

PACE NSC 2022 - Round 13 - Tossups

1. Steve Coll's book on this family documents the mysterious 1988 plane crash in San Antonio that killed its patriarch. This non-royal family handed over 35% control of one company and prioritized building a palace for the NEOM project after a crane they owned collapsed and killed hundreds of Malaysian pilgrims. Members of the Hamburg Cell, including Mohammad (*) Atta, swore allegiance to a member of this family. This family's patriarch founded a lucrative construction group that restored the Masjid al-Haram. After fleeing the Tora Bora Caves, a member of this family spent several years next to a base in Abbottabad before being killed in a 2011 raid by Seal Team Six. For 10 points, name this family that included the leader of al-Qaeda, Osama.

ANSWER: bin Laden [accept Saudi Binladin Group; do not accept or prompt on "Saudi"]

<Michael Bentley, History - World - Middle Eastern> ~22995~

2. Truncating a Taylor expansion in powers of this quantity gives Oseen's equations. This quantity is plotted on the x-axis of a Moody diagram, whose y-axis sometimes plots a factor named for Darcy. An analog of this quantity in plasma physics, which quantifies the effects of magnetic diffusion, is its "magnetic" version. When this quantity is small, a regime named for Stokes applies and the Hagen-Poiseuille equation holds. This quantity equals the (*) velocity scale times the lengthscale over kinematic viscosity, or equivalently the ratio of inertial to viscous forces. When this dimensionless quantity is large, vortices and eddies appear in a fluid flow. For 10 points, what namesake "number" determines if a flow is laminar or turbulent?

ANSWER: Reynolds number [or Re or R_m; accept magnetic Reynolds number]

<Joseph Krol, Science - Physics> ~23026~

3. This character develops lifelong stomach troubles after being forced to eat an entire bunch of bananas as a punishment for stealing. This character burns his shop down for insurance money as part of his resolution to "paddle his own canoe." After this character gets distracted while watching a calf, his father drowns in a stream. This author of several stories titled "Escape" interviews many "Deserving Destitutes" for the (*) *Sentinel* newspaper. This man, who lives with his wife Shama at the Hanuman House with the Tulsi family after stopping working as a sign painter, dies young while still owing a mortgage on the title structure. For 10 points, V. S. Naipaul ("NYE-paul") wrote a novel about a "house" for what character?

ANSWER: Mr. Biswas [or Mohun Biswas; accept *A House for Mr. Biswas*]

<Michael Bentley, Literature - World and Miscellaneous> ~22879~

4. In 1960, excavations at Alba Fucens discovered a twice life-size statue of this figure in the *Epitrapezios* or "At Table" pose. This figure bends back the neck of an enemy in a Giambologna statue in Florence's Loggia dei Lanzi. A 30-foot bronze statue of this figure stands atop a large pyramid and octagon in a park in Kassel, Germany and is based on a nine-foot-high marble statue found in the Baths of Caracalla. That (*) Farnese sculpture of this figure, one of the most famous ancient sculptures unearthed during the Renaissance, depicts his left arm hanging over a club. A sculpture by Antonio del Pollaiuolo depicts this figure lifting Antaeus from the ground. For 10 points, name this Greek hero often shown holding the skin of the Nemean Lion.

ANSWER: Hercules [or Heracles; accept Farnese Hercules]

<Michael Bentley, Fine Arts - Sculpture> ~22636~

5. A 1985 book by Kenneth E. Hagin is titled for "How God Taught Me About [This Quality]." In a parable from Luke, a "fool" with this quality proclaims, "I have no place to store my crops." It's not youth, but a man with this quality asks Jesus about how to acquire eternal life, but goes away "sorrowful." Kenneth Copeland argued that this quality could be increased "a hundredfold" by contributing (*) "first fruits" to the church. Matthew 19:24 ("Chapter 19, Verse 24") compares the difficulty of a person with this quality "[entering] the kingdom of God" to "a camel to go through the eye of a needle." For 10 points, name this trait that should lead to philanthropy according to a "gospel" written by Andrew Carnegie.
ANSWER: wealth [or prosperity; accept prosperity theology or prosperity gospel; accept anything involving being rich; prompt on health by asking, "what other trait?"; prompt on faith by asking, "faith about having what other trait?"]
<Michael Bentley, RMP - Christian Practice> ~23488~

