

1. This official was to be the ruler of a new "Dacia" upon the execution of the so-called "Greek Project" envisioned during his time as a diplomat negotiating with Sir James Harris over his country's policy of "Armed Neutrality." This man oversaw the founding of Kherson and Sevastapol and the redesign of (*) Odessa. As commander-in-chief, he oversaw a peaceful annexation of Crimea after supplanting Count Orlov. Later, this victorious commander in the second Russo-Turkish war allegedly showed his ruler how happy the Cossacks were by creating fake villages along the Dnieper river. For 10 points, name this favorite of Catherine the Great, who lends his name to a Russian battleship on which a 1905 mutiny occurred.

ANSWER: Prince Grigory Alexandrovich **Potemkin**-Tavricheski [or Grigory **Potyomkin**]

<Hart>

2. This empire established the port colony of Karum Kanesh in modern-day Kultepe. Early on, this empire was southeast of the Mittani state, which was destroyed while holding these people as vassals. A king of this empire built an elaborate palace at Khorsabad called Dur-Sharrukin, whose gate included carvings of winged bulls with human-faces called lamassu. Tiglath-Pileser III, who greatly expanded this empire, initiated its (*) pre-Babylonian capitivity of the Israelites, though it never took Jerusalem. Its capital, including a library among the Seven Wonders of the World, was destroyed by Nabopolassar of Babylon in 612 BCE. For 10 points, name this empire ruled by Sennacherib and Ashurbanipal, which was centered at Nineveh.

ANSWER: <u>Assyrian</u> empire [or Neo-<u>Assyrian</u> Empire; or <u>Assur</u>]

<Jackson>

3. This man claimed a certain people had no philosophical tradition of their own in a book that explores the two distinct spheres of influence created for men and women of those people. This man discussed the continuity of strong central government in *The Old Regime and the Revolution*. This man argued that it was not law, but social mores descended from the (*) "Puritan founding", that maintained equality in a work that began as a prison study. That book examined the importance of townships in forming the title type of government and was written after this man spent nine months observing the society and customs of some former British colonies . For 10 points, name this French noble who traveled to the US in the 1830s to write *Democracy in America*.

ANSWER: Alexis de **Tocqueville**

<Rosenberg>

4. A pathogen named for this disorder is susceptible to optochin. An appearance similar to "currant jelly" is used to diagnose the Klebsiella form of this disorder. Prevnar is a vaccine against a bacterium named for this disorder, and that pathogen was used by Frederick Griffith to prove DNA, not protein, was transformed by bacteria. Legionnaire's disease is a (*) form of this disorder. A variant of this disorder called PCP and transmitted by fungi kills many HIV patients. This disorder is classified as either "hospital-acquired" or "community-acquired" since it's so contagious. For 10 points, name this disorder which can be caused by bacteria or viruses and generally refers to inflammation of the alveoli, causing breathing trouble.

ANSWER: pneumonia

<Silverman>

5. This painting's central figure wears the traditional headdress of a married Florentine woman and may have had a didactic purpose for its commissioner's new bride, Semiramide d'Appiano. The leftmost figure in this work drives away some clouds with his staff, while another figure has flowers spilling from her mouth. A blindfolded Cupid aims his (*) flaming arrow in the direction of three dancing Graces in this painting. A woman on the right of this work who is either Chloris or Flora is being grabbed by a blue-skinned Zephyr. Orange trees and a bed of roses make up the setting of this painting, in which Venus stands before a myrtle bush. For 10 points, name this Sandro Botticelli masterpiece set during spring.

ANSWER: La <u>Primavera</u> [accept The <u>Allegory of Spring</u> before the end]

<Bentley>

6. Early in this play, two characters display their characteristic humors by insultingly calling a man "Mephistophilus" and "a Banbury cheese". Upon being denied a loan, one character in this play delivers the line "Why, then, the world's mine oyster". In two comic scenes, this play's central character hides in a basket of dirty laundry and is tricked into dressing as (*) Herne the Hunter. In its climactic scene, Caius and Slender are fooled into abducting boys, while Fenton marries Anne. This play was supposedly written in two weeks at the whim of Queen Elizabeth, who wanted to see its central character "in love". For 10 points, name this Shakespeare play in which Falstaff fails to carry out affairs with the title characters, Mistresses Page and Ford.

