

## PACE NSC 2017 - Round 24 - Tossups

- 1. A stockbroker often considered the British analogue of this person found homes for children taking train journeys to the U.K. and was named Nicholas Winton. During the reign of the General Government, this one time driver's ed school owner purchased an enamelware business called Emalia and expanded its ventures into armaments, for which he employed residents of Plaszów (PWAH-shoof). After his (\*) factory was moved to Brněnec, (burn-YEN-ets) this man wrote down the names of over a thousand people deemed essential to running the new factory, many of whose workers produced faulty munitions. His story was told in a Booker-winning novel by Thomas Keneally titled for his ark. For 10 points, name this businessman who saved many Polish Jews during the Holocaust, subject of a Steven Spielberg biopic. ANSWER: Oskar Schindler <Bentley>
- 2. In this geographical region, Muhammad Ilyas founded a proselytizing movement called Tablighi Jamaat. Sadr al-Din converted this geographical region's Lohanas to Nizari Isma'ilism, and named them Khojas. During the 19th century, the head of the Nizari Isma'ilis, the Aga Khan, was driven to this geographical region. A current political leader in this geographical region was criticized for his handling of a series of anti-Muslim riots in (\*) 2002 sparked by the death of pilgrims in a train fire. An emperor in this geographical region established the syncretic Din-i Ilahi and abolished the *jizya* tax; that emperor was Akbar the Great. For 10 points, in what geographical region did Muhammad Ali Jinnah's Muslim League call for an independent Pakistan?

ANSWER: <u>Indian</u> subcontinent [accept <u>South Asia</u>; prompt on <u>Asia</u>] < Cheng>

3. In 1970, this type of weapon was delivered to Cambodia after two left-wing sailors hijacked the SS Columbia Eagle. Father Daniel Berrigan employed this weapon during a protest at the Catonsville, Maryland draft board. Nick Ut photographed a naked nine-year-old girl running from a use of this weapon. It's not Agent (\*) Orange, but the use of this weapon led to nationwide campus protests against recruiters from the Dow company. This Louis Fieser-invented weapon was beloved by Curtis LeMay, who used it to obliterate Tokyo during World War II and pretty much all of North Korea during the Korean War. For 10 points, name this flesh-melting gel notoriously used in flamethrowers during the Vietnam War. ANSWER: napalm [prompt on fire or bombs] <Bollinger>

4. The Gauss–Bonnet theorem relates the integrals of this quantity's Gaussian and geodesic forms. The Riemann tensor of this quantity measures the extent to which the metric tensor of a Riemannian manifold is not locally isomorphic to Euclidean space. This quantity's namesake sign is the same as the sign of the second derivative and depends on which direction a certain object rotates. The value of this quantity at a point is equal to its value for the (\*) osculating circle at that point. For a smooth figure in the plane, this quantity is the magnitude of the rate of change of the unit tangent vector with respect to distance. For a circle, this quantity equals the reciprocal of the radius. For 10 points, name this mathematical concept that denotes a surface's deviation from flatness.

ANSWER: **curvature** < Kothari >

5. A club named for this author is the setting of *The Philanderers* by George Bernard Shaw, who claimed there is one realist among every 1,000 people in an essay about the "Quintessence" of this author's style. Arthur Miller's 1950 anti-McCarthy adaption of a play by this author revamps a speech denouncing the "solid majority." A German actress's refusal to perform one of his plays forced him to write an alternate ending in which a woman falls to her knees in a (\*) nursery. In a scandalous play by this author, an artist asks his mother to kill him with morphine due to his inherited syphilis. At the end of one of his plays, a door slam is heard as Nora leaves her family. For 10 points, name this playwright of realist dramas like *Ghosts*, *An Enemy of the People*, and *A Doll's House*.

ANSWER: Henrik (Johan) **Ibsen** <Brownstein>

6. In 2015, Brian Seibert published a history of this art form. A man renowned for his speed in this non-jazz art form performed an accomplished solo during "In a Sentimental Mood" from the 1989 musical Black and Blue and was named Bunny Briggs. The film Rebecca of Sunnybrook Farm includes a scene in which a prominent black artist in this field demonstrated his (\*) "stair routine". The so-called "national anthem" of this art form is the Shim Sham. Modern stars in this art form include Gregory Hines and Savion Glover (SAY-vee-on GLUV-er). Bill "Bojangles" Robinson performed it alongside Shirley Temple, and in Royal Wedding it was done on a ceiling by Fred Astaire. For 10 points, name this art form in which dancers use their feet to make sound.

