1. One method of creating these molecules involves culturing in an IL-6 rich medium or injecting into the peritoneal cavity of a mouse and collecting the ascites. The classical method of creating these molecules was developed by Cesar Milstein, and involves growing cells deficient in HGPRT in a medium containing hypoxanthine, thymidine, and aminopterin. Examples of these molecules used therapeutically include adalimumab, which inhibits TNF-alpha, and Trastuzumab, or Herceptin, used to treat breast cancer. These proteins are created by fusing a single plasma cell with a mouse myeloma cell, creating a hybridoma that secretes only one heavy-light chain pair. For 10 points, name these pharmaceuticals that consist of an antibody targeting a single epitope.

ANSWER: monoclonal antibodies

2. In a post-Classical story, the Cypriot youth Cymon falls in love with this sleeping woman. The story of this woman, which begins with the unwise slaughter of a pregnant hare, includes her theft of a *xoanon*, or carved cult image, when she is in the land of King Thoas. This character is taken away under the pretense that she will be wedded to Achilles. Later in life, she becomes a priestess of Artemis, who had replaced her with a deer at the instant of her death. Calchas declares that this woman's sacrifice is needed to allow the Greek fleet to sail to Troy, so her father Agamemmnon seizes her. For 10 points, name this woman who, according to Euripides, goes to Tauris after fleeing Aulis.

ANSWER: Iphigenia

3. Harris names a "sheet" of this quantity that serves as a common solution to the Maxwell-Vlasov equation, and one of these is run through a plasma in a z-pinch apparatus. Dividing this quantity by area gives a quantity whose four-gradient is set equal to zero in a common continuity equation in special relativity. The energy stored in an inductor is proportional to the square of this quantity. This quantity multiplies the cross product of a length infinitesimal with the displacement vector in the integrand of the Biot-Savart law. Devices used to measure this quantity are placed in series and have negligible internal resistance. Multiplying this quantity by V gives power. For 10 points, name this quantity equal to the amount of charge flowing in a wire at any given time.

ANSWER: current

4. This play begins in a chamber furnished only by a scarlet throne where a woman explains that the workers have run away to the hills. The protagonist of this play shoots at the shapeless beings called "Little Formless Fears" that he encounters in the forest and then imagines being auctioned off as a slave and transported on a slave ship while a tom-tom beats ever faster and louder in the background. The title character of this play avoids being sacrificed to a crocodile towards the end, and he originally runs away from his palace when he learns of Lem's rebellion from the white trader Smithers. For 10 points, name this Eugene O'Neill play in which a former Pullman Porter, Brutus, is finally killed by a silver bullet.

ANSWER: The Emperor Jones

5. This condition holds for a score above 5 on the Altman Self-Rating scale, while eleven questions scored from 0 to 4 are used to diagnose it on Young's scale. Hyperthymia may be misdiagnosed as a mild form of it. According to DSM-IV, mixed episodes may be characterized by the "dysphoric" type of this condition. Whether or not the unipolar form of this condition exists is still debated. The so-called "flight of ideas," or pressured speech, is common in people experiencing this condition. Diagnosis of bipolar disorder I usually requires at least one instance of this condition. In bipolar patients, it alternates with depression. For 10 points, name this behavior of extremely elevated activity and mood.

ANSWER: <u>mania</u> [or <u>manic</u> activity; or word forms; prompt on <u>bipolar</u> disorder before it is read]

6. One of this choreographer's ballets uses Respighi's *Ancient Airs and Dances* to adapt a Boccaccio story to the stage. An actor delivers a spoken-word Indictment in a ballet by this choreographer that includes the numbers "Church Social" and "Cotillion," and whose protagonist is simply called "The Accused." This choreographer transcribed "I Ride an Old Paint" for a ballet that was the first to incorporate a tap dance. This woman worked with Morton Gould on that ballet about an axe-murderess. For 10 points, name this choreographer, the niece of director Cecil, who told the story of Lizzie Borden in *Fall River Legend* and worked with Aaron Copland on *Rodeo*.

ANSWER: Agnes de Mille [or Agnes George de Mille]

7. The distribution of ratios of numbers selected from a normal distribution is named after this mathematician. If a prime p divides the order of a group, then according to a theorem due to him, that group has an element of order p. A formula due to this mathematician gives the value of a holomorphic function at each point inside a circle in terms of the values of the function on the circle. If two paths have the same initial and terminal paths, then the integral over them for a holomorphic function in that region is equal for the two paths according to an "integral theorem" due to him. This man was the first to discover an inequality stating that two vectors's dot product is less than the product of their magnitudes. For 10 points, identify this French mathematician who names a notable inequality with Hermann Schwarz.

