PACE NSC 2022 - Round 05 - Tossups

1. This character leads a prince away from his hunting expedition to tell him that his father had been pushed down a well three years prior. This character sets all the horses free after learning the low status of his position as "Keeper of the Heavenly Horses." This character writes "The Great Sage Equal to Heaven reached this place" on a pillar, then urinates on it, only to discover that it is a giant (*) finger. This character is born from a stone egg and is taught the "72 transformations" in a novel which is titled for them in Arthur Waley's translation. This character earns Buddhahood after retrieving scriptures alongside Sandy, Pigsy, and the monk Xuánzàng ("shwen-zong"). For 10 points, the novel *Journey to the West* features what legendary primate?

ANSWER: <u>Sūn Wùkōng</u> [accept either underlined part; or the <u>Monkey</u> King] <Alyssa Jorgensen, Literature - World and Miscellaneous> ~21724~

- 2. A popular illustrated children's book from this country includes a story about a "Scissor Man" who punishes a boy for thumb-sucking. A folk hero from this modern-day country, known as Owlglass in Victorian England, was a trickster fond of scatological pranks. The children's book Shock-headed Peter was a hit with parents in this country, whose folklore also includes stories about household sprites called (*) kobolds. A rock in this country that gives off a mysterious echo inspired a legend about a woman who became a siren after throwing herself into one of its rivers. The Lorelei is a legendary figure from this country. For 10 points, name this modern-day country where many fairy tales were collected by the Brothers Grimm. ANSWER: Germany [or German Confederation until "modern-day" is read]

 Michael Bentley, RMP World Mythology> ~22664~
- 3. A celebrated general in this battle who surrendered his sword to Francis Marion Walker was named Benjamin Prentiss. After severe losses during this battle's first day, one general declared, "lick 'em tomorrow, though." Prior to this battle, Union forces camped between Lick Creek and Owl Creek did not fortify their position on the assumption that Confederates would not attack after losing Fort (*) Donelson. Reinforcements under Don Carlos Buell helped stop an assault by P. G. T. Beauregard at this battle, thus turning the tide for the Union. Union forces at this battle had time to regroup thanks to a prolonged defense of the Hornet's Nest. For 10 points, name this first big bloodbath of the Civil War, an 1862 battle fought in Tennessee.

ANSWER: Battle of **Shiloh** [or Battle of **Pittsburg Landing**] <Michael Bentley, History - American - Pre-1865> ~23124~

4. In special relativity, this statement contains a "transverse" and a "longitudinal" term, respectively proportional to gamma and gamma-cubed. This statement's quantum mechanical analog is usually the second equation in the statement of Ehrenfest's ("AIR-en-fest's") theorem. This statement gains a term proportional to the rate of change of angular velocity, named for Euler ("OIL-er"), in a rotating frame. This statement gains a term equal to exhaust velocity times the mass-loss rate in the derivation of the (*) rocket equation. Integrating this statement gives the definition of impulse. This law can be applied by using a free-body diagram and finding a vector sum of forces. For 10 points, name this law often given as "force equals mass times acceleration."

ANSWER: <u>Newton</u>'s <u>second</u> law of motion [accept anything indicating <u>Newton</u> and <u>two</u>, prompt on partial answers; accept <u>impulse</u>-momentum principle before "impulse;" accept "<u>F</u> equals m a" or "<u>force equals mass times acceleration</u>" before "force"; prompt on <u>equation of motion</u>; prompt on <u>Tsiolkovsky's rocket</u> equation before "rocket," asking "what more basic statement gains that term in the derivation of the rocket equation?"] <Joseph Krol, Science - Physics> ~23057~

5. 21 pleasures of this task are outlined in Lydia Davis's Essays Two. The BLEU score was developed to assess the quality of this task. IBM researchers working on this task capitalized on the Hansard dataset, a byproduct of a 1969 Canadian law. In 2016, Deborah Smith won an "International" award for this task alongside Han Kang. David Foster Wallace attacked the Victorian sensibilities of (*) Constance Garnett's approach to this task. A 1959 Roman Jakobson essay describes how circumlocutions might be used when meanings differ in this task. A website automating this task took its name from Douglas Adams's Babel Fish. "False friends" often lead to errors in this task. For 10 points, name this task that might render a Spanish text in English.

ANSWER: <u>translation</u> [or machine <u>translation</u>; accept <u>interpretation</u>; accept more specific answers like <u>translating</u> from French to English or Russian to English; prompt on <u>natural language processing</u> or <u>NLP</u>] (Smith won the International Booker Prize.)