ANSWER: tap dance [accept word forms; prompt on word forms of dance] <Bentley>

7. Philosophers often discussed this play's lines "I understand the evils I am going to do, but anger prevails over my counsels" as an example of akrasia. In the first episode of this play, a teary-eyed woman emerges from her house to tell the chorus that "Of all creatures that can feel and think, we women are the worst-treated things alive." A nurse's lament opens this play, which includes a scene in which a messenger describes how a man dies after (\*) embracing his horrifically-burned daughter, who was poisoned by the dress gifted to her by the protagonist. At the end of this play, the title character flies to Athens in a dragon-drawn chariot, carrying the bodies of her two sons, whom she'd murdered. For 10 points, name this play titled for the foreign-born wife of Jason by Euripides.

ANSWER: Medea < Brownstein>

8. According to kinetic theory, this quantity equals one-third the mean free path times the average molecular velocity. A form of this quantity is often described as the momentum diffusivity, in analogy to the thermal and mass diffusivities. The del-squared term in the Navier–Stokes equations is multiplied by and is named for this quantity. The Poiseuille (pwah-ZUH-ee) equation sets (\*) head loss in a pipe proportional to it. Two measures of this quantity, usually symbolized mu and nu, differ only by a factor of density. Bernoulli's equation requires this quantity to be zero to hold. As it increases, a flow becomes more laminar. This quantity describes how much a fluid deforms when it's sheared. For 10 points, name this quantity which characterizes a liquid's resistance to flow.

ANSWER: viscosity [or kinematic viscosity; or dynamic viscosity] <Silverman>

9. In 1792, the meter was defined as one ten-millionth of the distance between Dunkirk and this city. A massive urban renewal scheme led to the creation of this city's 22@ ("twenty-two at-sign") district. An aborted athletic event in this city would have used a stadium on Montjuïc (mon-zhoo-EEK) hill. Many street performers often called "living statues" line this city's thoroughfare of La Rambla. An unfinished "Church of (\*) Colònia" and a park home to a mosaic salamander are both named for a textile entrepreneur from this city, Eusebi Güell (yoh-SEH-bee GWAY). An arena in this city called La Monumental hosted bullfights before a regional ban on the activity. For 10 points, name this Catalan city home to many works by Antoni Gaudí (gow-DEE), the second most populous city of Spain.

ANSWER: **Barcelona** < Shimizu >

- 10. A 2010 report by Alberto Alesina and Silvia Ardagna asserting that this policy aids recovery led Jean-Claude Trichet (tree-SHAY) to endorse it. An infamous study by Carmen Reinhart and Kenneth Rogoff, which established a 90 percent threshold for a certain ratio, spurred support for this policy. In the aftermath of the Great Recession, the European Central Bank endorsed and Germany's European loan program mandated this policy's (\*) "fiscal" form, prompting outcries from high-unemployment countries like Greece and Spain. David Cameron's 2009 declaration of an "age of" this policy presaged a widespread cutback in all British public services except the NHS and education. For 10 points, name this economic policy of cutting government spending pursued by right-wing parties in modern Europe. ANSWER: fiscal austerity [prompt on descriptions like cutting government spending until "cutback" is read] <Aggarwal>
- 11. The interleukin-1 antagonist anakinra is used to treat this disease. Peptides in which arginine is replaced by citrulline are mixed with serum to diagnose this condition, which also causes the presence of large subcutaneous nodules. From 2012 to 2016, a DMARD (DEE-mard) monoclonal antibody used to treat this disease by inhibiting TNF-alpha was the world's top-selling drug. This disease's namesake factor is an auto-antibody against IgG that's also present in (\*) lupus, for which it is often misdiagnosed. This disease causes the synovium to thicken and, in its worst cases, leads to swan necks, bent thumbs, and other skeletal deformities. This most common autoimmune disease leads to inflammation of joints in the hands. For 10 points, name this disease abbreviated RA.

ANSWER: **rheumatoid arthritis** [or **RA** until it is read; prompt on <u>arthritis</u>] <Silverman>

12. This man recounts eating at a breakfast table with a full chamber pot underneath it in a book that opens with him lodging at the Brookers' repulsive tripe shop. A passage from *Ecclesiastes* translated into "modern English of the worst sort" appears in an essay by this writer attacking the use of "meaningless words" and "pretentious diction." The working conditions of coal miners and other laborers are discussed in a study of (\*) northern England that he wrote called *The Road to Wigan Pier*. This author of "Politics and the English Language" wrote a novella in which phrases like "with sheets," "to excess," and "some are more equal than others" are added to the seven commandments written on a barn. For 10 points, name this author who allegorized Stalin as Napoleon in *Animal Farm*.