ANSWER: Augustin-Louis Cauchy

8. Both husbands of the noblewoman Marina Mniszech had this name; the latter of those two men began gathering followers at Starodub, and got decapitated at Kaluga. A deacon named Sidorka took this name to try to get Sweden to intervene in his own country. After death, a man of this name who ruled for ten months had his ashes shot towards Poland out of a cannon by supporters of Vasily Shuisky. A boy christened with this name was banished to Uglich, where he was stabbed in the throat at age eight, during the reign of Boris Godunov. For 10 points, give this name of a murdered son of Ivan the Terrible, whose name was claimed by three pretenders to the Russian throne during the Time of Troubles falsely.

ANSWER: Tsarevich **Dmitri** Ivanovich [or Pseudo-**Demetri**us; accept "false Dmitri s"]

9. Pakistani immigrant Shehzad Luqman was stabbed to death in this city's Petralona neighborhood. Santiago Calatrava designed a white Velodrome and a stadium with a retractable glass roof for an Olympic Games hosted in this city. This city contains many traditional restaurants in its old Plaka neighborhood. In this city, journalists on the upper floors of the Hotel Grande Bretagne are able to take pictures of protests in Syntagma square. Accessed via Venizelos airport to the east, its older landmarks include the octagonal Tower of the Winds and the Keramikos district. For 10 points, name this capital city which recently built a new museum in hopes of housing the Elgin Marbles near the Acropolis.

ANSWER: Athens [or Athina]

- 10. The opening Moderato of a G major piece of this type by this composer includes a series of fast Scotch snaps. Another of these pieces takes its nickname from the bariolage passages in its fourth movement. Two-bar statements of the main theme at the very end of one in E-flat major are constantly interrupted by rests. Apart from the "Apponyi" and "Tost" sets, bunches of these pieces were published six to an opus. One of them incorporates the melody "Gott erhalte Franz den Kaiser," which was later reworked into the "Deutschlandlied." The "Russian" ones include one nicknamed "the Joke," and the Opus 20 ones are nicknamed the "Sun." For 10 points, name these chamber pieces, such as the "Emperor," by an Austrian said to be the father of their form. ANSWER: Franz Joseph <u>Haydn</u>'s <u>string quartets</u> [or <u>string quartets</u> by <u>Haydn</u>; prompt on partial answer]
- 11. This book describes the loss of the "faithful martyr" Antipas, said to have been killed in a city "where Satan dwells." The author of this book chides a community for forsaking their first love, another for following an immoral prophetess, and still another for being lukewarm, warning that God will spit them out of His mouth. It begins with brief messages to seven churches in Asia, such as Ephesus and Philadelphia. In this book, creatures called locusts have human faces with lion's teeth. Near the end of this book, the author describes the "Beast of the Earth" and the "Beast of the Sea," and the opening of the seventh seal. For 10 points, name this final book of the New Testament which contains numerous prophecies about the end of the world.

 ANSWER: Book of **Revelation** [or the **Apocalypse**; do not accept "Revelations"]
- 12. In a speech adapted from one by J. Wallace Hamilton, this man noted that Alfred Adler identified the "quest for recognition" as the basic human impulse, an impulse he termed the "Drum Major Instinct." He noted that when "profit motives...are considered more important than people, the giant triplets of racism, militarism and economic exploitation are incapable of being conquered" in a speech explaining "Why I Am Opposed to the War in Vietnam." In his last speech, he claimed to have "seen the promised land" and "been to the mountaintop." He noted that "injustice anywhere is a threat to justice everywhere" in a "Letter from Birmingham Jail." For 10 points, name this orator who envisioned a day when his "four children will not be judged by the color of their skin but by the content of their character" in his "I Have a Dream" Speech. ANSWER: Dr. Martin Luther **King**, Jr.