<Michael Bentley, Other - Other Academic and General Knowledge> ~23648~

6. A "prophecy" by this man titles a Joseph Horowitz book that examines the relative obscurity of composers such as Florence Price. The allegro con fuoco final movement of a symphony by this composer introduces a brass motif consisting of the notes E (pause), F-sharp, G, F-sharp (pause), E, E. This composer imitated the call of a scarlet tanager in his String Quartet No. 12, written around the same time that he wrote a symphony whose (*) largo second movement contains an English horn solo inspired by baritone singer Harry Burleigh. During a trip to Spillville, Iowa, this composer was inspired by African-American spirituals such as "Swing Low, Sweet Chariot" to compose his E minor ninth symphony. For 10 points, name this Czech composer of the New World Symphony.

ANSWER: Antonín **<u>Dvořák</u>** [or Antonín Leopold **<u>Dvořák</u>**] <Michael Bentley, Fine Arts - Music - Romantic> ~23680~

7. Linda Colley's global history of these things begins with a biography of Pasquale Paoli and argues that their proliferation in the 19th century was due to the expense of naval warfare. A Broadway play by Heidi Schreck centered on what one of these things "means to me." The major work of *The Economist* editor Walter Bagehot ("badge-it") was a book on the "English" one of these things, often said to be (*) "unwritten." One of these things finalized by the Great Sejm ("same") on May 3rd, 1791 abolished the liberum veto in the Polish-Lithuanian Commonwealth. One of these documents was created following the failure of a meeting in Annapolis in 1786. For 10 points, name these documents, one of which was chiefly written by James Madison at a convention in Philadelphia.

ANSWER: <u>constitution</u>s [prompt on <u>law codes</u> or legal <u>code</u>s or <u>laws</u>] <Michael Bentley, History - Cross, Historiography, and Miscellaneous> ~22466~

8. A layer of nanophase iron originating from these events may resolve the S-type conundrum by producing a gradual reddening. The surface chemistry of rego·lith is shaped by embedding of protons and these events, which agglutinate particles together into a glassy mass. Tectonically inactive objects can be dated using the distribution of these events, which are the most energetic component of space (*) weathering. The smooth surface of the Mare ("MAH-ray") Imbrium stems from volcanism triggered by these events, which are used to separate the periods of lunar geology. The Caloris basin of Mercury was created by a large example of, for 10 points, what events that produce craters on the moon?

ANSWER: <u>impact</u> events [or (micro)meteorite <u>impact</u>s; or hypervelocity <u>impact</u>s; accept <u>bombardment</u>s or <u>collisions</u>; accept answers indicating being <u>struck</u> by (micro)<u>meteorite</u>s and prompt if no object is specified; prompt on space <u>weathering</u> before "weathering"]

<Kevin Wang, Science - Astronomy>~23712~

9. Fred Boissonnas's photos of this building illustrate a section about it as a "machine for stirring emotion" in Le Corbusier's *Towards a New Architecture*. Lawrence Alma-Tadema imagined an artist showing his friends a relief sculpture on this building. The Duveen Gallery houses sixteen metopes ("MEHtoe-pays") from this building. In 1687, this building was badly damaged after (*) shelling by Francesco Morosini of Venice. A battle between the Centaurs and the Lapiths was sculpted by Phidias for this building and is now at the British Museum thanks to Lord Elgin. The *naos* of this temple originally housed a large chryselephantine sculpture of a goddess of wisdom. For 10 points, name this temple dedicated to Athena on the Acropolis in Athens.

ANSWER: <u>Parthenon</u> [prompt on <u>Temple of Athena</u>] <Michael Bentley, Fine Arts - Architecture> ~22929~

- 10. In a story by this author, a German showman refuses to cut out Ivan after he is eaten alive by a crocodile. The "dreamer" protagonist of a story by this author falls for Nastenka over four winter evenings. One of this author's protagonists spends months preparing to literally bump into a tall military officer who insulted him. In a novella by this author of (*) "White Nights," the protagonist criticizes the "Crystal Palace" of Nikolai Cherny-shevsky prior to the section "Apropos of the Wet Snow." The protagonist of that novella by this author claims to be a "sick" and "spiteful" man and demeans the prostitute Liza. Notes from the Underground is by for 10 points what author, who created Raskolnikov in Crime and Punishment? ANSWER: Fyodor Mikhaylovich <u>Dostovevsky</u> (The first story is "The Crocodile.") <Joseph Krol, Literature European Short Fiction> ~23644~
- 11. This nation's flag carrier airline reduced operations after the closure of a zinc mine at Maamorilik in the late 1980s and still operates subsidized "settlement flights" to rural areas. This nation's Premier works from a penthouse office built above its first-ever shopping mall. This nation's KNI conglomerate emerged from a colonial monopoly that established the port of Godhavn ("good-HAUN") on Disko Island. The Queen Elizabeth Islands lie to this nation's northwest, where the US operates (*) Thule Air Base. This nation's northernmost year-round port, Sisimiut, is second in population to its capital of Nuuk. It is home to the only permanent ice sheet outside of Antarctica. For 10 points, name this largest island in the world, a constituent country of Denmark.

