



NSC 2019 - Round 07 - Tossups

1. **This god shares his name with a character who kills his unfaithful wife after his brother cuts off his own testicles and feeds them to a catfish to prove his fidelity. Bata's brother in "The Tale of the Two Brothers" is identified with this god, who was often depicted carrying the Imiut fetish object. This father of Kebechet puts on another god's flayed skin at the end of a story in which he repeatedly brands (*) Set, thereby giving the leopard its spots. In the Hall of the Two Truths, this god served as the Guardian of the Scales, overseeing the weighing of the feather of Ma'at against human souls. In later stories, he served as a psychopomp, guiding souls to Osiris. For 10 points, name this deity who oversaw the embalming of mummies in his role as the jackal-headed Egyptian god of the afterlife.**

ANSWER: **Anubis** [or **Anpu**]

<Jose, RMP - World Mythology>

2. **In this composer's second symphony, a long timpani roll transitions into the 3/2 ("three-two") time finale, whose melody begins with "D, E, F-sharp" on strings punctuated by a trombone ostinato of four quick blasts. A solo flute plays (read slowly) "A, G, A, B-flat" accompanied by soft strings to begin a section of a tone poem by this composer that is often performed with choral accompaniment. That tone poem by him was written for a protest against censorship called the (*) Press Pension Celebration, held in 1899. This composer used an English horn to depict the title bird swimming in the "Swan of Tuonela" section of his *Lemminkainen Suite*, which is based on his country's *Kalevala* epic. For 10 points, name this composer of the patriotic tone poem *Finlandia*.**

ANSWER: Jean **Sibelius** [or Johan Julius Christian **Sibelius**]

<James, Fine Arts - Music>

3. **Sidney Smyer, the president of this city's Chamber of Commerce, learned of unrest here from a newspaper photo he saw in Tokyo. The home of "drum major for justice" Arthur Shores was firebombed for leading an integration campaign in this city, where Civil Rights leader A. D. King was injured in a bombing of the Gaston Motel. Sit-ins were a major component of Wyatt Tee Walker's "confrontation" effort in this city called Project C. Bobby Frank Cherry assaulted (*) Fred Shuttlesworth in this city six years before his 19 sticks of dynamite killed Addie Mae Collins and three other girls. Police dogs were unleashed on children by Bull Connor in, for 10 points, what Alabama city where Dr. Martin Luther King, Jr. wrote a 1963 letter from jail?**

ANSWER: **Birmingham**, Alabama

<Evans, History - American>

4. The so called "plate trick" is used to demonstrate one property of this quantity. QED explains why the g-factor correlated to this value is not exactly two. Coupling between this quantity and motion causes contributions to the fine structure. EPR spectroscopy observes transitions in which the sign of this quantity changes in the presence of a magnetic field. This value for a particle determines whether or not it is symmetric or asymmetric during (*) exchange, which determines whether it follows Bose-Einstein or Fermi-Dirac statistics. Particles with non-integer values of this quantity must obey the Pauli exchange principle, such as the electron's value of plus or minus 1/2 for this quantity. For 10 points, name this intrinsic angular momentum of a particle.

ANSWER: spin [prompt on intrinsic angular momentum; do not accept or prompt on "angular momentum"]
<Wang, Science - Physics>

5. This novel is positively compared to "Montale's black Lucifer" and "Ovid's fragile Medusa" in the first of Italo Calvino's *Six Memos for the New Millennium*. That essay praises a title quality of this novel exemplified by the repeated German expression "Einmal ist Keinalmal." A professor in this book becomes disillusioned when he feels that the "Grand March" of history has ended; that occurs when he marches in Cambodia. (*) Beethoven's phrase "Es muss sein!" is repeated by a surgeon in this novel who refuses to retract an article comparing Communists to Oedipus. In this novel, a surgeon becomes a window washer, and has an affair with Sabina. For 10 points, Nietzsche's concept of "eternal recurrence" is central to what novel about Tomas and Tereza by Milan Kundera?

ANSWER: *The Unbearable Lightness of Being* [or *Nesnesitelná lehkost bytí*]
<Smith, Literature - European>

6. Theories based on this economist's thought were undermined by Okishio's theorem. John Roemer's revision of this economist's theory is based on Gerald Cohen's "analytical" interpretation of him. This economist hypothesized the tendency of the rate of profit to fall, which he sought to explain in terms of accumulation. Joseph Schumpeter claimed to have discovered the principle of creative destruction in this economist's works, such as the Karl Kautsky-edited *Theories of (*) Surplus Value*. A four-volume "Critique of Political Economy" by this economist builds on Adam Smith's labor theory of value and coins the term "commodity fetishism." For 10 points, name this economist who argued that workers were alienated from their labor by capitalists in *Das Kapital*.