13. This artist painted a crayfish and a lion next to a sickle-wielding goddess in *Ceres*, the only surviving painting of his series on the four seasons. In another of his paintings, a man wearing baggy pants and an ill-fitting white shirt stands in front of a doctor on his donkey. This user of the "three chalks" technique painted a group of aristocrats putting away a portrait of Louis XIV on the left side of a canvas intended as an advertisement for his friend's boutique. Pairs of lovers prepare to leave the angel-infested isle sacred to Cupid in a painting by this artist depicting a fete-galante. For 10 points, name this Rococo painter of many commedia dell'arte characters, as well as of *Gersaint's Shop Sign* and *Embarkation for Cythera*.

ANSWER: Jean-Antoine Watteau

14. In this city, a book about special stones called the *Lapidario* was produced by a noted 12th-and 13th-century school of translators. This European city is the birthplace of a soldier-poet who popularized the Italian sonnet, named Garcilaso de la Vega. The third council in this city confirmed Reccared's decision to convert from Arianism to Catholicism. As a *taifa*, this one-time capital of the Visigoths was captured by Alfonso X. Much like Damascus, it kept a secret formula for strong ancient-world steel, making it a center for swordsmiths. For 10 points, name this city near the dead center of Spain, the pre-Madrid capital of Spain and adoptive home of El Greco.

ANSWER: Toledo

15. An iconic character in this language's literature says "Humbly report, sir" to start almost every sentence, and gets pushed to a recruiting station in a wheelchair after making money selling dogs. In a play written in this language, a group of beings which have sudden fits of tooth-gnashing includes Damon and Radius. A satire of World War I titled for a certain "Good Soldier" was written in this language, in which Dr. Hallemeier remarks on a group whose members Primus and Helena become analogues of Adam and Eve after revolting and killing all humans except Alquist. For 10 points, name this language used by Jaroslav Hasek and Karel Capek, whose play *R. U. R.* coined the term "robot."

ANSWER: Czech language

16. For Rydberg states, this quantity over hc is the y-intercept of a plot of wavenumber versus one over n squared. The vertical form of this quantity assumes no change in bond length and is greater than its adiabatic form. This quantity is roughly equal to the negative energy of the highest occupied molecular orbital. Photoelectron spectroscopy measures this quantity for materials. This quantity unexpectedly drops between nitrogen and oxygen due to the stability of half-full subshells. Mulliken averaged this quantity and electron affinity to calculate electronegativity. This quantity is analogous to the wavefunction of a metal, and it usually increases across a row on the Periodic Table. For 10 points, name this quantity, the amount of energy required to strip an electron away from a molecule.

ANSWER: ionization energy [or ionization potential]

17. This thinker rejected the treatment of old age as a universal category in the book *The Coming of Age*. This thinker objected to a poor translation done by H. M. Parshley for Random House, of a book which Constance Borde and Sheila Malovany-Chevalier retranslated in the 21st century, and asked what to do with a mediocre, cruelty-obsessed author in the essay "Must We Burn Sade?" This author, who addressed the paradoxes of radical freedom in *The Ethics of Ambiguity*, attacked essentialism in a two-volume book arguing that Man posits himself as subject and construes half of humanity as the eternal Other against which Man is defined. For 10 points, name this existentialist who wrote "One is not born, but rather becomes, woman" in *The Second Sex*.

ANSWER: Simone de Beauvoir

18. A man shows this character his method for tying shoes after she compliments his boots. This woman does not marry a biologist acquaintance as a mutual friend wishes. While she is sitting on a lawn, another character nearly runs into her reciting "The Charge of the Light Brigade." This character becomes angry after a man tells her, "women can't write, women can't paint." This woman and Charles Tansley are both guests of a family whose mother dies in the section "Time Passes," and whose father annoys his son James by telling him the rain will prevent James from visiting the novel's title structure. For 10 points, name this painter staying with the Ramsays in *To the Lighthouse*.

ANSWER: <u>Lily</u> Briscoe [or Lily <u>Briscoe</u>]

19. In the final sentence of this novel, the protagonist vows to step "out of history into history and the awful responsibility of time." Warnings about football come true when its title character's son, the quarterback Tom, breaks his spine after impregnating Sibyl Frey. In this novel, the surgeon Adam Stanton murders a man who charged him with a six million dollar public hospital. This novel's protagonist comes to understand his ancestor Cass Mastern after inadvertently causing the death of Judge Irwin. In this novel, Jack Burden describes the gradual corruption of his friend, the politician Willie Stark. For 10 points, name this Robert Penn Warren novel about a corrupt governor inspired by Huey Long.