ANSWER: The Merry Wives of Windsor

<Carson>

7. This novel's narrator finds strange code in a book on seamanship, but it turns out the code is just some notes in Russian written by a man dressed like a harlequin. One character in this novel passes control of a boat to a "pilgrim" in order to throw a pair of bloody shoes overboard after a man feared by the General Manager orders an attack. A character in this novel waits for a (*) shipment of rivets to repair his steamboat and is entrusted with a report whose handwritten postscript reads "Exterminate all the brutes!" This novel's frame narrative is set on the *Nellie*, a ship anchored in the Thames. In this novel, Charlie Marlow hears "The horror! The horror!" as Mr. Kurtz dies. For 10 points, name this novella about the Congo by Joseph Conrad.

ANSWER: *Heart of Darkness*

<Mehigan>

8. To simplify the notation of this scientist's namesake equation, one uses a set of four four-by-four gamma matrices. This scientist introduced the bra and ket notation in quantum mechanics. He is the second namesake of a distribution function equal to one over the quantity positive one plus some constant times the exponential of energy over k T. A function that exists only where its input is zero, has infinite height, and has an integral one is his (*) "delta". His namesake equation is a relativistic wave equation describing spin-one-half particles, as does that distribution of which he is the second namesake. That distribution's first namesake also names spin-one-half particles: Enrico Fermi. For 10 points, name this person whose namesake equation predicted the existence of antimatter.

ANSWER: Paul Dirac

<Reinstein>

9. A vocal work by this composer includes an instrumental interlude in C major and 12/8 time that imitates pastoral "pifferari". This composer wrote a keyboard suite that ends with five increasingly rapid variations on an "air" in E major. A Siciliana by this composer called "La Paix" joins a movement called "La Réjouissance" in an orchestral work by this composer that was meant to (*) celebrate the end of the War of the Austrian Succession. This composer of "The Harmonious Blacksmith" and *Music for the Royal Fireworks* wrote a vocal work which includes the movements "Ev'ry valley shall be exalted" and "For unto us a child is born". For 10 points, name this German-born English Baroque composer who included a "Hallelujah" chorus in his *Messiah*.

ANSWER: George Frideric Handel [or Georg Friedrich Händel]

<Lawrence>

10. When this god was still in the womb, his mother pressed her fingers on the soil to create the dactyls. He once suspended his wife from the clouds using a silver thread while her feet were tied with anvils. With his son, this god was fed by the elderly Phrygian couple Baucis and Philemon, and he turned them into an oak and linden tree for their hospitality. While this god was a child, the (*) Curetes made loud noises to mask his crying. In one story, this god gave a mortal woman Laelaps, a javelin that never missed and Talos. In that story, this god transformed into a white bull to abduct Europa. For 10 points, name this Greek god who struck down his foes with lightning bolts.

ANSWER: **Zeus** [or **Jupiter**]

<Jose>

11. This architect used metal sheets to create a weathervane-like structure for his Open Hand Monument. He used the height of a man with his arm raised as the basis for a system of proportions called Modulor. This man invented a cube-shaped armchair called the "Grand Confort", developed a Y-shaped "hen's foot" floor plan for his proposed "Cartesian skyscraper", and used some of the principles of his (*) "Radiant City" in his design for Chandigarh. Horizontal windows, roof gardens, and the replacement of support walls with stilts called pilotis were among the "five points" described in a manifesto by this architect, who put them into practice with his Villa Savoye. For 10 points, name this Swiss-French architect who wrote *Towards a New Architecture*.

ANSWER: Le <u>Corbusier</u> [or <u>Le Corb</u>; or Charles-Édouard <u>Jeanneret</u>-Gris]

<Carson>

12. This city's mayor, Huda Ben Amer, fled in 2011. Violence in this city in 2013 led to the dismissal of Army Chief of Staff Yussef al-Mangoush. In this city, Major General Khalifa Haftar leads a paramilitary force that is fighting against terrorist groups such as the February 17th Martyrs Brigade. Those attacks caused the national government to close this city's (*) Benina Airport and declare a no-fly zone in May 2014. One of the Islamist groups in this city, whose members include Ahmed Abu Khattala and Muhammad al-Zahawi, is Ansar al-Sharia. That group is blamed for the deaths of Sean Smith and three other Americans during a 2012 attack here. For 10 points, name this city where U.S. Ambassador Chris Stevens was killed in Libya.