ANSWER: <u>Greenland</u> [or <u>Kalaallit</u> Nunaat; or <u>Grønland</u>; prompt on <u>Denmark</u> before the end] <Noah Sheidlower, Geography - Europe> ~17327~

12. One of these texts repeatedly declares "I am the food!" after explaining the five "sheaths" of food, breath, mind, understanding, and bliss. The method of "neither this, nor that," or neti neti, was introduced in these texts, which typically end by proclaiming "Peace! Peace! Peace!" In one of these texts, a father uses salt dissolved in water to teach his son that "Thou art that," or "tat tvam asi." The (*) Chandogya text of this type discusses the relationship between the self, or Atman, and "ultimate reality," or Brahman, and influenced the philosophy of Arthur Schopenhauer. This set of roughly 108 texts founded the tradition of Vedanta, meaning "after the Vedas." For 10 points, name these late Vedic period commentaries on Hindu philosophy.

ANSWER: <u>Upanishad</u>s

<Jordan Brownstein, RMP - Hinduism> ~24029~

13. In 2021, a king of these people with the first name Goodwill appointed one of his wives as his successor, but she died a month after he did. A 20th century leader of these people signed the Mahlabatini Declaration of Faith with Harry Schwarz and founded a "freedom party" named after their word for crown. After most of their land was seized in 1906, some of these people staged the unsuccessful Bambatha Rebellion. (*) Mango-suthu Buthe-lezi led these people in the state of Natal. In 1878, Lord Chelmsford captured an earlier leader of these people who was also Buthuelzi's grandfather, Cetshwayo. The "buffalo horns" battle formation was developed by, for 10 points, what Bantu people who were led by Shaka in South Africa?

ANSWER: <u>Zulu</u> [prompt on <u>Nguni</u>; prompt on <u>Bantu</u> before mentioned] <Michael Bentley, History - World - African> ~22646~

14. A condition which occurs due to excess amounts of this compound must be differentiated from neuro·leptic malignant syndrome. The constipation drug pru·calo·pride targets this molecule's class 4 receptors. This compound's receptors in the chemo·receptor trigger zone are blocked by anti·emetics like on·dan·se·tron. This vaso·constricting compound is secreted from the dense bodies of platelets along with ADP and calcium. Nearly 80% of the body's supply of this neurotransmitter is found in (*) entero·chromaffin cells in the enteric nervous system. This monoamine is produced by the sequential hydroxylation and decarboxylation of tryptophan. SSRIs inhibit the reabsorption of, for 10 points, what neurotransmitter that regulates appetite and mood?

ANSWER: <u>serotonin</u> [accept <u>5-hydroxytryptamine</u> or <u>5HT</u>]

<Andrew Wang, Science - Biology>~23831~

15. The first film adaptation of this play opens with one character eating a chicken leg and another doing a crossword. A character in this play declares "we must carry on as though we did [know the difference between truth or illusion]" and describes himself as an "Abmaphid." Mike Nichols directed a film adaptation of this play, which originally opens by quoting Beyond the Forest's "What a dump!" A character in this play fires a (*) gag umbrella gun at his wife. This play, which contains a "Walpurgisnacht," ends after one character decides to "kill" his fictional son. History professor George and his wife Martha host a dinner party in, for 10 points, what Edward Albee play whose title references the author of Mrs. Dalloway? ANSWER: Who's Afraid of Virginia Woolf?

<Michael Bentley, Literature - American>~23110~

16. During the 1867 "Year of Great Weakness" in this country, a famine sent emigrants such as future IWW member Joe Hill to the US. Two economists born in this country helped inspire the "Million Program" of public housing after publishing Crisis in the Population Question. An architect and diplomat from this country, who was inspired by the film Pimpernel Smith to save numerous Hungarian Jews, was named (*) Raoul Wallenberg. A politician from this country who advocated "functional socialism" spoke out against South Africa a week before his 1986 murder, a crime initially pinned on Christer Pettersson. For 10 points, name this Nordic country previously led by Olaf Palme that once formed a union with its western neighbor, Norway.