ANSWER: George Orwell [or Eric Arthur Blair] < Jose>

13. Lillian Schwarz argued that this painting is actually a self-portrait by comparing its anatomical features to its artist's *Portrait of a Man in Red Chalk*. A nude version of this painting is commonly attributed to an artist nicknamed "The Devil", Salai, whose sexuality led some historians to believe he was the model for the more famous version of this painting. Sigmund Freud wrote that this painting was a "glorification of motherhood" and that it was inspired by Caterina, its artist's mother. The (\*) shading around its subject's eyes is a particularly notable example of *sfumato*. Giorgio Vasari claimed that it depicts the wife of Francesco del Giocondo on a *loggia* in front of a rocky background. For 10 points, name this Leonardo da Vinci portrait of a woman with a mysterious smile.

ANSWER: Mona Lisa [or Monna Lisa; accept La Gioconda until "Giocondo" is read] <Jose>

14. This man edged out Herbert Morrison to claim a seat vacated by George Lansbury, giving him control of his party for some twenty years. After Hugh Gaitskell introduced a budget that would have charged people for medications, many of his more liberal ministers resigned. During this man's premiership, the National Coal Board was established and the Bank of England was nationalized. In Operation Hurricane, his country detonated its first (\*) atomic weapon. This man's Minister of Health, Aneurin Bevan, helped create the National Health Service during this Prime Minister's rule. This PM dispatched British troops to fight in the Korean War. For 10 points, name this British Prime Minister, whose Labour party won a surprising election over Winston Churchill in 1945.

ANSWER: Clement Attlee < Bentley>

15. Several central African traditions refer to objects representing these beings as *nkisi* (in-KEE-see). The Bois Caïman (bwah kah-ee-MON) ritual that precipitated a national revolution featured one of these beings named Ezili Dantor and the sacrifice of a black pig; Pat Robertson later accused that country of having made a "pact with the devil." *Houngans* and *mambos* are responsible for (\*) mediating between these beings and their communities. In one tradition, Obatalá is considered the father of humans as well as these beings. The Ewe and Yoruba originated several New World traditions that invoke these beings, which the Yoruba call orishas. For 10 points, name these incorporeal beings that occupy natural locations in animistic traditions like voodoo.

ANSWER: spirits [accept orishas before mention; accept loas or lwas] < Aggarwal>

16. A poem by this author instructs, "put a sign up CLOSED to all but me" before describing "A broken drinking goblet like the Grail" from a children's playhouse, from which the addressee should "Drink and be whole again beyond confusion." The speaker of a poem by this author refers to the words "Stay where you are until our backs are turned!" as a spell and decides "it's not (\*) elves exactly" before watching a man who "moves in darkness" like an "old-stone savage armed." This poet of "Directive" wrote "here there are no cows" and "He is all pine and I am apple orchard" in another poem. This poet wrote "something there is that doesn't love" an object that is justified with the line "good fences make good neighbors." For 10 points, name this poet of "Mending Wall."

ANSWER: Robert Frost [or Robert Lee Frost] < Brownstein>

17. According to epiphenomenalism, physical events have this sort of relation to mental events, but the reverse is not true. Immanuel Kant called this concept the *crux metaphysicorum* and credited Hume's discussion of this specific concept for "interrupting his dogmatic slumber" in *Prolegomena to any Future Metaphysics*. David Hume's skepticism of this concept arose from the lack of a so-called "necessary connection;" that discussion of this concept in *An Enquiry Concerning Human Understanding* posits a series of events that arises from one (\*) billiard ball transferring motion to another and concludes that constant conjunction is not sufficient to assert this relation. For 10 points, name this connection between the occurrence of two events, often paired with the word "effect."

ANSWER: <u>causality</u> [or <u>causation</u>; or <u>cause</u> and effect; or <u>causal</u> interaction] < Aggarwal>

18. George Dales argued that Deadman's Lane in the HR region of a city of these people did not provide evidence for a civilization-ending massacre. Stone seals in the grandest of this civilization's settlements were unearthed in the 1920s by John Marshall. One of their cities was later occupied by the Cemetery H culture. They're not from the Americas, but Yuri Knorozov (k'nuh-ROH-zoff) has argued that their undeciphered script is for a (\*) Dravidian language. Mortimer Wheeler argued they were wiped out by an Aryan invasion. Their "Mound of the Dead Men" city was first settled around 2500 BCE. The Great Bath at one of their cities is the world's oldest known water tank. They had centers at Harappa and Mohenjo-Daro. For 10 points, name this ancient civilization named for a river in northwest India and Pakistan.