ANSWER: Benghazi, Libya

<Reinstein>

13. In a play by this author, the inventor of the alphabet has a son named Cain, whose name is changed to Henry after he kills his brother. This author wrote the screenplay for Alfred Hitchcock's *Shadow of a Doubt*. In the third act of a play by this man, a character decides to re-live her twelfth birthday, on which she sees the reliable milkman Howie Newsome. This man wrote a play in which George and (*) Maggie Antrobus survive a New Jersey flood, war, and ice age. In another play by this author of *The Skin of Our Teeth*, Simon Stimson hangs himself and the lives of George Gibbs and Emily Webb are explained by the Stage Manager. For 10 points, name this American playwright who used Grover's Corners as the setting of of *Our Town*.

ANSWER: Thornton Niven Wilder

<Mehigan>

14. "Positive" and "negative" subsets of these things respectively correspond to the organs of the body and the days of the year. The eight threads and five knots of the *tzitzit* remind believers of the number of these things, which also corresponds to the numerical value of the word "Torah." 26 of these things are only relevant in the land of (*) Israel. The *Halakah* developed to facilitate practical application of these things. Maimonides compiled the canonical list of 613 of these commandments, which include acknowledging God's existence and reading the Torah. For 10 points, give this term for a Hebrew law to which Jewish men become subject, or "bar," at age 13.

ANSWER: <u>mitzvot</u> [or <u>mitzvah</u>; prompt on <u>commandment</u>s; accept <u>613 commandments</u> or equivalents before "613" is read and prompt thereafter; accept <u>Jewish commandment</u>s before "commandments" is read and prompt thereafter]

<Bollinger>

15. A member of this intellectual group allegedly coined the term "cosmopolitan" when asked if he was a foreigner or a Greek. Philosophers of this type included Crates of Thebes and Antisthenes. Legendarily, one person from this group plucked the feathers off a chicken to refute the definition of man as "featherless biped." Many members of this group were accused of defecating in public. A member of this group from (*) Sinope was said to look for an honest man while holding a lantern and sleep without possessions in a giant jar on the street. For 10 points, name thinkers whose name meant "dog-like," whose examples such as Diogenes radically rejected much of ancient Greek society.

ANSWER: <u>Cynic</u>s [or <u>Cynic</u>ism; or <u>Cynic</u>al school; or <u>Kunikoi</u>]

<Jackson>

16. A year before this event, one of its leaders gave a funeral oration for Rossa, saying his nation "unfree shall never be at peace". Another participant in this event had his diary published while awaiting execution in Pentonville prison, revealing his homosexual affairs. This movement outlined its plan for a provisional government on the steps of a (*) post office. Roger Casement was arrested and executed for his participation in this event, after Eoin MacNeill backed out and forces under Patrick Pearse went through with it. In the wake of this rebellion, Eamon de Valera was elected president of the party Sinn Fein. For 10 points, name this failed Irish rebellion which began in 1916 after Holy Week.

ANSWER: <u>Easter</u> Rising [or <u>Easter</u> Rebellion; or <u>Easter</u> Revolution; accept <u>Sinn Fein</u> Rebellion before mentioned]

<Bentley>

17. Orthogonal arrays depicting the minimum desired number of these events are constructed in the Taguchi method. If their number is a multiple of four, the Plackett-Burman method can be used to estimate their main effects. Variability in their results can be decreased via blocking, a special case of which is "matched pairs". These events can be "full factorial" if all of the possible combinations of variables influencing their results are explored. True design of these events requires random assignation to either a (*) control or treatment group, and they can be "double blind" if neither the doctor nor patient knows which group the patient is assigned to. For 10 points, name these procedures designed by scientists to test things like hypotheses.

ANSWER: controlled <u>experiment</u>s [or <u>randomized experiment</u>; or <u>studies</u>; or statistical <u>survey</u>s; or clinical <u>trial</u>s; prompt on scientific <u>test</u>; do not accept "observational study"]

<Wynne>

18. Association constants for host-guest complexes are calculated using this technique on Benesi-Hildebrand plots. This procedure is done to aniline derivatives to determine extent of protonation using the Hammett acidity function. The Woodward-Feiser rules for this technique estimate the influence of conjugated dienes on (*) lambda-max. Samples for it are often placed in glass or fused quartz cuvettes. An equation used in this technique is often expressed as "A = abc", where a is the extinction coefficient, b is the linear path length, and c is the molar concentration. For 10 points, name this technique governed by Beer's Law, which measures a compound's absorbance of ultraviolet and visible light.