ANSWER: Karl Marx [accept Marxism or Analytical Marxism]
<Smith, Social Science - Economics>

7. Jill Harsin profiled five assassination attempts on this ruler, including one supported by Theodore Pepin and Pierre Morey ("moh-RAY"). Charles Philipon was fined 2,000 francs for his humorous depiction of this ruler in "Les Poires" ("pwahr"). One rebellion against this ruler was sparked by the death of General Lamarque and supported by crowds with flags bearing the words "Liberty or Death." This ruler lost popularity after the Campaign of Banquets was shut down by his prime minister (*) François Guizot ("gee-ZOH"). This ruler abdicated after his plans to close the National Workshops prompted the June Days Uprising. This ruler came to power following the overthrow of Charles X in the July Revolution. For 10 points, name this French "citizen king" who ruled from 1830 to 1848.

ANSWER: Louis Philippe I [do not accept or prompt on partial answers; prompt on Citizen King before "Citizen"]
<Singh, History - European>

8. In 2005, it was discovered that these structures have their own atmosphere composed of molecular oxygen, likely as a result of UV light disintegrating nearby water ice. James Maxwell wrote that these are the second "most remarkable bodies in the heavens" after spiral nebulae in a prize-winning essay that demonstrated they must have a particulate structure. A shepherd moon is responsible for separating the "A" and "B" components of these structures across the (*) Encke (EHN-kay) division. These structures were called "ears" by their discoverer Galileo in 1610; it was Christiaan Huygens who later established their shape. The Cassini Division can be found in, for 10 points, what structures that orbit the sixth planet from the Sun?

ANSWER: **rings of Saturn** [or **Saturn's Rings** prompt on planetary **rings**]

<Jose, Science - Astronomy>

9. Victor Mair suggests this book was preempted by the *Bhagavad Gita* in noting the similarity of its commands to "block the openings" and "shut the doors" to the Gita's description of yoga. This book employs the analogy of a bow to contrast heaven, which brings down the high and raises up the low, with man, who takes from what is wanting to supply what is abundant. This book, which opens with a cryptic sentence about a concept that "cannot be spoken," claims "the (*) sage does not hoard" in the last of its 81 chapters. It proposes to make the "state small and the people few" as part of a philosophy whose two-word name translates as "not-doing." The principle of *wu wei* is outlined in, for 10 points, what religious text attributed to Laozi ("lao-tzuh")?

ANSWER: The **Daodejing** [accept **Tao Te Ching**]

<Alston, RMP - Other Religion>

10. A song recited by one of these characters compares rubies to "freckles" in petals, and likens cowslip flowers to "pensioners" or bodyguards serving a ruler. Another of these characters "bakes the elflocks in foul sluttish hairs," tickles a parson's nose with a "tithe-pig's tail," and is served by a "team of little *atomi*." One of these characters had forsworn her husband's "bed and company" and is served by the quartet of Mob, Cobweb, (*) Peaseblossom, and Mustardseed. A chariot made from an empty hazelnut is said to be possessed by one of these characters "no bigger than an agate stone" according to a soliloquy by Mercutio. For 10 points, name this type of character, exemplified by the queens Mab and Titania in William Shakespeare's plays.

ANSWER: **fairies** [accept **fairy** queens; prompt on **queens**]

<Jose, Literature - British>

11. This filmmaker created uric acid stains on the brass band of a pen to use as imagery in a film about giant hallucinogenic mushrooms in Mongolia. The poster for *The Silence of the Lambs* contains a skull created by Philippe Halsman and this artist, who designed curtains covered in eyes and a warped wheel for a 1945 film he did not direct. He appears as a priest in a film whose sequences include a man dragging a piano filled with dead donkeys. A director's (*) nightmare of the moon being sliced inspired a shot created by this artist in which a knife appears to cut a woman's eye. The dream sequence in Alfred Hitchcock's *Spellbound* was designed by, for 10 points, what Spanish painter who collaborated with Luis Buñuel to make *Un Chien Andalou*?