ANSWER: <u>Indus</u> Valley Civilization [or <u>IVC</u>; accept <u>Harappan</u> culture until read] <Bentley>

19. Studying flour beetles, Thomas Park found that, for certain starting conditions, this process can give indeterminant results. Joseph Connell demonstrated the interference type of this process in barnacle spatial distribution. It's not predation, but alpha is the coefficient of this process in the Lotka–Volterra model. According to G. E. Hutchinson, this process restricts the fundamental niche to the realized niche. After observing one (\*) species always washing out of a mixed culture, Georgy Gause formulated the principle named for this process's "exclusion". This "minus-minus" interaction leads to character displacement and resource partitioning and comes in intra-specific and inter-specific forms. For 10 points, name this process by which organisms vie for limited resources.

ANSWER: **competition** < Grames>

20. A composer from this country often used the motif E-flat E A to represent the sea. In 2014, it was revealed that a violin sonatina and a 2003 symphony, among other works, had actually been ghostwritten for a composer from this country who was not actually deaf. A conductor from this country who collaborated with an author from this country on the book *Absolutely on Music* was, between 1973 and 2002, the music director of the Boston Symphony Orchestra, and is known both for wearing turtlenecks and for his (\*) fluffy cloud of hair. Monks in this country practicing *suizen* (SOO-ee-zen) meditation play a bamboo flute called the *shakuhachi*. The *biwa* and *shamisen* are also from, for 10 points, what home country of Toru Takemitsu and Seiji Ozawa?

ANSWER: <u>Japan</u> [accept <u>Nippon</u>-koku or <u>Nihon</u>-koku] [The fraudulent composer is Mamoru Samuragochi.] <Carson>

21. The Coldry process pulverizes an impure form of this material to remove moisture from it. This substance often contains tiny flakes known as inertinite. The Bergius process was originally developed to hydrogenate this material so that it can be converted into a liquid mixture. Both "fly" and "bottom" ash are produced as a result of processing this substance. Diagenesis of vitrinite and other macerals produces a form of this substance. (\*) Sealcoat, which is often applied to asphalt, is often made from a polycyclic aromatic hydrocarbon known as the "tar" of this material. The "brown", or "lignite", form of this material is less pure than its "anthracite" form. Decomposing peat is the first step of making, for 10 points, what sedimentary rock and fossil fuel?

ANSWER: **coal** [do not accept or prompt on "charcoal"] <Jose>



## PACE NSC 2017 - Round 24 - Bonuses

1. The collector John Allnutt made a surprise purchase of this artist's *Landscape Ploughing Scene in Suffolk*, but later got another artist to paint over its naturalistically rendered sky. For 10 points each:

[10] Name this artist, one of the first to carefully study weather patterns for his paintings. The V&A Museum owns his painting *Dedham Vale*.

ANSWER: John Constable

[10] Constable is probably best known for this painting, in which the title conveyance is being pulled through some shallow water near Willy Lott's Flatford Mill.

ANSWER: The **Hay Wain** 

[10] This artist remarked that Constable's clouds "make me call for my great-coat and umbrella". This Swiss-born artist contributed several paintings to John Boydell's Shakespeare Gallery, including *Lady Macbeth Sleepwalking*, in which the title redhead holds a torch.

ANSWER: Henry Fuseli [or Johann Heinrich Fussli] <Bentley>

2. Answer the following about tennis in American literature, for 10 points each.

[10] Ginnie and Selena play tennis each Saturday in "Just Before the War with the Eskimos," a short story from this collection that also contains "Teddy" and "For Esmé—with Love and Squalor."

ANSWER: *Nine Stories* [by J. D. Salinger]

[10] This American writer of *Infinite Jest* described the "kinetic beauty" of the "Federer Moment" in his essay "Roger Federer as Religious Experience."

ANSWER: David Foster Wallace

[10] This 2014 book by Claudia Rankine meditates on the injustices suffered by Serena Williams to illustrate what it means to be a "black woman's body in a historically white space."