ANSWER: <u>Sweden</u> [or Kingdom of <u>Sweden</u>]

<Michael Bentley, History - European - 1900+> ~22651~

17. A poem by this author describes how the narrator "stood dumb / when your betraying sisters, / cauled in tar, / wept by the railings." The lines "Out here in Jutland / In the old man-killing parishes / I will feel lost, / Unhappy and at home" was based on this author's reading of P. V. Glob's book *The Bog People*. This author described how the "summer's blood" of the title fruit of another poem causes "palms" to be as "sticky as Bluebeard's." This poet of (*) "Blackberry-Picking" described "Big Jim Evans saying it was a hard blow" in a poem in which the speaker's brother is placed in "a four-foot box, a foot for every year." For 10 points, name this Irish poet whose collection *Death of a Naturalist* includes "Mid-Term Break" and "Digging."

ANSWER: Seamus Heaney

<Michael Bentley, Literature - British - Poetry> ~22890~

18. Smith College owns this artist's colonial revivalist painting of a woman at a spinning wheel, called *In Grandmother's Time*. This artist carved notes from a Mendelssohn passage into the frame of his portrait of soprano Weda Cook. In a noncommissioned portrait by this artist relegated to Ward One at the Centennial Exposition, the only woman in the painting cringes in horror to the left of the title figure, a professor at Jefferson. In another painting by this artist, a nude model poses for sculptor (*) William Rush. An assistant holds a chloroform-doused cloth as students in an amphitheater take notes in a painting by this artist titled for a Philadelphia surgeon. For 10 points, name this American realist painter of *The Gross Clinic*.

ANSWER: Thomas **Eakins**

<Michael Bentley, Fine Arts - Painting - U.S.> ~23675~

19. Weeping and crizzling are forms of corrosion that can occur to this material due to improper levels of moisture and alkali. Austen Angell developed the concepts of strong and fragile precursors to this material. Network-forming cat-ions and stabilizers form the bulk of this material, which forms through a second-order phase transition involving the supercooling of a viscous fluid. Sodium carbonate serves as a flux to lower the (*) transition temperature required to form a type of this substance to which lime is added for durability. This substance is given a low coefficient of thermal expansion through the addition of boron trioxide. Silica is melted to form, for 10 points, what amorphous solid?

ANSWER: glass

<Andrew Wang, Science - Chemistry> ~24140~

20. In a book titled for this thinker and Philosophy, Paul Ricoeur calls this thinker a "master of suspicion." In Life Against Death, Norman O. Brown endorses the perspective this thinker takes on religion in works like The Future of an Illusion. This thinker's writings on the memoirs of Judge Schreber are critiqued in the first volume of Deleuze and Guattari's Capitalism and Schizophrenia. Herbert Marcuse's book (*) Eros and Civilization is a "philosophical inquiry" into this thinker partly titled after the life drive Eros, which this thinker contrasted with the death drive Thanatos in Beyond the Pleasure Principle. For 10 points, Anti-Oedipus was written in opposition to the psychoanalytic theories of what Austrian thinker?

ANSWER: Sigmund <u>Freud</u> [accept <u>Freud</u>ianism; accept <u>Freud</u> and Philosophy] <Anson Berns, RMP - Philosophy> ~23485~

21. In the UK, people in this profession need to apply to the REF every six years with evidence of their "outputs." Germans in this profession with the most job security are said to have "habilitated themselves." "Freedom" for people in this profession has long been a cause of the AAUP. In 2021, a North Carolina-based Board of Trustees that makes hiring and promotion decisions for people in this job controversially denied an application from (*) Nikole Hannah-Jones. To get on a certain employment "track" and avoid adjunct status, people in this job submit to high-impact journals as part of the "publish or perish" model. For 10 points, name this job where someone might earn tenure working at an institution such as Dartmouth.

ANSWER: college <u>professor</u>s [or university <u>professor</u>s; or <u>college teacher</u>s or <u>university teacher</u>s; or <u>lecturer</u>s; prompt on just <u>teachers</u>; prompt on <u>researchers</u> or <u>college</u> employees or <u>school</u> employees or <u>education</u> employees or <u>PhD</u>s]

<Michael Bentley, Current Events - U.S.> ~23007~

PACE NSC 2022 - Round 05 - Bonuses

1. This term was coined by law professor William Baude in 2015. For 10 points each:

[10] Give this term for "a range of orders and summary decisions that defy [the Supreme Court's] normal procedural regularity." Opinions described by this term are often released without a majority opinion and tend to be emergency orders.

ANSWER: shadow docket

[10] A shadow docket ruling kept in place the "Remain in [This Country]" policy for asylum seekers. This country's president is Andrés Manuel López Obrador.