ANSWER: Salvador **Dalí** [or Salvador Domingo Felipe Jacinto **Dalí** i Domènech, 1st Marquis of Dalí de Púbol]

<Smith, Fine Arts - Film>

12. A book named for this concept coins the term "reflective equilibrium" to describe the end result of the process of reconciling beliefs with a particular issue. "Distributive" theories of this concept are criticized in a 1974 book using the example of a million people paying 25 cents to the basketball player Wilt Chamberlain. Ways of achieving this concept are said to be rational and impartial in a thought experiment in which (*) policies are chosen from "the original position" behind a "veil of ignorance." Robert Nozick's *Anarchy, State, and Utopia* is a critique of a John Rawls book devoted to this concept, which Rawls equated with "fairness." For 10 points, name this legal concept often represented by a blindfolded woman.

ANSWER: **justice** [accept *A Theory of Justice*]

<Jose, RMP - Philosophy>

13. This title period of time is "rethought" in the book *We Now Know* by John Lewis Gaddis, who won a 2011 Pulitzer for a biography of one of its participants. The name for this period was popularized in a series of articles by Walter Lippmann that criticized a certain "Mr. X" for his policies. This period's name comes from George Orwell's essay "You and [a certain weapon]," in which this period is called a (*) "peace that has no peace." The distinction between "first world," "second world," and "third world" countries appeared during this period, which is often said to have begun after George Kennan sent the Long Telegram, and was brought to a lull with détente ("day-TAHNT"). For 10 points, name this indirect conflict between the U.S. and the Soviet Union.

ANSWER: **Cold War** [do not accept or prompt on broader answers such as "the 20th century" or more specific answers such as "Korean War"]

<Jose, History - Cross, Historiography, and Miscellaneous>

14. In his final appearance, this character enters a minister's hotel room while wearing green-tinted glasses, and leaves behind a note mentioning a "sinister design" worthy of "Thyestes" (thy-ESS-teez). This character is often approached by a prefect named "G-", whom this character describes as "too cunning to be profound." This character suggests a killer can be found by searching for a boat used by a character's sailor boyfriend. This practitioner of a form of logic dubbed (*) "ratiocination" appears in "The Mystery of Marie Roget (ROH-zhay)," "The Purloined Letter," and a third story in which this character deduces Madame L'Esplanaye (leh-SPAHN-eye) was killed by an orangutan. "The Murders in the Rue Morgue" features, for 10 points, what detective created by Edgar Allan Poe?

ANSWER: C. **Auguste Dupin** [accept either underlined part; prompt on C.]

<Jose, Literature - American>

15. The greatest possible value for this quantity for a molecule is the x-value of the right end of the K-edge in a XANES (zayns) spectrum. The London dispersion force between two atoms depends on their harmonic mean for this quantity. A metal's contribution to a Born-Haber cycle equals its heat of sublimation plus this quantity. This quantity, which is equivalent to the energy of the HOMO, can be calculated from the Rydberg equation by setting one of the Ns to infinity. It increases from (*) left to right and from bottom to top of the periodic table and is highest for helium, since He+ ("H-E-plus") is very unstable. The magnitude of this quantity equals a monovalent cation's electron binding energy. For 10 points, name this quantity, the energy required to remove an electron from an atom.

ANSWER: first **ionization energy** [or **ionization potential**; or **ionization enthalpy**; or electron **binding energy** before mentioned]

<Silverman, Science - Chemistry>

16. A tale from this dynasty concerns the "Mad Monk" Fengbo ("fung-boh"), who swept the floor in public as a metaphor for removing Qin Hui ("chin hway") from office; Qin had conspired to have this dynasty's general Yue Fei ("y'way fay") executed. Lu Xifu ("loo shee-foo") grabbed this dynasty's last emperor, the child Zhao Bing, and leapt into the ocean after its final defeat at the naval battle of Yamen. Officials of this dynasty include the Neo-Confucian Zhu Xi ("zhoo shee") and an advisor to Emperor Shenzong who initiated the New Policies, the reformer (*) Wang Anshi. After this dynasty lost its capital Kaifeng to a Jurchen invasion, it entered its "Southern" period of rapid growth. For 10 points, name this Chinese dynasty which thrived from the 10th to 13th centuries, when it fell to the Mongols.