ANSWER: All the King's Men

20. This man's plan to retire was stymied when it was revealed that his replacement made a secret lifetime contract with Louis Wolfson. This man's court unanimously ruled that states were obligated to respect court decisions in *Cooper v. Aaron*. This man had earlier signed the Collier-Burns Act, which funded public improvements with a gasoline tax. As a popular governor of California, he became the losing running mate of Thomas Dewey in 1948. This man's court declared obligatory school prayer unconstitutional in *Engel v. Vitale*, and held that defendants must be informed of their rights in *Miranda v. Arizona*. For 10 points, name this man who presided over the *Brown v. Board of Education* decision in his tenure as Chief Justice of the Supreme Court.

ANSWER: Earl Warren

21. José Ruiz Massieu was killed this year, possibly under the direction of his country's president's brother. A constitutional rule preventing any candidate from holding public office before the election left Luis Donaldo Colosio's campaign manager his party's nominee after Colosio was assassinated in Tijuana. This was the year of the "December mistake," when the peso's devaluation set off an economic crisis. The Declaration of the Lacondón Jungle was issued at the beginning of this year to announce the demands of a group led by Subcommandante Marcos. The EZLN tried to seize San Cristóbal and protested among other things their country's new free trade agreement. Ernesto Zedillo's electoral victory in this year made him the last PRI president until 2012. For 10 points, name this year NAFTA came into effect.

ANSWER: 1994

22. This poem sarcastically declares, "a worshipful woman was this one," after describing the ugliness of an old maidservant. The use of the term "wodwo" for "wild-man" in this poem is preserved by Simon Armitage's recent translation. Opening "once the siege and assault was ceased at Troy," this poem uses a rhyme structure called the "bob and wheel." In this poem, a man receives a deer, a boar, and a fox in exchange for three kisses. That character accepts a girdle from Bertilak's wife before being nicked on the neck as part of a beheading game that he started the prior Christmas Eve. For 10 points, name this work of the Pearl Poet featuring a knight of King Arthur and a giant of a certain color

ANSWER: Sir Gawain and the Green Knight

23. Because a Young Tableau consists of rows and columns of numbers that are sorted, functions that search and extract the minimum value from these data structures are easily extended to such. Implementing a priority queue using this data structure provides good performance for Dijkstra's algorithm, especially when its Fibonacci type is used. An in-place sorting algorithm named for these data structures has an average runtime of big O of n log n, combining the best properties of insertion and merge sort, respectively. The binary type of these data structures must be complete binary trees. For 10 points, name these data structures whose order property dictates that data stored in a node must be less than or equal to all the node's descendants, so the smallest value is the root node.

ANSWER: binary heaps [prompt on trees]

- 1. This state is the home base of the ski-mask wearing insurgent Subcomandante Marcos. For 10 points each:
- [10] Name this Mexican state that was the home of the Zapatista revolt. This southern state contains such cities as Tuxtla Gutierrez and San Cristobal de las Casas.

ANSWER: Free and Sovereign State of **Chiapas**

[10] Chiapas, the southernmost Mexican state, borders this Central American country, which along with Belize, is on Mexico's southeast border.

ANSWER: Guatemala

[10] The ruins of this Mayan city are located in Chiapas near the Usumacinta River. Smaller than Tikal or Chichen Itza, it was the home of Pacal the Great, whose tomb was located in the Temple of the Inscriptions.

ANSWER: Palenque

- 2. In human females, this process stops at prophase I until puberty, and then pauses again at metaphase II until fertilization. For 10 points each:
- [10] Name this form of cell division undergone by gametes, in which a single diploid cell divides into four haploid cells.

ANSWER: <u>meiosis</u> [prompt on "division" or "reduction division"]

[10] During prophase I of meiosis, homologous chromosomes recombine and exchange genetic material in a process given this name. Synaptonemal complexes are required for this process.

ANSWER: **crossing over** [or chromosomal **crossover**]

[10] Chromosomal crossover occurs during this stage of prophase I, though the actual chiasmata aren't visible until later.

ANSWER: pachytene stage

3. This leader delivered a "funeral oration" early in the Peloponnesian War, in which he promised that the children of dead soldiers would be raised by the state. For 10 points each: [10] Name this foremost statesman of the Athenian Golden Age, who had his rival Cimon

ANSWER: Pericles

ostracized.

[10] Pericles then died of plague two years into the Peloponnesian War, as related by this Athenian general's history thereof. Thomas Hobbes translated this man's work into English.