ANSWER: **spectrophotometry** [or word forms; or using a **spectrophotometer**; or **UV-vis** spectroscopy or **ultraviolet-visible** light spectroscopy before it is read; prompt on it afterwards]

<Silverman>

19. Footnotes in this novel cite the work of people like D.J. West and Sigmund Freud and culminate in an examination of a fictional study by "Anneli Taube". It ends with a morphine-induced dream in which a character makes love to an island girl while imagining his girlfriend Marta. This novel contains five interludes in which a character recounts his memories of works like *Cat People*, *White Zombie*, and a fictional (*) Nazi propaganda film. One of its main characters is tasked by the wardens with gathering information about the other's revolutionary comrades. For 10 points, name this novel set in the prison cell of the homosexual Molina and the Marxist Valentin, the most famous work of Manuel Puig. ANSWER: *Kiss of the Spider Woman* [or *El beso de la mujer araña*]

<Carson>

20. Future Congressman Robert Smalls stole a transfer ship called the *Planter* in this city's harbor. This city boomed after Eliza Lucas started growing and exporting indigo nearby. This city's defenders killed much of the Massachusetts Fighting 54th black regiment as it charged Fort Wagner. Benjamin (*) Lincoln surrendered troops in this city to Henry Clinton during a siege in the Revolutionary War. Denmark Vesey's revolt prompted the creation of a military institute in this city called The Citadel. Robert Anderson surrendered a Union garrison to a bombardment by P. G. T. Beauregard in a fort in this city's harbor in April 1861. For 10 points, name this Southern port city home to Fort Sumter. ANSWER: Charleston, South Carolina

<Bentlev>



21. This scientist names a conducting metallic chamber used to measure current in ion implantation and mass spectrometry. This person showed that a charged metal sphere induces an opposite charge on a metal ice pail, thus discovering the principle behind electrostatic shielding. An equation of this scientist is incorporated into Maxwell's equation as the curl of electric field equals negative partial time derivative of magnetic field. The negative sign in that equation is explained by (*) Lenz's law, and it more commonly as electromotive force is proportional to the time derivative of magnetic flux. The SI unit for capacitance is named for this person. For 10 points, identify this namesake of a "law of induction" often used with dynamos.

ANSWER: Michael Faraday

<Reinstein>

22. A woman of this name ruled over a so-called "Moderate Decade," in which Ramon Maria Narvaez's party came to power. Intrigue over the planned marriages of that woman and her sister Luisa Fernanda caused a diplomatic affair between France and Britain in 1846 as the second Carlist war began. An early royal with this name beat Joanna la Beltaneja in a succession war as a descendant of Henry of (*) Trastamara, and treated with the Nasrid dynasty ruler Boabdil. The Second Vatican council revoked a decree by that woman of this name, called the Alhambra decree, which expelled all Jews living in her country. For 10 points, give this name held by a queen of Castile who accepted Granada's surrender, completing the Reconquista, and married Ferdinand II of Aragon.

ANSWER: <u>Isabella</u> [accept <u>Isabella II</u> of Spain; accept <u>Isabella I</u> of Castile]

<Liu>

23. One character in this play repeats another's earlier observation that man is born "astride of a grave" before lamenting, "of me too someone is saying, he is sleeping, he knows nothing." Act Two of this play opens with a pair of boots front and center, whose owner spent the previous night in a ditch and later begs his friend for a carrot. After two characters leave the stage in this play, one contentedly observes "that (*) passed the time" before his partner counters, "it would have passed in any case." Characters in this play swap hats and consider hanging themselves with a belt from the lone tree on stage. Despite the attentions of Vladimir and Estragon, the title character of this play never shows up. For 10 points, name this play by Samuel Beckett.?

ANSWER: Waiting for Godot [or En Attendant Godot]

<Mehigan>

24. In one poem, this phrase appears after the musings of a tyrant's wife and daughter that one shouldn't "provoke the lion ...whom a desire for blood" will send "raging so swiftly through the core of destruction." That poem suggests that "steed and spear" make youths "the Parthians' dread". The speaker of a poem with this title saw a man drowning "as under a green sea" while participating in an (*) "ecstasy of fumbling" for his gas mask. That poem, which opens by describing people "bent double, like old beggars under sacks," says one would not say this phrase "with such high zest" to "children ardent for some desperate glory." For 10 points, identify this Latin phrase that precedes "pro patria mori" in poems by Horace and Wilfred Owen.

ANSWER: <u>dulce et decorum est</u> pro patria mori [accept rough translations like "<u>it is sweet and dignified</u> to die for your country"]

<Schindler>



- 1. This technique involves transfecting genes for light-gated ion channels into selected neurons. For 10 points each:
- [10] Name this neuromodulation technique which precisely activates neurons using pulses of light.