ANSWER: Song dynasty
<Alston, History - World>

17. Sewall Wright's statistic F_{IS} is often used as an index of this phenomenon, which can reduce the frequency of deleterious alleles through genetic purging. Quantitative trait loci are often mapped using recombinant lines that have undergone this phenomenon, which increases the probability that homologous genes in an individual are identical by descent. Self-incompatibility is a mechanism to avoid this phenomenon in plants by enforcing (*) outcrossing. Its namesake depression refers to the potential reduction of fitness it causes. Because it results in low heterozygosity, it often increases the expression of deleterious recessive alleles. For 10 points, name this phenomenon that occurs when offspring are produced by genetically related parents.

ANSWER: inbreeding [accept word forms]
<Kothari, Science - Biology>

18. Near the end of a novel, the protagonist gives away this object after visiting the Illusory Land of the Great Void. In a frame story it is revealed that this object, which was created with 36,500 brethren, was cast down from a peak. Afterwards, this object gains the ability to talk to a priest and a monk, and recites the "doggerel verse" carved on its back. The protagonist's marriage is predestined when lines from this object match lines from a golden (*) locket owned by Xue Baochai ("shway bao-CHYE"). This object was made by Nuwa to repair heaven. At the opening of a novel, Jia Baoyu is born with this object in his mouth, which is why he is sometimes called "Precious Jade." For 10 points, *Dream of the Red Chamber* is alternatively titled for "The Story of" what sort of object?

ANSWER: the stone [accept the piece of jade before "jade"]
<Jose, Literature - World and Miscellaneous>

19. An annual fireworks competition known as the Celebration of Light takes place on this city's English Bay and coincides with the SHOREFEST music festival. The Dr. Sun Yat-Sen garden and a stacked-rock sculpture called *Inukshuk* were created for Expo 86 in this city, where a century earlier Gassy Jack set up a tavern in what is now Gastown during the (*) Cariboo Gold Rush. TripAdvisor users really love the totem poles in Stanley Park in this city, whose second-tallest building, the Harbour Centre, is partially leased by Simon Fraser University. This city is bypassed by American tourists on their way to the Whistler ski resort, site of the 2010 Winter Olympics. For 10 points, name this most populous city in British Columbia.

ANSWER: Vancouver, British Columbia
<Augelli, Geography - United States>

20. A fervent Catholic purchased this artist's painting of a bunch of drunk priests, *The Return from the Conference*, in order to destroy it. This artist's painting of two mounted men leading a train of cows, *The Peasants of Flagey Returning from the Fair*, was exhibited alongside a painting of an old peasant wielding a hammer that was later destroyed during the Dresden firebombing. Two church officials clothed in red stand out in a crowd in a (*) 21-foot-wide canvas by this artist depicting a procession in his hometown. That painting by this artist features four pall bearers and a white dog standing next to a hole in the ground. For 10 points, name this French artist of *The Stone Breakers* who showed his great-uncle's funeral in *A Burial at Ornans*.

ANSWER: Gustave Courbet [accept Jean Désiré Gustave Courbet]

<Bentley, Fine Arts - Painting>

21. In one episode from this book, a marchioness prepares a meal exclusively from hens and "sprightly words" to shame the king of France. A woman named Lisabetta in this book dies from grief after discovering the head of her dead lover underneath a pot of basil. This book describes a "wicked" man Ciappelletto being given his last rites using lies about his life's deeds. A woman who narrates a part of this book is possibly the lover to whom the author dedicated his poems (*) *Il Filostrato* and the novel *The Filocolo*. In the frame story of this book, women such as Fiammetta and Emilia move into a villa in the countryside to avoid the Black Death. Ten stories told every day for ten days comprise, for 10 points, what collection of tales written by Giovanni Boccaccio?

ANSWER: Decameron

<Jose, Literature - European>



NSC 2019 - Round 07 - Bonuses

1. The Euclidean algorithm is used to find this value for a pair of numbers. For 10 points each:

[10] Give this value. For two numbers, it is equal to their product divided by their least common multiple.

ANSWER: **greatest common divisor** [or **gcd** or **greatest common factor** or **gcf**]

[10] The Euclidean algorithm has been used to prove this result, which states that for every integer there is a unique factorization. This result was first proved by Gauss.

ANSWER: **fundamental theorem of arithmetic** [prompt on **fundamental** theorem]

[10] This identity named for a Frenchman states that for two nonzero integers a and b , there exists two integers x and y such that $ax+by$ equals the greatest common divisor of a and b .