ANSWER: *Citizen*: An American Lyric <Kothari>

3. A practitioner of this discipline named John Wallis wrote his *Elenchus* to dispute Thomas Hobbes's reductive treatment of this discipline in *De corpore*. For 10 points each:

[10] Name this discipline. The Quine–Putnam indispensability thesis supports platonism towards objects posited in this discipline.

ANSWER: mathematics [do not accept "science"]

[10] This Italian scientist attempted to prove his earlier claim that nature "is written in the language of mathematics" by providing a unified science of matter in his *Two New Sciences*, written under house arrest.

ANSWER: **Galileo Galilei** [accept either underlined portion]

[10] This empiricist philosopher mockingly described the infinitesimals used in calculus as "ghosts of departed quantities" in his tract *The Analyst*. This man argued that conceiving of something requires a mind as part of his "master argument" supporting idealism.

ANSWER: George **Berkeley** <Kothari>

- 4. This author described his recovery from an accident in which he was hit by a van in the final section of his 2000 "memoir on the craft" *On Writing*. For 10 points each:
- [10] Name this author who described a time traveler's attempts to prevent the assassination of John F. Kennedy in his novel 11/22/63. His earlier horror novels include *Carrie*, *Salem's Lot*, and *The Shining*.

ANSWER: Stephen King [or Stephen Edwin King; accept Richard Bachman]

[10] After he was given a medal for "Distinguished Contribution to American Letters" at the National Book Awards, King was dubbed "an immensely inadequate writer" by this cantankerous Yale literary critic. His books include *The Anxiety of Influence* and *The Western Canon*.

ANSWER: Harold **Bloom** 

[10] In a 2011 short story by King, Paulie Enslin is inspired by a *New York Times* article that notes this author of *Marjorie Morningstar* and *The Caine Mutiny* was still alive and writing at age 94.

ANSWER: Herman Wouk < Carson>

- 5. In 2016, this country began considering an IPO for its state-run oil company, whose declining revenue has resulted in many guest workers becoming stranded here without pay or exit visas. For 10 points each:
- [10] Name this country. It leads a coalition whose Operation Decisive Storm has targeted Houthi rebels while intervening in a civil war in its southwestern neighbor.

ANSWER: <u>Saudi Arabia</u> [or Kingdom of <u>Saudi Arabia</u>; or Al-Mamlakah <u>Al-'Arabiyah As-Sa'udiyah</u>; accept <u>KSA</u>]

[10] Some guest workers currently stranded in Saudi Arabia are demanding back pay from a construction conglomerate owned by this family. A member of this family who was killed in a 2011 raid on a compound in Abbottabad, Pakistan had earlier founded al-Qaeda.

ANSWER: **Bin Laden** [or **Binladin**; prompt on partial answer]

[10] In early January 2016, Saudi Arabia executed 47 people, including this popular Twelver Shi'a cleric, a prominent critic of the Saudi government who was arrested and tortured after advocating the secession of Saudi Arabia's Eastern Province.

ANSWER: Nimr Baqir al-<u>Nimr</u> [or Nimr an-<u>Nimr</u>; or Sheikh <u>Nimr</u>] <Bentley>

- 6. Pectin hydrogels can control the amount of resistance in this tissue, which may allow it to respond to cavitation, even though most of the cells in this tissue are dead at maturity. For 10 points each:
- [10] Name this tissue that most biologists agree operates according to the cohesion-tension model, despite some logical shortcomings.

ANSWER: xylem

[10] The cohesion-tension theory rests on the assumption that this empirical quantity, which is effectively the sum of hydraulic pressure and osmotic pressure, is equivalent to a namesake thermodynamic variable, and will decrease from roots to shoots in the direction water diffuses.

ANSWER: water **potential** [or **psi**; or water **chemical potential**]

[10] The water potential is thus minimized at the leaves, where water does not accumulate, but instead evaporates from the surface by this process.

ANSWER: <u>transpiration</u> [or word forms] <Kothari>

- 7. A Margaret Atwood poem about this piece of music is narrated by a character who wishes to reveal its secret to the person who gets her "out of this bird suit". For 10 points each:
- [10] Name or describe this song, which indirectly killed almost everyone who listened to it. The only man to survive the experience of hearing this song did so by tying himself to a mast.

ANSWER: the <u>Sirens</u>' song [accept descriptions like the song sung by the <u>Sirens</u>]

[10] According to Suetonius, this second Roman emperor loved pop quizzing supposedly erudite scholars with the impossible question "What song did the Sirens sing?"

