "bestial age" in his work *The New Science*.  
ANSWER: Giambattista **Vico**  
[10] Vico's *The New Science* proposes a "cyclical" form of this concept. Francis Fukuyama analyzed the "last man" in a book titled for the "end of" this concept.  
ANSWER: **history**  
[10] Vico was one of the main thinkers that Isaiah Berlin identified as part of the Counter-Enlightenment, alongside Johann Gottfried Herder and this other thinker, who was Herder's mentor. This thinker wrote the essay *Socratic Memorabilia*.  
ANSWER: Johann Georg **Hamann**  
<RMP Philosophy/Thought - Joseph Krol>

17. In a poem titled for this thing, the speaker promises his lover, "when all wells are drawn dry, / I'll drink a tear out of thine eye." For 10 points each:  
[10] Name this thing which belongs to Amarantha. This title thing is described as a "spicy nest" in a poem which ends, "our very sorrows weep, / That joys so ripe, so little keep."  
ANSWER: **hair** [accept **Amarantha's hair**; accept "Song to Amarantha, that she would Dishevel her **Hair**"]  
[10] Amarantha's hair was praised by Richard Lovelace, who wrote about lying tangled in Althea's hair in a poem set in one of these places. That poem ends, "Stone Walls do not [one of these places] make, / Nor Iron bars a Cage."  
ANSWER: **prison** [accept "To Althea, from **Prison**"]  
[10] Lovelace tells Amarantha to "shake your head and scatter" her hair like this thing. At the end of "To His Coy Mistress," the speaker says, "we cannot make [this thing] / Stand still, yet we will make him run."  
ANSWER: the **sun**  
<Literature British - Caroline Mao>

18. A package that performed this task was made unavailable after its developer fought with the social media platform Kik over a package name. For 10 points each:  
[10] Describe this task of a simple 11-line long package by Azer Koçulu that, upon its deletion, caused the compiler Babel and any project using it to fail.   
ANSWER: left **pad**ding a string [accept descriptions that indicate **making a string the right length** or **adding empty spaces to a string**; accept **left-pad**]  
[10] The deletion of left-pad and subsequent fallout led to scrutiny over the practices of npm, the default package manager for this server-side Javascript library. It is named for a generic term for any device that sends data on a network.  
ANSWER: **Node** [or **Node.js**]  
[10] In 2018, another popular npm dependency, event-stream, was updated with malicious code to steal account details from people with this commodity, a cryptocurrency first described by Satoshi Nakamoto.  
ANSWER: **Bitcoin** [or **BTC**]  
<Science Computer Science - Vishwa Shanmugam>

19. The death of three people in an improperly constructed one of these structures built by James Ray, led the Lakota Nation to sue him for desecrating their religion. For 10 points each:  
[10] Name these structures used for purification rituals. In the Lakota rite of Inipi **(in-ip-ee)**, the door to one of these structures is opened four times.  
ANSWER: **sweat lodge**s [prompt on partial answer]  
[10] The door is opened four times in reference to the four ages of a prophet who taught the Lakota the Seven Sacred Rites; that prophet is named after these rare, sacred animals in Plains Indian Tradition.

ANSWER: **white buffalo**es [accept **White Buffalo** Calf Woman; accept **White Buffalo** Maiden; prompt on buffalo]

[10] The White Buffalo Calf Woman gave the Lakota a sacred one of these objects to use in the Seven Sacred Rites. Kinnikinnick **(ki-nee-ki-nuhk)** is smoked in these objects, which may also be used to seal a peace treaty.  
ANSWER: **pipe**  
<RMP Non-Christian/Bible Religion - Adam Swift>

20. Answer the following about the popular Asian garment of sarongs **(sun-RONGs)**. For 10 points each:  
[10] This is the larger of two islands on which a panel called the *kepala* is created by sewing together rows of triangles with golden thread on sarongs. Wayang **(WHY-ahng)** shadow puppet performances often accompanied by *kendhang* **(kend-AHNG)** drums originated on this island.  
ANSWER: **Java** [or **Jawa**]  
[10] Sarongs are often dyed using this process in which a design is covered in melted wax so it doesn't absorb vegetable oil. Oral tradition passed down in Indonesia has taught how to use pen-like *cantings* **(chan-TING)** to create designs that may be printed with a copper tool called a *cap*.  
ANSWER: **batik**  
[10] *Batik* designs were influenced by this Islamic art form which may be written in Kufic **(KOO-fick)** or Naskh script with pen and ink.  
ANSWER: **calligraphy** [accept word forms like **calligraphic** writing; prompt on writing alone]  
<Arts Misc Arts - Ganon Evans>

21. One of these compounds is used as the recording layer of many CD-Rs and DVD-Rs, giving them their distinctive blue color. For 10 points eachL  
[10] Name this class of compounds which have a central nitrogen-nitrogen double bond that is often bound to aryl **(AIR-il)** groups. Radical initiators like AIBN are examples of these compounds.  
ANSWER: **azo** compounds [accept **azo** dyes or **azo** pigments]  
[10] Azo compounds are synthesized by a namesake coupling, an example of the electrophilic aromatic variant of this reaction type. Reactions of this type replace one functional group with another.  
ANSWER: **substitution** reactions [accept electrophilic aromatic **substitution**; prompt on EAS]  
[10] An alternative route to azo compounds is oxidizing derivatives of this molecule with formula N2H4. The harsh Wolff-Kishner reduction uses this molecule to remove carbonyls **(carbon-EELZ)**.  
ANSWER: **hydrazine**s  
<Science Chemistry - Vishwa Shanmugam>