ANSWER: **Bezout's** identity

<Reinstein, Science - Math>

2. From 1563 to 1783, an English law made it a hanging offense just to be one of these people. For 10 points each:

[10] Name these people, whose "English history" was told in a recent book by David Cressy. A flag for these nomadic people incorporates the wheel from their characteristic wagons.

ANSWER: **Roma** [accept **Romani**; or **Romany**; or **travelers**; or **Egyptians**; accept **gypsy** or **gypsies**]

[10] Mid-18th century London was abuzz with talk of the Roma community after the sensational trial of Elizabeth Canning, who was defended by this man. This novelist also founded the Bow Street Runners, sometimes called London's first police force.

ANSWER: Henry **Fielding**

[10] Roma people were expelled from this Italian city in 1493. This most populous city in northern Italy was once ruled by the Sforza family.

ANSWER: **Milan** [or **Milano**]

<Bentley, History - European>

3. Ghanaian artist El Anatsui ("ah-nah-chwee") makes most of his works, such as the wall installation *Gli*, out of flattened components of these objects. For 10 points each:

[10] Give these objects, one of which is found by an African tribe after it is thrown out of an airplane in *The Gods Must Be Crazy*.

ANSWER: **bottles** [accept Coca-Cola **bottles** or soda **bottles** or **bottle** caps; prompt on **caps**]

[10] "Fantasy" examples of these objects made by Ghanaian artists may take the form of Coke bottles and other unconventional objects. Egyptians made elaborate examples of these objects to protect mummies and placed these objects inside sarcophagi.

ANSWER: **coffins** [accept **caskets**; accept fantasy **coffins**]

[10] Another El Anatsui work is titled for an "Old Man's" example of this material. Ghana's Akan people make a variety of this material called *kente* ("KEN-tay").

ANSWER: **cloth** [accept **fabric**; accept Old Man's **Cloth**; prompt on **silk**]

<Alston, Fine Arts - Miscellaneous>

4. In this book, an attempt to collect moon-milk results in the protagonist becoming stuck on the moon with the wife of Captain Vhd Vhd (**wood wood**). For 10 points each:

[10] Name this book which includes the aforementioned story "The Distance to the Moon." Each of this book's stories begins with a so-called scientific "fact."

ANSWER: **Cosmicomics** [accept Le **cosmicomiche**]

[10] *Cosmicomics* is by this Italian author. A group of mute travelers tell stories using tarot cards in a novel by him set at the Castle of Crossed Destinies.

ANSWER: Italo **Calvino**

[10] Calvino also wrote *If on a winter's night a traveller*, which contains chapters written from this unusual point of view. In one such chapter, you, the reader, receive a defective copy of a novel called *If on a winter's night a traveller*.

ANSWER: **second**-person [or **2nd** person]

<Mao, Literature - European>

5. Juan Manuel Santos established a program called BIO to study the biological diversity of regions newly opened to research thanks to a peace agreement signed with this group. For 10 points each:

[10] Name this guerrilla group. In 2016, voters narrowly defeated a referendum that would have ratified a peace agreement with this group.

ANSWER: **FARC** [or **FARC-EP**; accept but DO NOT REVEAL **Fuerzas Armadas Revolucionarias de Colombia-Ejército del Pueblo** or **Revolutionary Armed Forces of Colombia**-People's Army]

[10] FARC is a guerilla group based largely in the jungles of this Latin American country. Ivan Duque governs this country from Bogota.

ANSWER: **Colombia** [or Republic of **Colombia**]

[10] The Colombian government has sought Cuba's assistance in catching Nicolas "Gabino" Rodriguez, the head of this other guerrilla group that has not signed a peace deal.

ANSWER: **ELN** [or **National Liberation Army**; or **Ejército de Liberación Nacional**]

<Bentley, Current Events - World>

6. The Falls Fight and the Great Swamp Fight were skirmishes in this conflict. For 10 points each:

[10] Name this conflict ended by the 1678 Treaty of Casco Bay. Mary Rowlandson wrote a captivity narrative during this conflict.

ANSWER: **King Philip's War** [accept **Metacom's War** or **Metacomet's War** or **Pometacomet's Rebellion** or **Metacom's Rebellion**; prompt on **First Indian War**]

[10] Native Americans who were known by this adjective were interred at Deer Island during King Philip's War. This adjective also describes towns like Nantucket designated for converted Native Americans in Massachusetts.