ANSWER: <u>Tiberius</u> [or <u>Tiberius</u> Claudius Nero or <u>Tiberius</u> Julius Caesar; do not accept or prompt on "Claudius" or "Nero" or "Julius Caesar"]

[10] This author quoted Thomas Browne's observation that "What songs the Sirens sang" is a "puzzling question, though not beyond all conjecture" in the foreword to his idiosyncratic mythological study *The White Goddess*.

ANSWER: Robert Graves [or Robert von Ranke Graves] <Jose>

8. An example of this kind of algorithm is the simple change-making algorithm, which simply selects as many quarters, then dimes, then nickels, and then pennies that are needed to make correct change. For 10 points each: [10] Name this type of algorithm that takes the locally-optimal result at any decision. It does not necessarily produce the correct result.

ANSWER: greedy algorithms

[10] A greedy algorithm may be used to solve this computationally-demanding problem, in which the namesake person must visit every city on his path in the shortest amount of distance.

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

[10] The greedy reverse-delete algorithm tries deleting the edge with the largest weight of a graph to find one of these structures. Borůvka's algorithm also generates them.

ANSWER: minimum spanning tree [do not accept or prompt on "tree"; prompt on spanning tree] <Jose>

- 9. This man assassinated the general Afzal Khan at a meeting in which he used an iron-knuckle like weapon called "tiger's claws." For 10 points each:
- [10] Name this 17th-century member of the Bhonsle clan. His conquests paved the way for the formation of the Maratha Empire.

ANSWER: Shivaji Bhonsle

[10] Shivaji's son Sambhaji waged war with this other Indian empire, which was situated to the north. It was founded by Babur.

ANSWER: Mughal Empire

[10] This son of Shah Jahan invaded the Deccan Plateau to fight a war against the Maratha Empire during his reign. His rule was known for its austerity and patronage of Islamic arts.

ANSWER: <u>Aurangzeb</u> [or <u>Alamgir</u> or Abu'l Muzaffar <u>Muhi-ud-Din Muhammad</u>] <Jose>

- 10. Identify the following about some racially charged symbols of politics in the 1980s and '90s, for 10 points each.
- [10] 44 states passed laws holding mothers responsible for the health of their unborn children over fear of babies addicted to this drug. The 2010 Fair Sentencing Act adjusted the long minimum sentences for using this drug compared to powder cocaine.

ANSWER: **crack** cocaine [or **rock** or **work** or **hard** or **iron** or **cavvy** or **base**]

[10] This was the term given to African American women who supposedly were scamming the namesake system in large numbers. This term was first used in stories about Linda Taylor, whose crimes were sensationalized and exaggerated by Ronald Reagan.

ANSWER: welfare queens

[10] This term was coined by Princeton political scientist John J. DiIulio, Jr. who argued that these youths would soon unleash a massive crime wave on the nation. In February 2016, Hillary Clinton apologized for using this term after being confronted by Black Lives Matter protesters.

ANSWER: **super predator**s <Bentley>

- 11. Name some things about representing electromagnetic fields on paper, for 10 points each:
- [10] Electric fields always begin on positive charges and end on negative charges, pointing in the direction of decreasing values for this scalar quantity, which equals a namesake type of energy divided by a test charge.

ANSWER: electric **potential** [or electric **potential** difference; or **voltage**; or **V**]

[10] When representing magnetic fields, it is traditional to use this symbol to represent a field that is oriented out of the page, since it is the profile of an arrow pointing out of the page.

ANSWER: a **dot** [or a **dot** nested inside a circle; prompt on <u>circle</u>; do NOT accept "cross" or "x"]

[10] The icon Wikipedia uses on all "electromagnetism"-related pages is a diagram showing the homogeneous magnetic field inside the metallic core of these devices, which has magnitude proportional to the number of turns of wire per unit length.

ANSWER: **solenoid** [prompt on <u>inductor</u>; prompt on <u>electromagnet</u>] <Silverman>

- 12. This man was only able to bring his personal guard to one battle because it was forbidden for the army to be dispatched during the Carneia festival. For 10 points each:
- [10] Name this military commander who was ultimately betrayed when Ephialtes revealed a path allowing the opposing force to surround him.

ANSWER: Leonidas I

[10] Leonidas and his Spartan troops defended a narrow pass against a much larger Persian army under Xerxes I at this battle.