ANSWER: Thucvdides

[10] The plague probably came into Athens through these structures, which people walked along to get from Athens to its port town of the Piraeus.

ANSWER: the Long Walls [or Makra Teiche]

- 4. The title character of this story owns a monograph of Leibniz's *Characteristica universalis* and a cycle of sonnets for the Baroness de Bacourt. For 10 points each:
- [10] Name this short story, whose title character attempts to rewrite a Miguel de Cervantes novel.

ANSWER: "<u>Pierre Menard</u>, Author of the Quixote" [or "<u>Pierre Menard</u>, autor del Quijote"] [10] This blind Argentinean author included "Pierre Menard, Author of the Quixote" and "The Garden of Forking Paths" in his collection *Ficciones*.

ANSWER: Jorge Luis **Borges**

[10] A character in this Borges story is nicknamed the "Englishman from La Colorada" by the people of Tacuarembo. That character, Vincent Moon, reveals the story behind his scar to the landowner Cardoso.

ANSWER: "The **Shape of the Sword**" [or "The **Form of the Sword**"; or "La **forma de la espada**"]

- 5. The cult of these deities arose after the decline of the cult of Ra during the sixth dynasty. For 10 points each:
- [10] Name this set of nine deities headed by Atum and which is also called the Great Pesedjet. ANSWER: **Ennead** of Heliopolis
- [10] One member of the Ennead of Heliopolis was this evil deity who killed Osiris and hacked his body to pieces.

ANSWER: Set

[10] This is the name given to the primordial mound of nothing that Atum sat on when he began the creation of the world.

ANSWER: Nun

- 6. Answer these questions about the growth of the Industrial Revolution in continental Europe, for 10 points each.
- [10] This country became the first industrialized nation on the Continent in part because Cockerill family's stole British secrets. It became independent in 1830.

ANSWER: Kingdom of **Belgium** [or **Belgie**; or **Belgique**]

[10] Production of this resource in the Ruhr valley and in Saarland allowed German industry to take off by mid-century. It is a precursor to coke.

ANSWER: bituminous **coal** [prompt on "carbon"]

[10] This bank, founded by the Jewish Pereire brothers in 1852, spurred industrialization in France by letting investors pool their savings to finance huge public works projects.

ANSWER: Société Générale du <u>Crédit Mobilier</u> [do not accept "Crédit Mobilier of America," which is a completely unrelated organization]

- 7. In this novel, messages from a "fabricant" named Somni-451, recorded in a dystopic future Korea, lead people in the even further future on Hawaii to revere her as a goddess. For 10 points each:
- [10] Name this 2004 novel by David Mitchell, whose six interrelated narratives are nested one inside the other. In each of its stories, one character has a comet-shaped birthmark.

ANSWER: Cloud Atlas

[10] In this third narrative within *Cloud Atlas*, detective Luisa Rey works to shut down the Swannekke nuclear reactor in the 70s. Within the text, it is later revealed to be a fictional book under review by editor Timothy Cavendish.

ANSWER: *Half-Lives*: The First Luisa Rey Mystery

[10] David Mitchell's earlier novel *Black Swan Green*, about a thirteen-year-old boy with a stutter, exemplifies this type of novel, a fictional account based heavily in autobiography with a French name.

ANSWER: roman à clef

- 8. This character prays to God to protect her in her Act 3 aria "Je dis que rien ne m'epouvante." For 10 points each:
- [10] Name this soprano role that was not present in the original novella by Prosper Merimee. As an innocent village maiden, she serves as a foil to the brash and indecent title character.

ANSWER: Micaela

[10] In this other opera by the same composer, Nadir and Zurga sing the friendship duet "Au fond du temple saint" in spite of their mutual love for the Ceylonese princess Leila.

ANSWER: The **Pearl Fishers** [or Les **Pecheurs de Perles**]

[10] This composer of *The Pearl Fishers* included Micaela's aria and the still more famous "Habanera" in his *Carmen*.

ANSWER: Georges Bizet

- 9. This god is commonly depicted crushing a dwarf with his right leg during his cosmic dance. For 10 points each:
- [10] Name this Hindu destroyer god who, like Brahma and Vishnu, is a member of the Trimurti. ANSWER: **Shiv**a [or **Siv**a]
- [10] Shiva and Parvati ride on this divine bull. Giant stone statues of this bull generally sit outside temples of Shiva.