ANSWER: optogenetics

[10] Actuators used in optogenetics are related to rhodopsin, for which this molecule is a cofactor. This chromophore isomerizes from its 11-*cis* form to its all-*trans* form when struck by a photon, allowing it to activate transducin. It's an aldehyde derived from Vitamin A.

ANSWER: **retinal** [do not accept "retinol"]

[10] Rhodopsin is found in these photoreceptor cells. Unlike cones, they are sensitive to a single photon, making them useful in low light, and several of them synapse with a single retinal bipolar cell.

ANSWER: **rod**s

<Kothari>

2. This woman craftily removed the nail in the foot of Talos, thereby disabling it. For 10 points each:

[10] Name this sorceress who abandoned her sister Chalciope and helped Jason retrieve the golden fleece.

ANSWER: Medea

[10] Medea was a princess of this kingdom, which was ruled by Aeetes. While fleeing from this kingdom Medea chopped her brother Absyrtus into bits.

ANSWER: Colchis

[10] When Medea arrived in Iolcus, she was able to kill this king, who tasked Jason with retrieving the golden fleece. She convinced him that she had a way of making him young again.

ANSWER: Pelias

<Jose>

- 3. This composer wrote the only famous sonata for the arpeggione and piano, though the cello almost always plays the arpeggione part today. For 10 points:
- [10] Name this Austrian composer whose fourteenth string quartet is called *Death and the Maiden* and whose eighth symphony is famously unfinished.

ANSWER: Franz Peter Schubert

[10] Schubert's Opus 1 is this lied, a setting of a Goethe poem of the same name about a father and his child being are pursued by the title demon.

ANSWER: "Der Erlkönig" [or "The Erl-King"; or "The Alder-King"; or "The Elf-King"]

[10] Schubert based both *Winterreise* and this other song cycle on the poetry of Wilhelm Muller. It tells the story of a journeyman who falls in love with the title character, then despairingly drowns in a brook.

ANSWER: Die schöne Müllerin [or The Beautiful Mill-maiden or other reasonable translations]

<Rosenberg>

- 4. Answer these questions about the influence of Sanskrit culture pretty far away from India, for 10 points each.
- [10] The past nine kings of this Southeast Asian country have used the name "Rama," after the mythical character. The British governess Anna Leonowens tutored one king of this nation.

ANSWER: **Thailand** [or **Siam**]

[10] The name of this older pre-Thai state is derived from Rama's ancestral home in India. It fell to the Burmese in 1768.

ANSWER: Avutthava kingdom [the original Sanskrit name is "Ayodhya"]

[10] Kings of this earlier Southeast Asian empire adopted Sanskrit names such as Jayavarman and Suryavarman. It started a complex irrigation system around Angkor.

ANSWER: Khmer empire

<Jackson>

- 5. The number 6943 appears in the center of his work *States of Mind I: The Farewells*, and he portrayed suburban construction in *The City Rises*. For 10 points each,
- [10] Name this artist who depicted a walking man in bronze in *Unique Forms of Continuity in Space*. A sculpture of his fist was created by his colleague Giacomo Balla.

ANSWER: Umberto Boccioni

[10] Boccioni was a member of this early-20th-century Italian art movement whose work depicted technology, speed, and violence, and whose manifesto was written by Filippo Marinetti.

ANSWER: **Futurism** [or **Futurismo**]

[10] A red and black-dominated painting by futurist Carlo Carrà depicts one of these events involving the anarchist Angelo Galli. An unfinished 1867 painting by Manet depicts the one involving Charles Baudelaire.

ANSWER: <u>funerals</u> [or <u>funerale</u>; or <u>funérailles</u>]

<Karas>

- 6. This poem includes a hunter "in habit for the chase arrayed" among the lively dead. For 10 points each:
- [10] Name this poem by Philip Freneau in which the narrator observes an exception to his usual rule that "the posture that we give the dead points out the soul's eternal sleep."

ANSWER: "The **Indian Burving Ground**"

[10] Margaret Fuller Slack and Jonathan Swift Somers are among the dead who narrate first-person accounts of their lives from a cemetery in the title Midwestern town of this 1915 poetry collection. Its opening poem notes that "All, all are sleeping on the hill".

ANSWER: **Spoon River Anthology** [by Edgar Lee Masters]

[10] In *Spoon River Anthology*, Ann Rutledge claims to be "beloved in life" of this American president, who is the subject of Walt Whitman's "O Captain! My Captain!"