ANSWER: **praying** [accept **praying** Indians or **praying** towns]

[10] A Native American known to the English as James the Printer published the first full book of this type in the American colonies. King James I lends his name to a version of this religious text.

ANSWER: Christian **Bible** [accept English **Bible** or King James **Bible**]

<Bentley, History - American>

7. The prices of these things reflect all available information according to the "strong" form of a hypothesis developed by Eugene Fama. For 10 points each:

[10] Give these things which are analyzed using the CAPM ("cap-M") model, which describes them in terms of the "risk-free rate" and a measure of risk denoted "beta."

ANSWER: financial **assets** [accept **securities** or **stocks** or **bonds** or **equities**; accept Capital **Asset** Pricing Model; prompt on **investments**] (The hypothesis is the "efficient market hypothesis.")

[10] This CEO of Berkshire Hathaway disagrees with the efficient market hypothesis and instead promotes "value investing," which performs fundamental analysis to find underpriced stocks and other assets.

ANSWER: Warren **Buffett**

[10] The most common measure of whether stocks are relatively under- or overvalued is this ratio, which relates a company's financial valuation to its performance.

ANSWER: **P/E** ratio [accept **price** to **earnings** ratio or **price** to **equity** ratio]

<Suh, Social Science - Economics>

8. Among the Khas people of Nepal, these people are called Bahuns and, oddly, are the second most numerous caste behind the Chhetris, or *kshatriyas* ("SHET-ree-yus"). For 10 points each:

[10] Name this priestly caste or *varna*. Ascetics called *sramanas* ("SHRAH-muh-nuhs") rejected the authority of these people.

ANSWER: **Brahmins** [do not accept or prompt on "Brahman" - make sure they are saying it right, and ask them to spell it if need be]

[10] Members of the Brahmin caste are priests in this religion, which has been called the "oldest religion in the world."

ANSWER: **Hinduism** [accept answers that refer to the **Hindu** religion; do not accept or prompt on "India" or "Indian religion"]

[10] The four castes of Hinduism supposedly correspond to the mouth, hands, thighs and feet of this cosmic giant. This is also the name for the concept of the "eternal self" in Hinduism.

ANSWER: **Purusha** [accept **Purusa**]

<Jose, RMP - Other Religion>

9. The line "Oh, what a tangled web we weave / When first we practice to deceive" appears in this author's epic poem *Marmion*. For 10 points each:

[10] Name this British writer whose other works include the six-canto long poem *The Lady of the Lake*. He may be better known for his historical novels, such as *Quentin Durward* and *The Heart of Midlothian*.

ANSWER: Sir Walter **Scott**

[10] This other Scottish poet wrote the popular poem "Auld Lang Syne," as well as "To a Louse" and "To a Mouse."

ANSWER: Robert **Burns** [accept Robbie **Burns**]

[10] The Scottish poet Alfred Noyes is perhaps best remembered for this poem, which describes the deaths of the title character and a "landlord's daughter" after their tryst is interrupted by an ostler.

ANSWER: "The **Highwayman**"

<Jose, Literature - British>

10. Prefixing a quantity with the word "specific" makes it this type of quantity by normalizing against total mass. For 10 points each:

[10] Name this type of quantity that does not depend on the amount of material, such as density or pressure.

ANSWER: **intensive** quantities [accept **bulk** property]

[10] Thus, a factor of total mass distinguishes the "specific," intensive form of this quantity, measured in Joules per Kelvin kilogram, from its extensive counterpart. This quantity is the energy required to raise an object's temperature by a degree.

ANSWER: **heat capacity** [or **specific heat** capacity]

[10] Although solids have different specific heats, their *molar* heat capacity is often approximated by this common, exact value. This value is slightly less than 25 Joules per Kelvin mole.

ANSWER: **3R** [or **three times the ideal gas constant**; or **three times R**; or obvious equivalents]

<Silverman, Science - Chemistry>

11. These people celebrate fighting alongside the British at the 1818 Battle of Koregaon. For 10 points each:

[10] Name these people whose rights were championed by the Self-Respect Movement. B.R. Ambedkar was a member of this group and encouraged many of them to convert to Buddhism.

ANSWER: **Dalit** people [accept **Untouchables** or **Scheduled Castes**; prompt on **Other Backward Castes**]

[10] In 1931, E. V. Ramasamy sought to gain entry for people of lower castes to the Guruvayur Temple in this modern-day Indian state. This state in the country's southwest emerged from Travancore-Cochin.