ANSWER: Nandi

[10] A famous temple to this Hindu god at Konark in Orissa is designed as a giant version of his chariot, complete with seven stone statues of the horses that draw it.

ANSWER: Surya [or the sun]

- 10. Raphael's *Deposition of Christ*, which is part of this museum's collection, is sometimes also known as its namesake "Deposition." For 10 points each:
- [10] Identify this art museum in Rome, named for the nephew of Pope Paul V, whose collection includes several Baroque paintings and the early output of Bernini, such as his *David* and *Apollo and Daphne*.

ANSWER: Galleria Borghese

[10] This Titian painting, in which Cupid dips his hands into a sarcophagus surrounded by the white-clad bride of Niccolo Aurelio and the nude Venus, hangs at the Galleria Borghese.

ANSWER: <u>Sacred and Profane Love</u> [or <u>Amor Sacro e Amor Profano</u>]

[10] The Galleria also includes a self portrait as the jaundiced Bacchus by this Baroque artist and murderous tennis fan, who is best known for using chiaroscuro in paintings such as *The Calling of St. Matthew*.

ANSWER: Michelangelo Merisi da Caravaggio [or Michelangelo Merisi; or Amerighi]

- 11. Answer the following about a concept in physics that conspiracy theorists love to talk about, for 10 points each.
- [10] This energy is required for a bound system to remain bound even at the point at which kinetic energy is zero. It is one-half h-bar times the circular frequency for a quantum harmonic oscillator.

ANSWER: **zero-point** energy [or **ground** state energy]

[10] Zero-point energy is often used in the explanation of this effect, in which an attractive force exists between two parallel uncharged plates in a vacuum.

ANSWER: Casimir effect

[10] The Casimir effect is predicted by this relativistic field theory, which interprets the interaction of charged particles as being carried out by virtual photons.

ANSWER: quantum electrodynamics [or QED]

- 12. The 475 basis point spread between this quantity and nominal GDP growth is one of the reasons cited by Bill Gross for his opinion that Treasury bond yields are 150 basis points too low. For 10 points each:
- [10] Identify this quantity which is the rate at which banks lend money to each other overnight in order to meet the minimum deposit requirements at an American institution.

ANSWER: Federal Funds rate

[10] This prescription suggests that the Federal Funds rate should be equal to 1.0 + 1.5 times inflation rate + 0.5 times the output gap. It is named after a Stanford professor.

ANSWER: **Taylor** rule

[10] Decisions on money supply and interest rates are made by this committee composed of Federal Reserve Bank presidents and Board of Governors. Its principle mechanism for achieving policies is the buying and selling of treasury securities.

ANSWER: Federal **Open Market** Committee [or F**OMC**]

- 13. This country has supposedly recently developed a stealth fighter called the Qaher-313, though many analysts think that it's fake. For 10 points each;
- [10] Name this country in which a group of students were arrested for creating a video of them dancing to Pharrell Williams's "Happy."

ANSWER: Islamic Republic of Iran

[10] This president of Iran tweeted that the government "shouldn"t be too hard on behaviors caused by joy." This member of the MDP party was elected in 2013.

ANSWER: Hassan Rouhani

[10] A series of protests in 2011 occurred in this Arab-majority province located in the southwest of Iran. In 2005, its city of Ahvaz was the location of several bombings by the ARMB.

ANSWER: Khuzestan

- 14. An important result in this theory was that no one could traverse the seven bridges of Konigsberg without going over one of the bridges twice. For 10 points each:
- [10] Name these mathematical constructs which consist of a group of vertices connected by one or more edges.

ANSWER: graphs

[10] This kind of route in a graph visits each vertex exactly once. The task of finding one of these in a graph is NP-complete.

ANSWER: **Hamiltonian** path

[10] This theorem states that, in a sufficiently large graph, any coloring will have a monochromatic subgraph.

ANSWER: **Ramsey**'s theorem

- 15. Name these people who lived in Gaul in pre-Roman times, for 10 points each.
- [10] These Celtic religious officials allegedly trained for twenty years to learn all their rituals, such as a veneration of a sacred oak.

ANSWER: druids

[10] People of this ethnicity founded the city of Massilia, now Marseilles, on the southern coast around 600 BCE. They also founded the colonies of Tarentum and Cyrene.

ANSWER: **Greeks** [or **Hellenes**]

[10] This tribe occupied the northernmost of the "three parts" into which Julius Caesar claimed Gaul was famously divided.