6. Geoffrey Keynes ("canes") made "a terrible mistake" with this poem's punctuation according to Allen Ginsberg, who set to music a collection in which it is followed by "My Pretty Rose Tree." A phrase from this poem titles a 1947 critical work about its author by Northrop Frye. This poem imagines a time "when the stars threw down their spears / And water'd heaven with their tears." The third of this poem's six stanzas considers "what (*) dread hand? and what dread feet?" This poem wonders, "What immortal hand or eye, could frame thy fearful symmetry?" The title figure of this poem from *Songs of Experience* is described as "burning bright / in the forests of the night." "The Lamb" is paired with, for 10 points, what William Blake poem about a carnivorous animal?
ANSWER: "The Tyger" [Frye's book is titled *Fearful Symmetry*.]
<Joseph Krol, Literature - British - Poetry> ~23972~

7. Stricter rules governing this phenomenon are part of Ella's Law, named for a London girl who died due to it in 2013. A law named for regulating this phenomenon is at the center of a 2022 Supreme Court case about rule-making filed by West Virginia. A book by Gary Fuller notes that 95% of humans live in places that don't meet a ten microgram WHO standard governing this phenomenon. In 2020, Andrew R. Wheeler blocked changing a (*) PM 2.5 standard that would have reduced deaths due to this phenomenon. In 2010, the US embassy tweeted that this phenomenon was "crazy bad" in Beijing; in 2018, similar levels of this phenomenon were observed in Seattle due to wildfires. For 10 points, name this environmental problem made worse by factory smokestacks.
ANSWER: air pollution [or smog; or bad air quality; accept answers like ill effects from air pollution or car emissions; accept Clean Air Act; prompt on pollution or smoke; do not accept "global warming" or "climate change" or "acid rain"]
<Michael Bentley, Current Events - World> ~15499~

8. The Marquis of Squillace, an advisor to a king of this dynasty, sparked a revolt when he banned the wearing of slouch hats. By 1749, a monarch of this dynasty established an intendant for every province in the kingdom. In 1714, this dynasty ceded control of its slave trade to Great Britain. A series of reforms named for this dynasty established new vicerealties and reduced the power of the Council of the (*) Indies. After the War of the Polish Succession, this dynasty gained control of Naples. In 1767, Charles III of this dynasty expelled the Jesuits. This dynasty secured Philip V's control of one country through the Peace of Utrecht. For 10 points, name this dynasty that ruled both Spain and France following the War of the Spanish Succession.
ANSWER: Bourbon dynasty [or House of Bourbon; or Borbón; accept Bourbon reforms]
<Michael Bentley, History - European - 1500-1900> ~23864~

9. Experimental contact lenses for measuring this biological quantity rely on reactions with boronic acid probes. One method measures this quantity using the current produced by a reaction that forms a delta lactone and hydrogen peroxide. CGMS devices monitor this quantity which is lowered post-prandially by incretins ("in-CREE-tins"). This quantity's three-month average is approximated by the hemoglobin (*) A1c ("A-one-c"). A hexo-kinase iso-form primarily located in the liver only activates when this quantity is high. Testing this quantity is impeded by the cost of test strips and constant need for finger pricking. Enzymes from the pancreatic islets like insulin and glucagon help regulate, for 10 points, what quantity which is chronically high in type II diabetics?

ANSWER: blood sugar [or blood glucose; accept glycemia]

<Michael Bentley, Science - Biology> ~22660~

10. In *Contingency, Irony, and Solidarity*, Richard Rorty sets up a dichotomy between "ironists" and practitioners of this discipline. A paper about this discipline characterizes sentences like Heidegger's "the Nothing nothings" as "pseudo-statements." Heidegger himself claimed the fundamental question of this discipline is "why is there anything at all?" Logical positivists like Rudolf (*) Carnap believed "logical analysis of language" would lead to the "elimination" of this philosophical discipline. This branch of philosophy was originally referred to as "first philosophy" and includes ontology as a sub-branch. For 10 points, give this philosophical discipline that got its name because Aristotle's text on it came after his *Physics*.

ANSWER: metaphysics [accept word forms like metaphysical or metaphysician; prompt on philosophy or word forms before "philosophical"]

<Anson Berns, RMP - Philosophy> ~23477~

11. This novel's author contributed to a 1984 text adventure sequel where players can dial-up a super-intelligent computer. In a lecture, one character in this novel declares, "Stand against the small tide of those who want to make everyone unhappy with conflicting theory and thought." A woman in this novel insists on watching the White Clown on her large parlor (*) wall television. The protagonist of this novel declares, "We've started two atomic wars since 1990," and refuses to turn his weapon on his own house after his wife Mildred reports him. This novel's protagonist is pursued by eight-legged Mechanical Hounds after turning on Captain Beatty. For 10 points, name this dystopian novel about a fireman named Guy Montag who burns books, written by Ray Bradbury.