ANSWER: **Kerala**

[10] This activist argued that the Guruvayur Temple should be open to lower castes only during certain hours, after which the temple must be ritually purified. He also led the Salt March.

ANSWER: Mahatma **Gandhi** [or Mohandas Karamchand **Gandhi**; or **Gandhi** ji; or **Bapu**]

<Bentley, History - World>

12. Unlike the more general loop technique, this method can only be applied to planar circuits which do not cross over themselves. For 10 points each:

[10] Name this technique in circuit analysis in which the voltage drops are written in terms of the currents flowing around the namesake closed paths.

ANSWER: **mesh** current analysis

[10] Mesh analysis is an application of this scientist's voltage rule, which states that the voltage drops around a loop must sum to zero.

ANSWER: Gustav **Kirchhoff**

[10] On circuit diagrams, these points are indicated by three parallel horizontal lines of decreasing length. The electrical potential equals zero at these points, which are named because they are often connected to the Earth.

ANSWER: **grounds**

<Rosenberg, Science - Physics>

13. This character takes the protagonists to a carnival, and while there, he recognizes the "Wild African Savage" as an old acquaintance from Roanoke. For 10 points each:

[10] Name this man, who, after running away from the prison in Alfred, follows a blossom of flowers north to Cincinnati.

ANSWER: **Paul D** [prompt on Paul or D]

[10] Paul D appears in this novel by Toni Morrison. In this novel, the ghost of Sethe's (SETH-uh's) daughter haunts 124 Bluestone Rd.

ANSWER: **Beloved**

[10] Paul D's heart is compared to this object throughout the novel. Once Paul D chooses to sleep with Beloved, the "flakes of rust" on this object "[fall] away."

ANSWER: tobacco tin **box** [accept tobacco **box** or the tobacco **tin**]

<Carpenter, Literature - American>

14. Hartry Field argued for a kind of "fictionalism" in proposing a "science without" these objects, since he maintained that using these objects only generates falsehoods. For 10 points each:

[10] Modern Platonism, which holds that these abstract things exist, derives its name from the fact that Plato thought what things were Platonic Forms?

ANSWER: **numbers** [or **mathematical** entities; accept **sets**]

[10] This philosopher and Hilary Putnam argued that numbers must exist since they are indispensable to science. He attacked the analytic-synthetic distinction in *Two Dogmas of Empiricism*.

ANSWER: Willard Van Orman **Quine**

[10] This other ancient philosopher believed that numbers were fundamental to the organization of the *cosmos*. He also names a theorem about triangles.

ANSWER: **Pythagoras** of Samos

<Carpenter, RMP - Philosophy>

15. In 2002, chemists at Oregon State University accidentally discovered a new shade of this color nicknamed "Yin Min" and received a patent for its pigment. For 10 points each:

[10] Give this color which also names a gloomy period within Pablo Picasso's art.

ANSWER: **blue** [accept Yin Min **Blue** or **Blue** Period]

[10] This company trademarked a "light medium robin egg blue," which it often uses on its bags. Its chief designer in the late 19th century, who was from its namesake family, made many stained glass windows in the Art Nouveau style.

ANSWER: **Tiffany & Co.** [accept **Tiffany** or **Tiffany's**] (The designer is Louis Tiffany.)

[10] This French artist developed a namesake international blue with Edouard Adam but never officially patented it. He used models covered in that color as "living brushes" in his *Anthropometries* series.

ANSWER: Yves **Klein** [accept International **Klein** Blue]

<Smith, Fine Arts - Painting>

16. For 10 points each, answer the following about medieval historian Lynn White:

[10] White wrote that the Middle Ages were "full of beans" since legumes were often planted to fix nitrogen in the soil as part of this system of crop rotation, in which some part of fields would lie fallow.

ANSWER: **three-field** system [accept any answer that indicates the notion of using **three** different **fields** to grow crops; prompt on multiple fields or equivalents]

[10] White argued that "shock combat" became possible with the invention of the stirrup, which allowed soldiers who used these animals to stay on them more easily.

ANSWER: **horses**

[10] White cited the shifting of technological innovation from southern Europe to northern Europe to argue against this Belgian historian, whose book *Medieval Cities* claims that the rise of Islam was the main cause of the Middle Ages.