ANSWER: Abraham Lincoln

<Mehigan>

- 7. In *The Brothers Karamazov*, Fyodor compares himself and his sons Dmitri and Ivan to the central family of this 1781 play. For 10 points each:
- [10] Name this play in which the schemes of Franz Moor cause the banishment of his brother Karl, who becomes a leader of a group of outlaws.

ANSWER: *The <u>Robbers</u>* [or *Die <u>Räuber</u>* ("ROY-bur")]

[10] *The Robbers* is a play by this German author of *Intrigue and Love*, the *Wallenstein* trilogy, and *William Tell*. He wrote about a "daughter of Elysium" in his poem "Ode to Joy".

ANSWER: Friedrich Schiller [or Johann Christoph Friedrich von Schiller]

[10] This Schiller play, whose similarities to *Star Wars* were described by Jeffrey L. High, is a historical drama about a character whose obsessive love for Elizabeth of Valois is complicated when his father, King Philip II, marries her.

ANSWER: **Don Carlos**, Prince of Spain [or **Don Karlos**, Infant von Spanien]

<Carson>

- 8. This agreement preceded the Battle of Fontenoy, at which its participants defeated their brother Lothair and nephew Pepin II of Aquitaine. For 10 points each:
- [10] Name this pact of alliance between Louis the German and Charles the Bald. Recorded in three languages, including Old French, it is the first surviving use of a written French vernacular.

ANSWER: <u>Oaths</u> of <u>Strasbourg</u> [or <u>Sacramenta Argentariae</u>]

[10] The commanders at Fontenoy all descended from this great Frankish king, a Carolingian who controlled most of what's now France and Germany for decades until his 814 death.

ANSWER: <u>Charlemagne</u> [or <u>Charles the Great</u>; or <u>Charles I</u>; or <u>Karl der Grosse</u>; or <u>Carolus Magnus</u>] [10] This imperial capital, home to an octagonal Palatine Chapel, was the site of an intellectual renaissance during Charlemagne's reign. A treaty signed here ended the War of the Austrian Succession.

ANSWER: <u>Aachen</u> [or <u>Aix-la-Chapelle</u>]

<Liu>

- 9. The vertical-cavity surface-emitting type of this device uses two distributed Bragg reflectors as end-mirrors for the active region. For 10 points each:
- [10] Name these devices that emit monochromatic, collimated, coherent light by stimulated emission, often used in a namesake "pointer".

ANSWER: <u>laser</u>s [or <u>light amplification by stimulated emission of radiation</u>]

[10] This form of scanning probe microscopy consists of a cantilever with a pointy tip and a laser that reflects from the cantilever to a photodetector to determine its position.

ANSWER: atomic force microscopy [or AFM]

[10] The cantilever in AFM is commonly made from this type of material, in which charge accumulates as a result of mechanical stress. PZT and quartz are examples of this material.

ANSWER: **piezoelectric**ity [or word forms]

<Voight>

- 10. Beglik Tash is a Bulgarian example of one that was useful in keeping track of time. For 10 points each:
- [10] Name this kind of archaeological site, which consists of large rocks used to create a monument.

ANSWER: **megalith**s [or **standing stone**s or **menhir**s. Prompt on stones.]

[10] Quarried from rocks at Marlborough Downs, this series of rocks north of Salisbury, England, is one notable example of a megalith. It may have had an astrological purpose.

ANSWER: Stonehenge

[10] Stonehenge was likely built by this prehistoric culture, so named because of the distinctive features on their pottery cups which hold water.

ANSWER: Bell **Beaker** People [or Bell **Beaker** Culture]

<Jose>

- 11. Jesus' Name baptism is performed by members of the "oneness" type of this denomination. For 10 points each:
- [10] Name this denomination of Charismatic Christianity that emphasizes the "foursquare gospel" and was spread by William Seymour.

ANSWER: Classical Pentecostalism

[10] Most Pentecostals believe that, in order to live a fulfilling religious life, one must be baptized with this aspect of the Trinity that joins the Father and the Son.

ANSWER: **Holy Spirit** [or **Holy Ghost**]

[10] William Seymour initiated the Pentecostal movement at this revival meeting on a namesake thoroughfare in Los Angeles.

ANSWER: the Azusa Street Revival

<Gupta>

- 12. This work asserts that "Soon, you'll be ashes or bones...A mere name at most...the things we want in life are empty, stale, trivial." For 10 points each:
- [10] Name this book that was written while its author was campaigning against the Quadi and the Marcomanni.