ANSWER: Fahrenheit 451

<Michael Bentley, Literature - American> ~23130~

12. During this man's presidency, twenty-four stockbrokers met under a tree in Manhattan to sign the Buttonwood Agreement. After leaving North Carolina, the preacher Herman Husband fomented anger against a tax passed by this president. A two-year long economic panic during this man's presidency was caused by a land speculation bubble driven by Robert Morris. During this man's presidency, a (*) "dinner-table bargain" led to the passage of the Funding Act, which allowed the federal government to assume state debts. This president tasked "Light-Horse Harry" Lee and the "Watermelon Army" with peacefully putting down a revolt sparked by an unpopular excise tax. For 10 points, name this president who put down the Whiskey Rebellion.

ANSWER: George Washington

<Caleb Kendrick, History - American - Pre-1865> ~22723~

13. This text was called a "dangerous book" by Gilbert Murray, who, with Jane Harrison, drew on this book to develop the theories of the "Cambridge School." This text's theories are applied to tarot suits, among other subjects, in a book by Jessie Weston. This book centrally analyzes a ritual combat in which a runaway slave sought to kill a former slave and take his place. This text posits the "law of (*) similarity" and the "law of contagion," which govern "sympathetic magic." This text hyperbolically argues that all social rituals enact a pattern found in myths about "dying-and-rising" gods. A magical artifact from the *Aeneid* titles, for 10 points, what influential study in comparative religion by James Frazer?

ANSWER: The *Golden Bough*: A Study in Comparative Religion

<Matthew Bollinger, RMP - Greco-Roman Mythology> ~24003~

14. The metastable cementite is converted to austenite and this material at high temperatures, which can then form ductility-enhancing nodules. Potassium reacts with this material to form a bronze-colored reducing agent via intercalation. This material's microstructure is possessed by gray iron. Herbert MacPherson helped pioneer techniques to produce this material, which is formed with (*) silicon carbide in the Acheson process. This material's large cross-section allowed it to serve as a neutron moderator for Chicago Pile-1. Individual layers of this substance were repeatedly peeled using scotch tape in a method that earned Andre Geim a nobel prize. Layers of hexagonal carbon sheets form, for 10 points, what allotrope of carbon that is found in pencil lead?

ANSWER: graphite

<Benjamin Chapman, Science - Chemistry> ~23426~

15. The Otago Museum in Dunedin houses a restored one of these objects called *Te Paranihi*. "Head" versions of these objects built by the Haida had their crests removed prior to battles. A single *totara* was often used to make a *waka*, the Maori name for these objects. Hawaiian king Kamehameha (kah-MAY-uh-MAY-uh) the Great commanded over 100 of these objects and added European swivel guns to some of them. The Algonquins made a type of these objects called a *rabaska* from (*) bark. The American Museum of Natural History owns one of these objects made from a single cedar log that contains paintings of killer whales on the prow. For 10 points, name these vessels used by many indigenous peoples for fishing and river-based warfare.

ANSWER: canoes [or war canoes; accept more specific answers like dugout canoes; prompt on boats]

<Michael Bentley, History - Cross, Historiography, and Miscellaneous> ~22889~

16. A sufficient but not necessary condition for objects to be used in this process is the three rules of the Conway criterion. If the actions of a symmetry group are transitive for a given object, then both that object and its snub can be used in this process. Showing that objects named for Hao Wang can be used for this process is equivalent to the halting problem. The result of this process in n dimensions is an n -honeycomb. Roger (*) Penrose names a family of darts and kites which can perform this process aperiodically. There are three ways to perform this process such that every vertex is identical, corresponding to triangles, hexagons, and squares. For 10 points, name this process of covering a space in shapes without leaving gaps.

ANSWER: tiling the plane [or tiles; or tesselation; accept regular tilings, aperiodic tilings, periodic tilings, uniform tilings, or Wang tiles; accept space-filling]

<Kevin Wang, Science - Math> ~23902~

17. A composer from this country developed a microtonal system called "the thirteenth sound." The second symphony of a composer from this country is scored for indigenous instruments like a rattle made of butterfly cocoons and a string of deer hooves. Folk instruments from this country include a wooden stage that doubles as a percussion instrument — the *tarima* — and the 8-stringed *jarana*. After visiting this country and meeting the composer of *Sinfonía (*) india*, Aaron Copland quoted its folk songs in a piece named for one of its nightclubs. An ensemble from this country typically consists of two trumpets, three violins, a guitar, a *vihuela*, and a *guitarrón*. For 10 points, name this country where the genre of *mariachi* developed in its state of Jalisco.