ANSWER: Henri **Pirenne**

<Jose, History - Cross, Historiography, and Miscellaneous>

17. The reversed form of this interaction links together poly-pyrimidine stretches linked by a penta-thymidine in a PPRH. For 10 points each:

[10] Name this alternative to Watson-Crick base pairing which can be produced by rotating the purine from its Watson-Crick position 180 degrees around a glycosidic bond. These typically unnatural bonds may form triple or quadruple helix structures.

ANSWER: **Hoogsteen** base pairing [accept reverse **Hoogsteen** base pairing]

[10] The presence of Hoogsteen pairs allows the formation of G-quadruplexes by these repetitive DNA structures found at the ends of chromosomes.

ANSWER: **telomeres**

[10] G-quadruplexes are named after this nucleobase which binds to cytosine.

ANSWER: **guanine** [do not accept or prompt on "guanidine" or "guanosine"]

<Wang, Science - Biology>

18. For 10 points each, name these iconic dissonant chords:

[10] The notes F, B, D-sharp, and G-sharp comprise this chord, which is named for a knight and lover of Isolde ("ee-ZOL-duh") who is represented by it in a Richard Wagner opera.

ANSWER: **Tristan** chord

[10] This chord consists of a C major and an F-sharp major triad, and is highly dissonant because its intervals are a tritone apart. This chord is named for a title character who is killed by the Moor in a ballet.

ANSWER: **Petrushka** chord

[10] This six-note chord used by Alexander Scriabin was given its English name by Scriabin's biographer Arthur Hull. It is sometimes called the "Prometheus" chord for its use in Scriabin's *Prometheus, Poem of Fire*.

ANSWER: **mystic** chord [accept **mystic** neat chord; accept **pleroma**]

<Alston, Fine Arts - Music>

19. A hero written about in this language leads the Hwalbindang ("hwahl-been-dahng"), a group of bandits who steal from the rich and give to the poor, before he becomes the king of Yul. For 10 points each:

[10] Name this language, in which Heo Gyun ("huh gyoon") wrote *The Story of Hong Gildong*. It was written using the *hangul* alphabet.

ANSWER: **Korean** [accept **Hangugeo**]

[10] This South Korean author of *Little Pilgrim* and *Ten Thousand Lives* is a perennial contender for the Nobel Prize.

ANSWER: **Ko Un** [do not accept or prompt on "Un"]

[10] A poem by Choi Young-Mi ("chweh Yung-mee") titled "Monster" accused Ko Un of sexual harassment by using these two words in the text. In 2018, Catherine Robbe-Grillet ("robe gree-Yay"), the daughter of novelist Alain, criticized the sexual assault awareness movement known by these two words.

ANSWER: **Me Too**

<Dees, Literature - World and Miscellaneous>

20. Thucydides says that two kings of Athens, Erechtheus (eh-REK-thee-us) and Cecrops ("KEY-crops"), wore jewelry made from cicadas in their hair since both cicadas and the kings had this unusual manner of birth. For 10 points each:

[10] Give this Greek term for beings that sprung, often fully formed, from the soil.

ANSWER: **autochthonous** (aw-TAHK-thun-us) [do not accept or prompt on "chthonic"]

[10] Many autochthons (aw-TAHK-thuns) are described as children of this Titaness of the earth, who is the mother and wife of Uranus.

ANSWER: **Gaia** [accept **Gaea**]

[10] According to the *Critias*, all the kings of this land descended from an autochthonous being named Evenor. The primary source describing this mythical kingdom situates it beyond the pillars of Hercules.

ANSWER: **Atlantis**

<Jose, RMP - Greco-Roman Mythology>

21. The person who used this phrase presented an apocalyptic vision of a city with chocolate fountains and a tree of life to his followers. For 10 points each:

[10] Give this two-word phrase taken from a Beatles song that describes a future war arising from racial tension. It was used by a fanatic to goad his associates into committing murder.

ANSWER: **Helter Skelter**

[10] The phrase Helter Skelter was used by this murderer, whose namesake "family" killed Sharon Tate and others in the 1960s.

ANSWER: Charles **Manson** [or Charles Milles **Manson**; or Charles **Maddox**; accept **Manson** Family]

[10] This member of the Manson family went to junior high school with *Simpsons* voice actor Phil Hartman. She served 34 years in prison after attempting to assassinate President Gerald Ford in Sacramento.

ANSWER: Squeaky **Fromme** [or Lynette Alice **Fromme**]

<Jose, History - American>