ANSWER: <u>Meditations</u> [or <u>Ta eis heauton</u>]

[10] Meditations is a work of Stoic thought penned by this philosopher and Roman Emperor.

ANSWER: Marcus Aurelius Antonius Augustus

[10] The evil actions of Marcus Aurelius, Charlemagne, and Akbar are juxtaposed with their wisdom in this philosophical work by the author *The Subjection of Women* that criticizes the tyranny of the majority and trumpets individuality.

ANSWER: On Liberty

<Jose>

- 13. This term first appeared in Franz Roh's discussion of the New Objectivity painters, but was first applied to literature in a 1955 essay by the critic Angel Flores. For 10 points each:
- [10] Name this broad literary category, also pioneered by Alejo Carpentier's *The Kingdom of this World*, in which surreal elements are combined with an otherwise naturalistic setting.

ANSWER: **magic**al **realism** [or lo **real marvailloso**; or word forms]

[10] Santiago Nasar's omen-filled dreams are among the magical-realist elements of this 1981 novel, in which Nasar's deflowering of Angela Vicario leads to his titular murder at the hands of Angela's two brothers.

ANSWER: *Chronicle of a Death Foretold* [or *Cronica de una muerte anunciada*; by Gabriel Garcia Marquez]

[10] Tita de la Garza's thoughts begin to infuse her cooking with magical powers in this Laura Esquivel novel, whose twelve sections each begin with a recipe.

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

<Carson>

- 14. Two flasks are used in this process, though the receiving flask is usually kept at a much lower temperature. For 10 points each:
- [10] Name this method of separating a liquid mixture based on the volatility of each component. It can be used to purify ethanol.

ANSWER: distillation [or word forms]

[10] The overhead from a laboratory-scale distillation is fed into this long tube leading to the receiving flask. Liebig names a common type of this piece of glassware. In it, the vapor is converted back into a liquid product.

ANSWER: condenser

[10] In a laboratory, liquids to be distilled or refluxed are usually kept in this type of flask, which gives the most uniform heating. Unlike Erlenmeyer flasks, they have to be clamped down while in use; otherwise, they fall over.

ANSWER: round-bottom flask

<Silverman>

- 15. The Casa da Música concert hall and the Clérigos (CLARE-ee-guss) Church are both located in this city. For 10 points each:
- [10] Name this city located on the Douro River, which is the capital of the Norte region.

ANSWER: **Porto** [or **Oporto**]

[10] Porto is the second most populous city in this country, and is linked via the Alfa Pendular high speed train to Lisbon.

ANSWER: Portugal

[10] This river passes through the Spanish cities of Aranjuez (ah-RAN-wez) and Toledo before emptying into the Atlantic Ocean near Lisbon. This river is the longest on the Iberian Peninsula.

ANSWER: Tagus River

<Karas>

- 16. A crucifix by this artist is now located in the Escorial Monastery, while his many now-lost works include a golden clasp for the cape of Clement VII. For 10 points each:
- [10] Identify this sculptor who included a boat surrounded by dolphins, as well as a gilded sea god reclining away from an earth goddess, in his most famous work, which was created for Francis I.

ANSWER: Benvenuto Cellini

[10] In addition to the *Saliera*, Francis I eventually came to own a Cellini medal depicting this mythical figure. Lee Lawrie created a huge bronze statue for Rockefeller Center depicting this Titan holding up the world.

ANSWER: Atlas

[10] Francis I also commissioned a Cellini sculpture titled for the genius of this place, which shows a reclining nude goddess and a deer extending out towards the viewer. A school of this name included Mannerist artists like Rosso Fiorentino.

ANSWER: **Fontainebleau** [accept the *Genius of Fontainebleau*] or the *Nymph of Fontainebleau*]

<Bentley>

- 17. Identify the following about mercenaries in the ancient world, for 10 points each.
- [10] This large island provided slingers to Mediterranean armies for a fee. After a failed Antigonid siege of this island, its citizens built a namesake colossus depicting Helios.

ANSWER: Rhodes [or Rhodos]

[10] Mercenaries called Mamertines were brought to this island by Agathocles, and fought Hiero II here. On this large island, Carthage fought the Mercenary War after its ships lost the First Punic War in surrounding waters.

ANSWER: Sicily [or Sicilia]

[10] In this historical work, a band of Greek mercenaries called the Ten Thousand journeys from the interior of Persia back to Greece, and exclaims "Thalassa! Thalassa!" upon seeing the Black Sea.