ANSWER: **Mexico**

<Jonathan Magin, Fine Arts - Music - 1900 to 1970> ~23725~

18. In *How Asia Works*, Joe Studwell argues that "discipline" named for this activity drove South Korea's economic miracle. This activity is the first word in the name of a US government "bank" whose credits funded the Pan-American Highway. The GATT allows lawsuits when an economic actor heavily cuts prices while engaging in this activity, known as "dumping." The net amount of this activity is combined with investment, government spending, and domestic consumption to calculate a country's (*) GDP. Portugal should support wine growers engaging in this activity according to Ricardo's theory of comparative advantage. For 10 points, a trade deficit results when the amount of what activity is lower than imports?

ANSWER: **exporting** [accept net **exports**; accept **export** controls; accept **export** discipline; accept answers like **selling** goods **overseas** or **selling** goods on the **global** market; prompt on **selling** or **trade**]

<Michael Bentley, Social Science - Economics> ~23186~

19. To create a mural titled for this activity, a 60-year-old artist pinned colored paper onto canvas but had to re-do the work because he got the measurements of the Main Gallery of the Barnes Foundation wrong. Figures possibly representing the four seasons engage in this activity beneath Apollo's chariot in one painting. Sergei Shchukin commissioned a painting of five red-colored figures engaging in this activity as a companion to (*) *Harmony in Red*. Six naked women engage in this activity in a yellow and orange landscape in the background of the painting *The Joy of Life*. Henri Matisse painted five figures holding hands as they engage in, for 10 points, what activity that Nicholas Poussin depicted happening "to the music of time?"

ANSWER: **dancing** [accept word forms like **Dance**; accept *A **Dance** to the Music of Time*]

<Michael Bentley, Fine Arts - Painting - European> ~22458~

20. The first TV play broadcast by the BBC was one by this author, in which a man waiting for a train talks to a man dying of epithelioma. In a play by this author, the protagonist's daughter dresses exactly the same as in a portrait prior to an altercation in which he stabs Tito. In another play by this author, a man complains that he has "lost a whole day" after a boy shoots himself with a revolver and a child (*) drowns in a fountain. This author wrote a play in which a nobleman who falls off a horse believes he is Henry IV. In a play by this author, rehearsals for *Mixing it Up* are interrupted by a family demanding that the Stage Manager let them tell their story. For 10 points, name this author of *Six Characters in Search of an Author*.

ANSWER: Luigi **Pirandello** (The play in the first line is *The Man with the Flower in his Mouth*.)

<Joseph Krol, Literature - European - Drama> ~23173~

21. An aria about this object states, "If he is dreaming about me, may this remembrance waken him!" A work whose title alludes to this object names a type of five-instrument ensemble and features a mix of singing and speaking called *sprechstimme* ("SHPREK-shtim-uh"). That work whose title alludes to this object sets 21 poems by Albert Giraud ("zhee-ROH") and centers on a (*) clown from *commedia dell'arte*. In an Antonín Dvořák ("duh-VORE-zhahck") opera, Rusalka reveals her love for the Prince in a "Song to" this object. Slow right-hand C-sharp minor triplets begin a piano work whose nickname alludes to this object, despite its only official title being "quasi una fantasia." For 10 points, name this object whose emanating light is depicted in Claude Debussy's *Clair de Lune*.

ANSWER: the moon [accept *Mesicku na nebi hlubokém* or "Song to the Moon"; accept *Pierrot lunaire* or "Pierrot in the Moonlight"; accept Moonlight Sonata]

<Noah Sheidlower, Fine Arts - Music - Miscellaneous> ~17321~

PACE NSC 2022 - Round 13 - Bonuses

1. For 10 points each, identify the following about depictions of newspapers in paintings.

[10] A man reads a newspaper in the center of this artist's *New Orleans Cotton Exchange*. This artist's paintings of horse races, ballet dancers practicing, and women bathing were highly influential to the Impressionists.

ANSWER: Edgar **Degas** [or Hilaire-Germain-Edgar **De Gas**]

[10] A 1916 still life by this artist features both a lemon and a newspaper. The objects on this artist's Cubist *Still Life with Checkered Tablecloth* form the shape of a bull, a symbol of his native country.

ANSWER: Juan **Gris** [or José Victoriano **González-Pérez**]

[10] A newspaper ad for Motobloc automobiles can be seen in *Bottle, Glass and Newspaper*, a painting by this co-founder of Cubism with Pablo Picasso.