ANSWER: <u>Mexico</u> [or United <u>Mexican</u> States; or Estados Unidos <u>Mexicanos</u>; accept Remain in <u>Mexico</u> policy]

[10] David Cole, a leader of this organization, has criticized the rise of the shadow docket. A former director of this organization, Ira Glasser, argues it would not have filed the *Skokie* free speech case today.

ANSWER: <u>ACLU</u> [or <u>American Civil Liberties Union</u> or <u>ACLU</u> Foundation]

<Michael Bentley, Current Events - U.S.>~18518~

2. Craig Venter began Celera Corporation because he thought this project was too slow. For 10 points each: [10] Name this government project, first headed by James Watson, that published its rough draft in June 2000. It aimed to sequence over 3 billion base pairs.

ANSWER: <u>Human Genome Project</u> [accept <u>HGP</u>]

[10] The first significant part of the human genome to be sequenced was this non-nuclear genetic material that codes for 37 genes.

ANSWER: <u>mtDNA</u> [accept <u>mitochondrial DNA</u>, or <u>mDNA</u>, or <u>mitochondrial genome</u>]

[10] Cytochrome c oxidase, a gene encoded by mtDNA, is one of the most commonly used genes in this technique that compares short regions of DNA to a library of specimens to determine the species of a certain specimen.

ANSWER: DNA barcoding

<Briana Magin, Science - Biology> ~15028~

3. This author's Kennebunkport estate was financed by the success of his stories about the rapscallion Penrod. For 10 points each:

[10] Identify this two-time winner of the Pulitzer Prize for Fiction who wrote *Alice Adams* and *The Magnificent Ambersons*.

ANSWER: Booth **Tarkington**

[10] The first Penrod novel opens by describing Duke, one of these creatures. One of these animals named Buck is the central character of Jack London's *The Call of the Wild*.

ANSWER: a dog

[10] In one Penrod story, Penrod ruins a play by accidentally revealing his overalls while playing this character. This non-royal character kills Gaheris and Gareth while rescuing his "forbidden lover" in T. H. White's *The Once and Future King*.

ANSWER: Sir Lancelot

<Michael Bentley, Literature - American>~18206~

- 4. Answer the following about jazz artists using anadromes, or words spelled backwards, to title their compositions, for 10 points each.
- [10] This trumpeter reversed the last name of one of his friends to title one of his tracks "Nardis," but is better known for his album *Kind of Blue*.

ANSWER: Miles **Davis** [or Miles Dewey **Davis** III]

[10] This brief member of the first Miles Davis Quintet wrote "Airegin," which is "Nigeria" reversed. He is known for the standard "St. Thomas," which he adopted from a Bahamian folk song that his mother sang to him.

ANSWER: Sonny Rollins [or Walter Theodore Rollins]

[10] The first recording of "Airegin" included Horace Silver, who named a track "Ecaroh" ("ECK-ah-row") by reversing his first name. Silver played this instrument, also played by Davis sideman Herbie Hancock.

ANSWER: piano [accept electric piano or keyboard]

<Jon Suh, Fine Arts - Jazz> ~18013~

- 5. This term once referred to a pair of unbuckled shoes but subsequently referred to women who bobbed their hair. For 10 points each:
- [10] Identify this term for women in the 1920s who flouted traditional gender roles by wearing arm-exposing dresses and smoking in public.

ANSWER: flappers

[10] Gertrude Ederle inspired many flappers to take up this activity. The US sent a women's team in this activity to the 1920 Olympics despite it being widely seen as "obscene" for women to partake in it just 8 years earlier.

ANSWER: **swim**ming [or competitive **swimming**; or **swimming** the English Channel]

[10] By 1927, only 70 of 1,300 working girls in Milwaukee still wore these things, due to the flapper resistance to them. Whalebone was frequently used for the stays in these things.

ANSWER: corsets

<Michael Bentley, History - American - 1865-1945> ~13330~

6. In this novel, Rebeca suffers the first case of insomnia that later plagues the whole town. For 10 points each:

[10] Name this novel in which one character foments 32 separate civil wars and fathers 17 illegitimate children.

ANSWER: One Hundred Years of Solitude [or Cien años de soledad]

[10] One Hundred Years of Solitude is a magical realist novel by this Colombian author, who created its setting of Macondo in his novella Leaf Storm.

ANSWER: Gabriel **García Márquez** [accept **Gabo** or **Gabito**; prompt on <u>Garcia</u> or <u>Marquez</u>]

[10] In *One Hundred Years of Solitude*, Remedios the Beauty ascends into heaven while doing this action. Remedios's sister-in-law Fernanda remains upset that Remedios left with the white objects she was doing this action on.