ANSWER: Battle of **Thermopylae** 

[10] The Serpent Column, supposedly made from melted down Persian armaments, commemorates this later battle, a victory for Pausanias over forces commanded by Mardonius.

ANSWER: Battle of **Plataea** <Bentley>

- 13. Identify the following British authors of time-travel fiction, for 10 points each.
- [10] This science fiction pioneer's short story "The Chronic Argonauts" appeared seven years before he introduced the Eloi and the Morlocks in his novel *The Time Machine*.

ANSWER: H. G. Wells [or Herbert George Wells]

[10] A time traveler appears to the title medieval priest in *The Dream of John Ball*, a novel by this author of *News from Nowhere* who designed wallpapers and textiles as leader of the Arts and Crafts movement.

ANSWER: William Morris

[10] This author of *Parade's End* and *The Good Soldier* wrote the Twain-inspired novel *Ladies Whose Bright Eyes*, about a man who travels back to the Middle Ages but fails in his attempts to introduce future technology. He shares his surname with the author of *'Tis Pity She's a Whore* and a real-life businessman who is the basis of the calendar in *Brave New World*.

ANSWER: Ford Madox <u>Ford</u> [or Ford Madox <u>Hueffer</u>; or Ford Hermann <u>Hueffer</u>; or Daniel <u>Chaucer</u>] <Carson>

14. A deep textual analysis of this document was performed in 1439 by Lorenzo Valla. For 10 points each: [10] Name this forged document in which the namesake emperor supposedly ceded control of the Lateran and other realms to the recipient.

ANSWER: **Donation of Constantine** [or **Donatio Constantini**]

[10] The Donation of Constantine was one of the justifications for the holder of this religious office's control over his namesake states in Italy.

ANSWER: the **pope** [or **Bishop of Rome**; or **papa**; or Bishop of Rome, Vicar of Jesus Christ, Successor of the Prince of the Apostles, Supreme **Pontiff** of the Universal Church, Primate of Italy, Archbishop and Metropolitan of the Roman Province, Sovereign of the Vatican City State, Servant of the servants of God] [10] This ruler actually did make a namesake donation to the papacy. He moved from *de facto* king to actual king after the deposition of Childeric III and got himself anointed by Pope Stephen II.

ANSWER: <u>Pepin the Short</u> [or <u>Pepin III</u>; or <u>Pippin der Kleine</u>; or <u>Pepin le Bref</u>; prompt on <u>Pepin</u>] <Bentley>

- 15. This devotional book opens by quoting from the Gospel of John, "He who follows Me, walks not in darkness." For 10 points each:
- [10] Name this book attributed to Thomas à Kempis, a member of Devotio Moderna. It includes dialogues between Jesus and a man known as "the disciple" in its sections "On Interior Consolation".

ANSWER: *The Imitation of Christ* [or *De Imitatione Christi*]

[10] Another author of devotional literature was this Spanish mystic, who wrote *The Way of Perfection* and *The Interior Castle*. She experienced a vision of a seraph plunging a golden spear into her heart.

ANSWER: Saint <u>Teresa</u> of Ávila [or Saint <u>Teresa</u> of Jesus; or <u>Teresa</u> Sánchez de Cepeda y Ahumada] [10] Saint Ignatius of Loyola, the author of the devotional text *Spiritual Exercises*, founded this order, whose members have included Pope Francis.

ANSWER: Jesuits [or Society of Jesus; or Societas Iesu] < Cheng>

- 16. These objects are central to *mua roi nuoc* (MOO-uh zoy NIH-uck), a tradition common in the Red River Delta in Vietnam. For 10 points each:
- [10] Name these objects whose movements are accompanied by a singer and a shamisen in *bunraku* performances.

ANSWER: **puppet**s [or **ningyo**]

[10] Three puppets are brought to life at the Shrovetide Fair at the beginning of this Russian composer's ballet *Petrushka*. His other ballet *The Rite of Spring* was met with riots at its Paris premiere.

ANSWER: Igor (Fyodorovich) Stravinsky

[10] This Indonesian word describes various types of puppet theater, including one that uses a back-light to cast shadows on a cloth screen.

ANSWER: wayang (WAH-yahng) [accept more specific answers that include wayang] <Shimizu>

- 17. This composer quoted material from the song "Oh, Susannah!" in "Desert Water Hole", a movement from his *Grand Canyon Suite*. For 10 points each:
- [10] Name this composer whose other evocations of American geography included suites titled for the Niagara Falls, the Mississippi River, and Death Valley.