ANSWER: Georges **Braque**

<Michael Bentley, Fine Arts - Painting - European> ~18170~

2. For 10 points each, answer the following about "mountain men" who explored west of the Mississippi in the early 1800s:

[10] This mountain man gained fame for his fur trapping expeditions in Arizona, attracting John C. Frémont's attention. As a general, this man forced the Navajo to relocate to Bosque Redondo ("bohs-kay ray-dohn-doh").

ANSWER: Christopher "Kit" **Carson**

[10] Hugh Glass barely escaped being mauled to death by one of these animals, which were a huge threat to mountain men. This animal appears on California's flag.

ANSWER: **bears** [accept specific answers like grizzly **bears** or black **bears**; accept **grizzlies**]

[10] In another legendary mountain man chase, John Colter escaped this tribe by diving into a river. This tribe allied with the Gros Ventre and Sacree to form a namesake confederacy in Montana and Canada.

ANSWER: **Blackfoot** Confederacy [or **Blackfeet**; or **Siksika**]

<Hari Parameswaran, History - American - Pre-1865> ~18262~

3. For 10 points each, answer some questions about bimetallic strips.

[10] The two halves of a bimetallic strip have different coefficients for this phenomenon, producing a measurable curvature. This phenomenon is minimal in the alloy Invar.

ANSWER: linear **thermal expansion** [accept coefficient of **thermal expansion**; prompt on **alpha**]

[10] A bimetallic strip wrapped in a wire can function as this kind of safety device, which "trips" in response to a strong current. Unlike a fuse, one may visit the box holding these devices and reset them without replacement.

ANSWER: circuit **breakers**

[10] The halves of the strip may be joined using this technique, which often employs a tungsten electrode and a stream of inert gas. UV light produced by this technique can cause "arc eye" if proper safety equipment is not used.

ANSWER: arc **welding** [accept gas tungsten arc **welding**, GTAW **welding**, tungsten inert gas **welding**, TIG **welding**, **welding** helmet, or **welding** mask]

<Michael Bentley, Science - Engineering and Miscellaneous> ~18759~

4. Jack Kerouac described this musician "whistling them on to the brink of eternity" and imparting a "feeling of early-in-the-morning" while performing. For 10 points each:

[10] Name this bebop saxophonist and lover of fried chicken who composed the standards "Ko-Ko" and "Ornithology."

ANSWER: Charlie **Parker** [prompt on, but do not reveal, **Bird** and **Yardbird**]

[10] This New York City jazz club, which was named in Parker's honor, forbids musicians from playing a piece named for it by Weather Report. George Shearing also wrote a jazz standard titled for the "Lullaby" of this club.

ANSWER: **Birdland** [accept "Lullaby of **Birdland**"]

[10] Weather Report's piece "Birdland" was written by this keyboardist and co-founder of the group alongside Wayne Shorter. This musician also led a jazz fusion "syndicate" named after himself.

ANSWER: Joe **Zawinul** [or Josef Erich **Zawinul**; accept The **Zawinul** Syndicate]

<Michael Bentley, Fine Arts - Jazz> ~18965~

5. In the late 17th century, John Aubrey recorded a magic spell for granting this power that involved burying a man's severed head alongside seven black beans. For 10 points each:

[10] Name this power, which a mythical king uses to usurp the throne of Lydia after finding a bronze horse.

ANSWER: **invisibility** [accept equivalents, such as **turning invisible**]

[10] Gyges, the aforementioned King of Lydia, discovers one of these objects. In Norse mythology, these objects include a treasure found by Sigurd, Andvarinaut (**ond-VAR-ee-nowt**), and a gift forged for Odin, Draupnir (**DROWP-neer**).

ANSWER: a **ring**

[10] During the war against the Titans, a "Helm of Invisibility" was created for this Greek god of the underworld.

ANSWER: **Hades** [or **Haides**; or **Plouton**; or **Pluto**]

<Michael Bentley, RMP - Greco-Roman Mythology> ~18761~

6. H. L. Mencken called this place "a city in Moronia" and Elizabeth Campbell co-authored a book on its understudied Black community. For 10 points each:

[10] Name this city which titles several books by sociologists Robert and Helen Lynd.

ANSWER: **Middletown** [prompt on **Muncie**]

[10] The Lynds observed the importance of these things on leisure opportunities available to Middletown residents. Alfred P. Sloan pioneered selling differently branded versions of these things to customers of different social classes.

ANSWER: **car** [accept answers like **automobiles** or **trucks**]

[10] In 2015, the Center for Middletown Studies released a book based on card catalogs and other records from one of these public institutions in Middletown. Andrew Carnegie financed one of these institutions in Muncie.