ANSWER: **fold**ing sheets [or **fold**ing laundry or folding **laundry**; accept clear equivalents]

<Michael Bentley, Literature - World and Miscellaneous>~18371~

- 7. A book on this concept was held up by Cowboys coach Jimmy Johnson after winning Super Bowl XXVII (27). For 10 points each:
- [10] Name this concept that titles a book about "The Psychology of Optimal Experience" written by Mihaly Csikszentmihalyi ("mee-HIGH CHEEK-sent-me-HIGH-ee").

ANSWER: flow

[10] Csikszentmihalyi examined the flow concepts inherent in Montessori types of these institutions which often mix together children of different ages.

ANSWER: preschools [accept anything involving schools or daycares] or elementary schools or classrooms [10] In the 1980s, Csikszentmihalyi used these then-cutting edge communication devices to get real-time feedback on the flow state of subjects. Because these devices usually work in cell coverage dead zones, they're still widely used by doctors.

ANSWER: <u>beeper</u>s [or <u>pager</u>s; do not accept or prompt on "cell phones"]

<Michael Bentley, Social Science - Psychology>~18120~

- 8. For 10 points each, identify the following about Adrienne Mayor's head-scratching interpretations of Greek mythology.
- [10] In her book *Gods and Robots*, Mayor characterizes this figure as "a seductive fembot" who released "a jar's swarm of evils to torment mortals forever."

ANSWER: Pandora

[10] Mayor argues that dinosaur fossils were the basis for the mythological griffins, who lived between the Arimaspians and this region. Every year, Apollo flew on a swan to this region, whose residents lived for a thousand years.

ANSWER: **Hyperborea**

[10] Mayor cites a "dilemma" named for this character amongst scientists working on age-prolonging medicines. This son of Laomedon is granted eternal life but not eternal youth by Zeus.

ANSWER: Tithonus

<Michael Bentley, RMP - Greco-Roman Mythology> ~18387~

- 9. By the time he composed his fourth symphony, Gustav Mahler had rejected these documents in favor of being a "pure musician." For 10 points each:
- [10] Name these documents that provide descriptions of the themes evoked in a symphony. Today, listeners at the symphony may receive these documents to read about the history of the performance's repertoire.

ANSWER: musical **program**s [or musical **program** notes]

[10] In contrast to Mahler, this earlier French composer provided program notes for each movement in his 1830 piece *Symphonie fantastique*.

ANSWER: Hector Berlioz

[10] The program notes for this second movement of *Symphonie fantastique* describe how the artist "finds himself in the most diverse situations in life." The *idée fixe* twice interrupts the central waltz of this movement, which originally included an often omitted solo cornet part.

ANSWER: A **ball** [or "Un **bal**"]

<Michael Bentley, Fine Arts - Music - Romantic> ~18733~

- 10. In a de insertion reaction that forms the product of the Heck reaction, a hydride at this position relative to an alkyl group is transferred to an open site on a metal. For 10 points each:
- [10] Name this position, the second carbon away from a functional group.

ANSWER: **beta** carbon [accept **beta**-hydride elimination]

[10] The product of the aldol reaction often forms this type of bond between the alpha and beta carbons. This type of bond consists of one pi and one sigma bond.

ANSWER: double bond

[10] The formation of an alpha, beta-unsaturated carbonyl in aldol reactions occurs through one of these reactions via the E1cB ("E-one-C-B") mechanism. In this type of reaction, two leaving groups are removed from a molecule.

ANSWER: elimination reaction

<Jonathen Settle, Science - Chemistry> ~18535~

- 11. During this emperor's early reign, the Buddhist fanatic Nisshō Inoue attempted to assassinate several government officials during the League of Blood Incident. For 10 points each:
- [10] Name this Japanese emperor during World War II.

ANSWER: Hirohito [or Emperor Shōwa]

[10] One of those killed in the League of Blood incident was Dan Takuma, a leader of one of these Japanese conglomerates that grew significantly during the Meiji period. They include Mitsubishi and Yasuda.

ANSWER: *zaibatsu* [prompt on companies]

[10] This man was inspired by the League of Blood incident to lead the Shield Society in a 1970 coup against the Japanese government. After the coup's failure, this man committed *seppuku*.