ANSWER: the Anabasis of Xenophon

<Bentley>

- 18. This character uses a "two-edged sword" to defeat Apollyon in a battle in the Valley of Humiliation, after which he makes his way through the Valley of the Shadow of Death with help from Psalm 23. For 10 points each:
- [10] Name this character who also visits Vanity Fair and the House Beautiful on his journey from the City of Destruction to the Celestial City.

ANSWER: Christian

[10] Christian is the aptly-named protagonist of *The Pilgrim's Progress*, a Christian allegory by this English preacher.

ANSWER: John Bunyan

[10] At the beginning of Christian's journey, an Evangelist directs him to this place to find deliverance.

This structure stands at the beginning of the King's Highway.

ANSWER: the Wicket Gate

<Carson>

- 19. George Dantzig solved a simple case of it using the cutting-plane method. For 10 points each:
- [10] Name this classic problem from computer science that asks how its namesake figure can visit every city exactly once and return to the origin.

ANSWER: <u>traveling salesman</u> problem [or <u>TSP</u>]

[10] Using this type of technique to solve the traveling salesman problem yields an approximate runtime of n factorial. This kind of approach tries all permutations of the problem.

ANSWER: <u>brute force</u> method [or <u>brute-force</u> approach; or <u>brute-force</u> search; or <u>exhaustive</u> search; or obvious equivalents]

[10] One can simplify the TSP by assuming that this statement is true, and thus allow it to be solved approximately and tractably by the Christofides algorithm. This mathematical statement holds true for metric spaces.

ANSWER: triangle inequality

<Jose>

- 20. Eisenhower's Executive Order 10450 sanctioned the firing of employees targeted during this period, whose name derives from a remark made by Everett Dirksen about "lads" of a specific color in the State Department. For 10 points each:
- [10] Name this series of persecutions of homosexual government employees in the 1950s, carried out on the theory that gays were susceptible to communism.

ANSWER: <u>Lavender scare</u> [prompt on "Red Scare" or "Second Red Scare"]

[10] Despite his own possible relationship with Clyde Tolson, this man started the "Sex Deviate" Program as part of the Lavender Scare. This FBI director used COINTELPRO to harass suspected gays and communists.

ANSWER: John "J." Edgar Hoover

[10] This legal counsel helped Senator Joe McCarthy go after homosexuals during a 1954 hearing on subversives in the Army. This man also helped prosecute the Rosenbergs while hiding his own sexuality.

ANSWER: Roy Marcus Cohn

<Wasserman>



- 21. In the transcription-coupled version of process, TFIIH unwinds a DNA strand so that XPG and XPF-ERCC1 can create a dual incision. For 10 points each:
- [10] Name this DNA repair mechanism whose failure is the most common cause of xeroderma pigmentosum.

ANSWER: **nucleotide excision** repair [or **NER**]

[10] Nucleotide excision repair often repairs damage done by ultraviolet radiation, which can include the formation of dimers of this pyrimidine which, unlike uracil, has a methyl group on C5.

ANSWER: thymine

[10] The formation of pyrimidine dimers by UV radiation is a major cause of skin cancers, including this most malignant kind of skin cancer.

ANSWER: melanoma

<Kothari>

- 22. The discovery of this deposit created boom towns such as Virginia City and Washoe. For 10 points each:
- [10] Name this massive silver deposit whose output continued until the mid-1880s.

ANSWER: Comstock lode

[10] The Comstock lode was in this modern-day state, where a mint in the capital city helped fund the Civil War. Gangster Bugsy Siegel helped finance casinos along The Strip in this state.

ANSWER: Nevada

[10] This businessman's father, George, earned his fortune in a mining company at the Comstock Lode. This husband of the chorus girl Millicent Willson had a lavish residence designed by Julia Morgan.

ANSWER: William Randolph **Hearst**

<Bentley>

- 23. Eugene dies of measles before the action of this play. For 10 points each:
- [10] Name this play about James, an old actor who only played one role, and Mary, his morphine-addicted wife.

ANSWER: Long Day's Journey Into Night

[10] This Nobel-winning American playwright of *Long Day's Journey Into Night* adapted the *Oresteia* into his play cycle *Mourning Becomes Electra*.

ANSWER: Eugene Gladstone O'Neill

[10] In *Long Day's Journey Into Night*, this youngest member of the Tyrone family is diagnosed with tuberculosis. He and his brother Jamie worry constantly about Mary's addiction.

ANSWER: Edmund Tyrone

<Mehigan>