ANSWER: public **libraries** [accept Carnegie **libraries**]

<Michael Bentley, Social Science - Sociology> ~18827~

7. The 1946 historical incident that inspired this play was also the basis for Duro Ladipo's play *Oba Waja*. For 10 points each:

[10] Name this play. In one scene in this play, Olunde pushes back on Jane Pilkings' notion that ritual suicide is barbaric by highlighting the violence of World War II.

ANSWER: ***Death and the King's Horseman***

[10] The chorus in *Death and the King's Horseman* was partly inspired by Wole Soyinka's translation of this author's play *The Bacchae*. This ancient Greek tragedian also wrote *Medea* ("**meh-DAY-ah**").

ANSWER: **Euripides** ("**yoo-RIP-ih-deez**")

[10] In *Death and the King's Horseman*, a group of unnamed women in this location mercilessly taunt Amusa for abandoning Yoruba traditions. Iyaloja ("**EYE-uh-LOW-juh**") is described as the "mother" of this place in the play.

ANSWER: the **market**

<Michael Bentley, Literature - World and Miscellaneous> ~18166~

8. Answer some questions about things that are called conjugates in chemistry. For 10 points each:

[10] Name this class of proteins which are conjugated to fluorescent tags or horseradish peroxidase in a secondary form used in Western blotting. They are conjugated to drugs in a class of potential anticancer treatments.

ANSWER: antibodies [or immunoglobulins]

[10] An acid and its conjugate base are used in one of these solutions that keeps a system at a specific pH.

ANSWER: buffers

[10] The wavelength absorbed by a particular conjugated chromophore can be estimated by treating it as one of these quantum systems with a length equal to that portion of the molecule.

ANSWER: particle in a box [or infinite square well]

<Victor Prieto, Science - Chemistry> ~19263~

9. The Portuguese explorer Diogo Cão erected a stone pillar at the mouth of this river. For 10 points each:

[10] Name this river. The Senegalese marine Malamine Camara assisted the French explorer Pierre de Brazza in his travels along this river, going up to the Malebo Pool.

ANSWER: Congo River [or Zaire River]

[10] From trade with the Congolese, the Portuguese acquired ivory oliphants. The Portuguese also commissioned the Sapi of this modern-day country to create ivory salt cellars, one of which is displayed by the Met.

ANSWER: Republic of Sierra Leone [or Salone]

[10] Queen Nzinga ("n'JING-ah") allied with this other European colonial power to kick the Portuguese out of Angola. The majority of *boers* were from this modern-day country, whose language was adapted into Afrikaans.

ANSWER: The Netherlands [prompt on Holland]

<Hari Parameswaran, History - World - African> ~19073~

10. Answer the following about depictions of aunts in British literature, for 10 points each:

[10] Tony remarks that "aunts of all kinds are damned bad things" after Neville fears her mother will send her to her Aunt Pedigree in this comedy by Oliver Goldsmith.

ANSWER: *She Stoops to Conquer*

[10] This character's Aunt Agatha, in contrast to his more lenient Aunt Dahlia, is constantly scheming to get this character to marry a respectable woman, such as in the story "Aunt Agatha Takes the Count."

ANSWER: Bertie Wooster [or Bertie Wooster; or Bertram Wilberforce Wooster]

[10] In *Aunts Aren't Gentlemen*, Bertie Wooster compares himself to this character after Jeeves solves a mystery of a stolen cat. This physician narrates *The Sign of Four* and other Sherlock Holmes stories.

ANSWER: Dr. Watson [or John H. Watson]

<Michael Bentley, Literature - British - Short Fiction> ~14361~

11. Eric Dean Wilson argues that this technology was used to enforce spatial segregation since it was less effective in the balconies of segregated movie theaters. For 10 points each:

[10] Name this technology that made it considerably more pleasant to live in the Southern US.

ANSWER: air conditioning [or AC; accept answers like cooling or refrigeration]

[10] Prior to AC, a way to cool off in New York was to visit Central Park, which was designed by this man, a onetime partner of Calvert Vaux ("vawks").

ANSWER: Frederick Law Olmsted

[10] Another way to cool off in the 19th century was with an iced beverage, perhaps supplied by "Ice King" Frederic Tudor. Tudor built a massive ice house in this Southern city, where Casimir Pulaski was killed during a 1779 siege.

ANSWER: Savannah

<Michael Bentley, History - Cross, Historiography, and Miscellaneous> ~18180~

12. Krishna washed the feet of Sudama using a bowl made of this substance. For 10 points each:

[10] Name this substance called *hiranya* in the Vedas, which is often bought on the festival of Akshaya Tritiya. A "seat of power" called the Akal Takht is located in a *gurdwara* in Amritsar that is nicknamed for this substance.