ANSWER: Ferde **Grofé** (FER-dee groh-FAY) [or Ferdinand Rudolph von **Grofé**]

[10] Grofé also served as the primary arranger for Paul Whiteman, in which role he orchestrated this jazz-influenced George Gershwin composition that opens with a dramatic clarinet glissando.

ANSWER: *Rhapsody in Blue* 

[10] The *Grand Canyon Suite* was recorded in 1945 by the NBC Symphony Orchestra under the baton this Italian conductor. He declared "at this point, the maestro died" at the abrupt end of the premiere of Puccini's unfinished *Turandot*.

ANSWER: Arturo **Toscanini** < Carson>

- 18. Aeschylus claimed that these characters had the bodies of swans, while Pseudo-Apollodorus added a third one of them, Deino, to Hesiod's listing of Enyo and Pemphredo. For 10 points each:
- [10] Name these mythical characters who had to take turns using their shared single eye and tooth.

ANSWER: the <u>Graeae</u> (GRYE-ee) [or the <u>Grey Sisters</u>; accept but DO NOT MENTION the <u>Phorcydes</u> (FOR-sih-deez)]

[10] This hero stole the eye of the Graeae and forced them to give him some information about Medusa, who he later killed, in exchange for the eye's return. He also saved Andromeda from a sea monster.

**ANSWER: Perseus** 

[10] The Graeae were sometimes known simply as the "daughters of" this primordial sea god. According to Hesiod, he was also the father of the dragon Ladon, the Gorgons, and probably Echidna.

ANSWER: **Phoreys** [or **Phorkus**] < Carson>

- 19. Both of Elif Batuman's books are titled after novels by this author, the first adopting the title of the 1916 Constance Garnett translation. For 10 points each:
- [10] Name this 19th-century author whose novel about the amoral Nikolai Stavrogin and the would-be revolutionary Pyotr Verkhovensky has been published in English under the titles *The Possessed*, *The Devils*, and *Demons*.

ANSWER: Fyodor <u>Dostoyevsky</u> [or Fyodor Mikhailovich <u>Dostoyevsky</u>; accept <u>Dostoevsky</u>]

[10] Batuman's latest book is titled for this Dostoyevsky novel about the epileptic Prince Myshkin, who travels from and back to a Swiss sanatorium at the novel's beginning and end.

ANSWER: *The Idiot* 

[10] In a 2010 interview Batuman said that Dostoyevsky, like this character of his, was a "'sick' man". This character mocks humanity's desire to create Chernyshevsky's "crystal palace" and engages in a complicated relationship with a prostitute named Liza.

ANSWER: the <u>Underground Man</u> [or the <u>narrator</u> or <u>protagonist</u> of <u>Notes from</u> the <u>Underground</u>] <Carson>

- 20. The classic example of this phenomenon is the evolution of viceroy butterflies to physically resemble monarchs, which are poisonous. For 10 points each:
- [10] Name this form of mimicry in which a harmless individual mimics a more dangerous target to confuse predators, often by using aposematic coloration. By contrast, Müllerian mimicry is mutually beneficial for both organisms.

ANSWER: Batesian mimicry

[10] The idea of aposematism was not formulated by Bates, but instead by this biologist and author of *The Colour of Animals*. In his namesake effect, natural selection leads to reproductive isolation between two species.

ANSWER: Alfred Russel Wallace

[10] Rather than aposematism, silk moths and sphingid caterpillars confuse predators using this sort of pattern on their bodies. This patterning, also known as an ocelli, decorates the plumage of peacocks.

ANSWER: eyespots [prompt on circles or ovals] <Grames>

- 21. For 10 points each, answer the following about the use of the color green in art:
- [10] Patina, a green layer that forms when copper or bronze is oxidized, provides the recognizable color of this Frederic Bartholdi sculpture that stands on a namesake island in New York City.

## ANSWER: **Statue of Liberty** [or **Liberty Enlightening the World**]

[10] This pale, grayish shade of green was used to glaze the pottery of ancient and medieval China before the rise of blue and white wares, and was valued due to its similarity to jade. The English name of this color of green comes from Honore d'Urfe's novel *L'Astrée*.

ANSWER: **celadon** [or **qingci**]

[10] A shade of viridian or emerald green popular among the Impressionists was named for this 16th-century Venetian painter of such gigantic canvases as *The Wedding at Cana* and *The Feast in the House of Levi*.

ANSWER: Paolo Veronese [or Paolo Caliari] <Jose>