ANSWER: Yukio Mishima [or Kimitake Hiraoka]

<Michael Bentley, History - World - Asian>~19087~

- 12. Between 1945 and 1970, the number of college majors in this field quadrupled. For 10 points each:
- [10] Name this field popularized among lay readers by Fritjof ("FRIT-yoff") Capra's best-seller on the "Tao" of it. The pragmatic nature of this discipline in postwar classrooms led to the motto, "Shut up and calculate!" ANSWER: physics [prompt on science]
- [10] The postwar American scientist was typified by a "man" named for this National Laboratory that developed Thin Man in the 1940s.

ANSWER: <u>Los Alamos</u> National Laboratory [or <u>LANL</u>; or <u>Los Alamos</u> Laboratory; prompt on <u>Project Y</u>] [10] A 2011 book by David Kaiser argues that these title people "saved" physics in the 1970s. These long-haired youths popularized slogans like "Make love, not war" and stereotypically drove around in VW Buses with peace signs painted on them.

ANSWER: **hippies** [accept *How the Hippies Saved Physics*]

<Michael Bentley, Other - Other Academic and General Knowledge> ~18296~

- 13. This author attacked playgoers in "An Ode to Himself" following the commercial failure of his play *The New Inn*. For 10 points each:
- [10] Name this playwright, whose earlier successes included Volpone and The Alchemist.

ANSWER: Ben Jonson

[10] At his death, Jonson was working on a play about "sad" people with this profession. Walter Raleigh wrote a "Nymph's Reply" to one of these people in response to a poem by Christopher Marlowe.

ANSWER: **shepherd**s [accept *The Sad Shepherds*; accept the passionate **shepherd**]

[10] After his death, Jonson's influence was maintained among the so-called "Sons of Ben," which included this Cavalier poet of "Ballade upon a Wedding." A lyric from this man's play Aglaura ("ag-LAU-rah") asks "Why so pale and wan, fond lover?"

ANSWER: Sir John Suckling

<Joseph Krol, Literature - British - Drama> ~19077~

- 14. One form of the Hebrew term *herem* is often equated to this Christian practice. For 10 points each:
- [10] Name this practice that in Catholicism bans someone from receiving the Eucharist or taking part in the liturgy. It should not be confused with a papal interdict.

ANSWER: **excommunication** [accept word forms]

[10] The Vilna Gaon declared that some sects of this movement, popular in Poland, were *herem* in the late 18th century. This movement, named for the word meaning "pious," was founded by Ba'al Shem Tov ("BAA-all SHEM-tove").

ANSWER: <u>Hasidic</u> Jews [accept word forms and spellings such as <u>Chassid</u>ism]

[10] Jews subject to a lesser form of herem called niddui cannot be counted for the minyan, a quorum of *this many* men needed for a public prayer.

ANSWER: 10

<Michael Bentley, RMP - Jewish Practice> ~18047~

- 15. The RCA researcher Herb Maruska claimed that his prior discovery was snubbed after the 2014 Nobel Prize for Physics was awarded for the discovery of one color of these devices. For 10 points each:
- [10] Name this type of diode used for illumination.

ANSWER: <u>LED</u>s [or <u>light emitting</u> diodes]

[10] Akasaki, Amano and Nakamura won the 2014 Nobel for inventing LEDs of this color based on magnesium doping. A U.S. case found that they had infringed on a patent for LEDs of this color made by Theodore Moustakas.

ANSWER: **blue** [or ultra**violet**]

[10] Most designs for blue LEDs use the nitride of this metal. The first LEDs used a III-V ("three-five") semiconductor including this metal, which is now prominently used in solar panels.

ANSWER: gallium [or Ga; accept gallium nitride or gallium arsenide]

<Joseph Krol, Science - Physics>~18029~

16. A series of paintings titled for these flowers are on display at the Musée de l'Orangerie. For 10 points each:

[10] Name these flowers, a frequent subject of late works by Claude Monet. Monet painted numerous images of these flowers floating at Giverny, including some under a Japanese bridge.

ANSWER: <u>water lilies</u> [or <u>Nymphéas</u>; or <u>Nymphaeaceae</u>; prompt on <u>lilies</u>]

[10] Monet paid a lumber merchant to save some of these other plants so he could finish painting them along the Epte River "in Grey Weather" and "in the Sun."

ANSWER: **poplar** trees [accept **poplars**; prompt on trees]

[10] Monet made over 70 paintings of two separate bridges in this city, including a painting subtitled "Through Fog" in 1903. Monet also repeatedly painted a government building in this city from St. Thomas's Hospital.

ANSWER: **London** [accept **Westminster**]

 < Michael Bentley, Fine Arts - Painting - European
> $\sim \! 17714 \sim$

- 17. One event at the Ancient Greek Olympics was a race where men wore the armor and carried the shields used by these soldiers. For 10 points each:
- [10] Identify these Greek foot soldiers who carried a thrusting spear and fought in phalanxes.