ANSWER: gold [accept the Golden Temple]

[10] Like Akshaya Tritiya, the first day of this festival is an auspicious day to buy gold. This "festival of lights" is celebrated in many South Asian religions.

ANSWER: Diwali [or Deepavali; or Divali]

[10] The Treta, the second of these ages, began on Akshaya Tritiya. In Hindu cosmology, these four, progressively worse ages repeat in a cycle that lasts over 4 million years.

ANSWER: yugas

<Michael Bentley, RMP - Hinduism> ~18713~

13. A concordance is a type of reference text that lists the page number and a brief quote for every instance of a word in a book. For 10 points each:

[10] Charles Grosvenor Osgood compiled a concordance of the poetry of this author, letting you find all uses of the word "yclept" ("eye-KLEPT") in his *The Faerie Queene*.

ANSWER: Edmund Spenser (yclept means "called by the name of")

[10] The first concordances were developed for the Bible by the Dominicans. An early online corpus collecting the writings of this Dominican friar include his thoughts on the double effect.

ANSWER: Saint Thomas Aquinas [or Tommaso d'Aquino; prompt on Saint Thomas or Tommaso]

[10] This company has trademarked the term "Concordance" for its electronic discovery tool. This company claims to offer the largest digital database of legal records in the world.

ANSWER: LexisNexis [prompt on RELX]

<Michael Bentley, Other - Other Academic and General Knowledge> ~18717~

14. Nina Simonovich-Efimova led the popularization of this type of theater in the Soviet Union, which authorities encouraged to become more humanistic. For 10 points each:

[10] Name this type of theater. Punch and Judy shows exemplify this type of theater, in which characters are manipulated behind a screen by the performers' hands.

ANSWER: puppetry [or puppet theater or marionette theater]

[10] French puppet theater, which includes characters like Guignol ("gwin-YOLL"), derives heavily from this traditional Italian theatrical genre whose stock characters include Arlecchino ("arl-ay-KEEN-oh") and Pantalone ("pan-tah-LOAN-ay").

ANSWER: commedia dell'arte ("com-ED-ee-uh dell ART-ay")

[10] Among the most prominent modern puppet plays is the 1895 drama *Interior*, a play by this Belgian author of *The Blue Bird* and *Pelléas* ("pell-AY-ass") and *Mélisande*.

ANSWER: Maurice Maeterlinck ("MAY-ter-link") [or Maurice Polydore Marie Bernard Maeterlinck]

<Joseph Krol, Literature - European - Drama> ~18273~

15. The "natural" type of this process can spontaneously give rise to hexagonal Bénard ("BAY-nar") cells. For 10 points each:

[10] Name this process by which fluid movement causes heat transfer, contrasted with radiation and conduction.
ANSWER: **convection** [accept, but DO NOT REVEAL, Rayleigh-Bénard **convection**]

[10] Bénard cells arise in a type of convection named for Bénard and this British scientist, whose namesake number determines the onset of convection. With Taylor, this scientist names an instability that arises when a high-density fluid lies above a low-density fluid.

ANSWER: Lord **Rayleigh** [or John William **Strutt**, 3rd Baron Rayleigh; accept **Rayleigh** number or **Rayleigh-Taylor** instability]

[10] Bénard also studied this eponymous convective effect, in which mass transfer results from a gradient in surface tension, sometimes creating so-called "tears of wine."

ANSWER: Gibbs-**Marangoni** effect [or Bénard-**Marangoni** convection]

<Joseph Krol, Science - Physics> ~18146~

16. This country's Fars News claims that at least 300 cities are threatened by water shortages. For 10 points each:

[10] Name this country whose Lake Urmia has shrunk by 90%. The city of Isfahan in this country is particularly low on water.

ANSWER: **Iran** [or Islamic Republic of **Iran**; prompt on **Persia**]

[10] Iran's ruling clerics have baselessly accused this country of stealing Iran's rain clouds. An early attraction of this country's city of Tel Aviv was its running water system.

ANSWER: **Israel** [or State of **Israel**]

[10] The Iranian government launched a campaign to reduce farm water usage with this technology. This tech slowly emits water directly onto roots and was advanced by Israel's Simcha Blass.

ANSWER: **drip irrigation** [or **trickle irrigation**; prompt on micro-**irrigation**]

<Michael Bentley, Geography - World> ~18623~

17. The second movement of this concerto quotes the French song *Il faut s'amuser, d'ancer, et rire* ("eel FOH seh-ah-MOO-say, dahn-say, et reer"). For 10 points each:

[10] Name this concerto, which begins with an "F, D-flat, C, B-flat" motif played by the French horns. The exposition of this concerto's first movement was based on a folk melody from a blind Ukrainian beggar.