ANSWER: **Belgae** [do not accept "Belgians"]

- 16. This lover of Lou Andreas-Salomé penned the line "You must change your life" in his poem "Archaic Torso of Apollo." For 10 points each:
- [10] Name this German poet of the *The Sonnets to Orpheus*, who wrote "Every angel is terrifying" in the second of ten elegies which he wrote at Duino castle.

ANSWER: Rainer Maria Rilke

[10] Rilke wrote a poem about one of these creatures which "paces in cramped circles" as it is imprisoned behind bars.

ANSWER: a panther

[10] Rilke coined this term for short lyric poems which attempted to describe a single concrete entity clearly and in its own voice.

ANSWER: "object-poems" [or object poetry; or thing-poems; or poem of things; or Dinggedichte]

- 17. Members of this organization were instrumental in the election of George Moscone as mayor of San Francisco in 1975, and its leader was appointed to the San Francisco Housing Authority. For 10 points each:
- [10] Name this religious community, over 900 members of which died in a mass murder-suicide in 1978.

ANSWER: **People's Temple** [prompt on **Jonestown**]

[10] People's Temple was led by this cult leader who established a namesake community for People's Temple in Guyana.

ANSWER: Jim Jones

[10] This Congressman visited Jonestown with journalists and concerned relatives of cult members shortly before the Jonestown Massacre. He and four others were murdered upon Jim Jones' orders, making him the only congressman to die while serving in the line of duty.

ANSWER: Leo Ryan

- 18. Answer the following about writing methods in Java, for 10 points each:
- [10] Methods in Java are defined inside one of these fundamental units of object-oriented programming. They have constructors, and objects are instances of them.

ANSWER: classes

[10] At least one class must have a "main" method, which is usually public, void, and has this property. This property means that a method can be executed without an object of the class having first been instantiated.

ANSWER: static

[10] Methods in subclasses can overwrite same-named methods in parent classes. To access the parent class's method in Java, you can use this keyword before the method's name.

ANSWER: super

- 19. The bassoons and violas introduce the funeral march-like theme that opens this piece. For 10 points each:
- [10] Name this Tchaikovsky composition written for wounded Serbian and Russian soldiers fighting the Ottoman Empire. It uses folk songs and anthems from both countries, including "God Save the Tsar."

ANSWER: <u>Marche Slave</u> in B-flat minor [or <u>Slavonic March</u>]

[10] *Marche Slave* is frequently combined in performance with this other patriotic Tchaikovsky piece, which also uses "God Save the Tsar," alternating it with cannon shots.

ANSWER: <u>1812 Overture</u> [or The <u>Year 1812</u>; or <u>Overture of 1812</u>]

[10] Tchaikovsky also used "God Save the Tsar" in a festival overture on the national anthem of this country, honoring the birthplace of Alexander III's wife. Organists born in this country include the composer of *Music of the Spheres* and the organizer of several popular late seventeenth century *Abendmusik* concerts.

ANSWER: Kingdom of **Denmark** [or Kongeriget **Danmark**]

- 20. Answer these questions about the character Beowulf, for 10 points each.
- [10] Beowulf sails south to help this king of Denmark ward off the monster Grendel.

ANSWER: **Hrothgar**

[10] The taunter Unferth doubts Beowulf's skill at this activity. Beowulf loses to Breca in a contest of this type due to being waylaid by monsters.

ANSWER: swimming contest

[10] Beowulf serves this lord, the king of the Geats, who speaks with Beowulf between the episodes involving Grendel's mother and the dragon. This man dies raiding the Frisians.

ANSWER: **Higelac** [or **Hygelac**]

- 21. The Visigoths held this religious belief system well into the 6th century CE. For 10 points each:
- [10] Name this belief declared a heresy at the Council of Nicaea, whose namesake bishop argued that the Son was created by, after, and apart from God the Father.

ANSWER: **Arian**ism [or **Arian** heresy]

[10] A bishop from this city named Athanasius sharply attacked Arianism. About a century later, a pagan female intellectual named Hypatia was killed by rioting Christians in this city.

ANSWER: Alexandria, Egypt

[10] This man's *Ecclesiastical History* and *Life of Constantine* give contemporary accounts of the Arian controversy. He notoriously argued that Jesus came when he did because Augustus had just cleared the roads and seas of brigands, letting the Gospel spread safely.

ANSWER: Eusebius of Caesarea