ANSWER: **hoplite**s

[10] Another military-themed athletic event popular amongst the Greeks was races in these vehicles. Roman women and men were allowed to sit together at races of these vehicles.

ANSWER: **chariot**s [accept war **chariot**s or **biga** or **triga** or **quadriga**]

[10] Callimachus wrote an ode praising a queen of this name whose horses were victorious at the Nemean Games. That queen of this name, known as the Benefactress, gave a lock of her hair for her husband Ptolemy III's safe return from Syria.

ANSWER: **Berenice** [or **Berenike**]

<Michael Bentley, History - European - Classical> ~17955~

- 18. After being pricked by a rose, this author wrote a three-line epitaph for himself declaring roses to be "pure contradiction." For 10 points each:
- [10] Name this poet, who also referenced roses in a 64-poem collection inspired by Vera Knoop ("K'NOOP"), whose first poem opens "There rose a tree. O pure transcendence!"

ANSWER: Rainer Maria Rilke ("RILL-kuh")

[10] Rilke declared "let the rose blossom each year" in the aforementioned collection, which consists of poems addressed to Orpheus in this 14-line format.

ANSWER: **sonnet** [accept **Sonnet**s to Orpheus]

[10] Rilke's epitaph uses his common theme of eyes, as does this other poem by him that describes the title statue's "eyes like ripening fruit." This poem ends with the line "You must change your life."

ANSWER: "<u>Archaic Torso of Apollo</u>" [or "<u>Archaischer Torso Apollos</u>"; accept similar translations like "<u>Apollo's Archaic Torso</u>" or "<u>Torso of Archaic Apollo</u>"]

<Charles Yang, Literature - European - Poetry> ~16937~

- 19. Google developed Kubernetes ("KOO-bur-NEHT-eez") to orchestrate the deployment of these objects, which was previously handled through a shim to Docker. For 10 points each:
- [10] Name these objects which allow OS-level virtualization. Amazon ECS hosts these objects in the cloud, separating users from the considerations of physical hardware.

ANSWER: **container**s [accept **zone**s]

[10] Persistent volumes mounted in a Docker container are owned by this user, which has ID zero. Executing commands using "sudo" ("SUE-doh") literally runs them as this user.

ANSWER: <u>superuser</u> [accept <u>root</u> or <u>superadmin</u>; prompt on <u>admin</u>istrator or <u>su</u>]

[10] Both containers and their underlying servers often use RHEL, a Red Hat-developed distribution of this open-source operating system. Home users may use the Ubuntu flavor of this OS.

ANSWER: Linux [accept Red Hat Enterprise Linux; do not accept or prompt on "Unix"]

< Kevin Wang, Science - Computer Science > ~18803~

- 20. The *amiras* ("uh-MEER-uhz") were a group of about 165 elite families of this ethnicity in 19th century Istanbul. For 10 points each:
- [10] Identify these people who name the southwestern "quarter" of Jerusalem. A "Question" about these people was debated at the Congress of Berlin.

ANSWER: <u>Armenian</u>s [accept <u>Armenian</u> Quarter or <u>Armenian</u> Question; prompt on Ottoman <u>Christians</u>]

[10] The *amira* Calouste Gulbenkian amassed a fortune from this commodity, attracting investments from Royal Dutch Shell and BP.

ANSWER: oil [accept crude oil or petroleum]

[10] These rivals of the Gulbenkians had a stake in the oil business from their headquarters in St. Petersburg. The most prominent member of this family was targeted by a premature obituary in 1888 calling him a "merchant of death."

ANSWER: **Nobel**s [accept Alfred **Nobel**]

<Michael Bentley, History - Cross, Historiography, and Miscellaneous> ~18184~

- 21. Seyla Benhabib discussed the "democratic iteration" of global norms in her book on "Another" form of this attitude. For 10 points each:
- [10] Name this attitude that suggests a lack of provincial prejudices. This word derives from the Greek for "citizen of the world," a phrase coined by Diogenes the Cynic.

ANSWER: cosmopolitanism

[10] Benhabib adopted the term "iteration" from this author of *On Cosmopolitanism and Forgiveness* and *Of Hospitality*. This thinker sported his trademark shock of white hair in his post-9/11 dialogues with Jürgen Habermas.

ANSWER: Jacques **Derrida**

[10] Benhabib dates the era of "cosmopolitan norms" to the UN Declaration of these principles. These "inalienable" concepts entitle humans to certain freedoms.

ANSWER: human rights

<Jordan Brownstein, RMP - Philosophy> ~19250~