ANSWER: Pyotr **Tchaikovsky's Piano** Concerto No. **1** in B-flat minor [or Pyotr **Tchaikovsky's Op. 23**; prompt on partial answers]

[10] Tchaikovsky's Piano Concerto No. 1 has one of these virtuosic passages for the soloist immediately after the introduction. They usually are designed for soloists to show off their skills.

ANSWER: **cadenzas**

[10] The 6/8 *Andantino semplice* second movement of the concerto begins with a lyrical solo for this high woodwind instrument which sounds an octave below the piccolo.

ANSWER: transverse **flute**

<Benjamin Chapman, Fine Arts - Music - Romantic> ~18807~

18. 2010 was a bad year for archaeological sites in Italy. For 10 points each:

[10] Heavy rain in that year contributed to the collapse of a house in Pompeii belonging to Auctus Anicetus, a man in this profession. *Auctorati* would volunteer for this job, unlike the *damnati* or *gregarii*.

ANSWER: **gladiator** [accept House of the **Gladiator**; prompt on **slave** or **warrior** or **swordsmen**]

[10] The same rain caused a partial collapse of the ceiling of this structure, where gladiators did battle in Rome.

ANSWER: Roman **Colosseum** [or **Flavian Amphitheater**]

[10] Also damaged was this mostly-buried building complex on the Esquiline Hill, which was built over in ancient times with the Baths of Trajan. This residence was built following a disaster in 64 CE.

ANSWER: Nero's **Golden House** [or **Domus Aurea**; prompt on **Nero's House** or **Domus Transitoria**]

<Michael Bentley, History - European - Classical> ~17719~

19. The giant siphonophore (sigh-FAH-nuh-for) can grow up to 50 meters long, making it one of the longest known animals. For 10 points each:

[10] The giant siphonophore is a deep-sea member of this invertebrate phylum, which also includes corals and jellyfish.

ANSWER: **Cnidaria** [or **cnidarians**]

[10] The giant siphonophore is a colony of specialized individuals called zooids (**ZOH-oyds**), much like this related cnidarian (**nigh-DAIR-ee-un**) that floats on the sea surface and has deadly stinging tentacles. It is named after a type of ship.

ANSWER: Portuguese **man o' war** [or Portuguese **man-of-war**; accept Pacific **man o' war** or Pacific **man-of-war**; accept **blue bottle**; accept **Pysalia** or **Pysalia physalis**]

[10] Like the Portuguese man o' war and many species of jellyfish, the giant siphonophore captures prey using these stinging organelles that eject microscopic darts.

ANSWER: **nematocysts** (nee-MAT-oh-sists) [or **cnidocysts** or **cnidae**]

<Eric Yin, Science - Biology> ~19050~

20. A 2009 book by Mark McGurl titled *The Program Era* examines the rise of MFA programs on this discipline in postwar America. For 10 points each:

[10] Name this discipline. A notable workshop that helps people in this discipline hone their craft was founded by Wilbur Schramm in Iowa.

ANSWER: creative **writing** [accept Iowa **Writers'** Workshop; accept equivalents such as being a **novelist** or an **author**]

[10] This author, whose most recent novel centers on a talking racehorse named Perestroika, attended the Iowa Writers' Workshop. She won a National Book Critics Choice Award for her King Lear-inspired novel *A Thousand Acres*.

ANSWER: Jane **Smiley**

[10] Anthony Hecht, who dropped out of the program, wrote a parody of this Matthew Arnold poem that ends by invoking a place "Where ignorant armies clash by night."

ANSWER: "**Dover Beach**" [accept "The **Dover Bitch**"]

<Michael Bentley, Literature - American> ~18869~

21. The journalist Julian Manyon was subjected to a mock execution while covering this war. For 10 points each:

[10] Name this conflict. Margaret Thatcher justified this war with Argentina using the Duke of Wellington's quote that, "there is no such thing as a little war for a great nation."

ANSWER: **Falklands** War [or Guerra de las **Malvinas**]

[10] Clive Ponting leaked documents about an inquiry into the British sinking of this Argentine ship during the Falklands War. The *Sun* ran the headline "GOTCHA" following the sinking of this ship.

ANSWER: *ARA General* **Belgrano**

[10] The economy of the Falklands was boosted following a change in British policy towards this industry. Britain fought several so-called "wars" with Iceland over the right to partake in this industry.

ANSWER: **fishing** [accept more specific answers like **cod** fishing]

<Michael Bentley, History - World - Latin American> ~18859~