

### Tossups

1. The protagonist of Graham Greene's *The Confidential Agent* is an expert on this poem. The protagonist of this poem comforts an archbishop, who dies while trying to fetch him some water. A character in this poem decides to name his sword "Precious" when he hears that an enemy king has also named his sword. One character in this poem rudely lets a glove drop after being chosen as a messenger, and the title character offers a glove to God when he is dying. This poem ends with a villain being torn apart by horses after Pinabel loses a trial by combat. The title character of this poem is betrayed by his stepfather Ganelon, leading to an ambush at Roncevaux Pass. For 10 points, name this *chanson de geste* about a hero in Charlemagne's army.

ANSWER: *The Song of Roland* [or *La Chanson de Roland*]

2. Symptoms of this disease are also seen in patients with defective dihydrofolate reductase, which reduces the cofactor BH<sub>4</sub>. This disease can be treated with sapropterin hydrochloride, which replaces tetrahydrobiopterin. Individuals with this disease often have musty-smelling skin. Though this disease does not result in the buildup of homogentisic acid, it's caused by a defect in the same pathway, and was the first inborn error of metabolism to have a proven biochemical basis. It leads to buildup of phenylpyruvic acid in the urine. Albinism is a common symptom of this disorder due to the inability to produce melanin. This recessive autosomal disorder is caused by a defect in the PAH gene. Its sufferers cannot consume aspartame. For 10 points, name this inability to metabolize phenylalanine.

ANSWER: phenylketonuria [or PKU]

3. In the eighteenth century, hundreds of these people would gather on Monday and Tuesday mornings in Bethnal Green as part of a namesake Market. Journalist John Brown's investigation into the lives of some of these people led to Richard Carlile's *The Lion* publishing a memoir by Robert Blincoe that described his time as a scavenger. Canada and Rhodesia were two places that the "Home" version of these people were sent by the Fairbridge Society from Britain. The number of hours these people could work was limited by the Factory Act of 1833, and further reduced with those of women by the Ten Hour Act. For 10 points, name these people who, during the Industrial Revolution, had their size exploited by being employed in such professions as chimney sweeping.

ANSWER: children [or orphans; accept equivalent answers; prompt on "factory workers" or equivalent answers]

4. Under Armour commissioned this artist's mixtape "Natural Born Hitters," in which all the songs are superimposed with vocals from Ray Allen locker room speeches. He featured Jay-Z on a 2003 hit on which he sings "I know that I'm carrying on, nevermind if I'm showing off." He appears twenty-four times in the twenty-four hour music video for his song which implores "clap along if you feel like a room without a roof." That song, "Happy," was included in the score he composed for *Despicable Me 2*. He got his start with Shay Hayley and Chad Hugo in N\*E\*R\*D, and also comprised half of the producing duo The Neptunes. He sang the opening "everybody get up" on a 2013 Robin Thicke hit. For 10 points, name this singer and producer who was featured on the 2013 hits "Blurred Lines" and "Get Lucky."

ANSWER: Pharrell Williams [or Pharrell Williams]

5. This politician responded to accusations that he married Harriet Stanwood in a shotgun wedding with a dubious claim that they had actually been married twice, the first time without a license. A Walt McDougall cartoon showed this man taking part in the Boodle Banquet on the same day that he heard a speech at the Fifth Avenue Hotel by Samuel Burchard. Bonds for the Little Rock and Fort Smith Railroad were the subject of this man's correspondence in the Mulligan Letters. New York may have been lost by this man after he failed to respond negatively to a speech about "rum, Romanism, and rebellion." For 10 points, name this man who lost the election of 1884, and whose nicknames included "Magnetic Man," "Plumed Knight," and "Continental Liar from the State of Maine."

ANSWER: James Gillespie Blaine

6. The artist of this painting only made one other work in the same genre, in which a snake has been crushed by a stone and a woman with her hand on her heart looks up at a glass sphere. Near the bottom left of this painting, a death mask lies on a table. A chandelier in this painting is topped by a double-headed eagle. A large blue and gold

curtain is pulled back to reveal this painting's scene. A woman in this painting may be carrying a book by Thucydides, since she is based on Cesare Ripa's depiction of Clio. That woman also carries a trumpet and wears a blue wreath on her head. A large map of the Netherlands hangs on the back wall of the room in this painting, which shows a painter and a female model. For 10 points, name this allegorical work by Jan Vermeer.

ANSWER: The *Art of Painting* [or The *Allegory of Painting*; or The *Painter in His Studio*; or De *Schilderkunst*]

7. This deity sued Ares for murdering a child of this deity named Hallirhotius. According to Ovid, on the first day of the Trojan War, Achilles choked a son of this deity named Cygnus who was otherwise invulnerable. During the Gigantomachy, this deity buried Polybotes under Cos. After being born, this dedicatee of the Isthmian games was hidden amongst sheep or raised by the dog-headed Telchines. Hesione was offered to a monster sent by this god after king Laomedon failed to pay for the walls of Troy. This seducer of Aethra and father of Chrysaor turned some Phaeacians to stone for helping Odysseus get home. For 10 points, name this father of the Cyclops Polyphemus, who made the earth shake with his trident.

ANSWER: Poseidon [accept Neptune or Neptunus just to be nice]

8. The apparent "xeroxing" of quantum information by these objects is avoided by observing that one part of them is a "fast scrambler". The 2012 AMPS paper proposed that these objects were surrounded by firewalls; that proposition was an alternative to Susskind's proposal of complementarity, which also solves the unitarity-violating information loss problem that these objects cause. It is widely believed that these objects can be characterized entirely by mass, angular momentum, and charge and are thus "hairless". These objects probably emit Hawking radiation, and are formed from the collapse of bodies smaller than their Schwarzschild radii. For 10 points, name these ultra-dense astronomical objects from which light cannot escape.

ANSWER: black holes

9. One character in this film admits "I don't understand my own soul." Its cinematographer, who later invented the bleach-bypass technique for another film, broke an unwritten rule by shooting directly at the sun during a shot of a silent walk through a forest. Its director was criticized in the United States for instructing his composer to write a distractingly similar knock-off of *Bolero*. At a trial in this film, a dead man delivers his testimony through an old medium. This film ends as the rain stops and the sun comes out after a woodcutter tells a priest that he will adopt an abandoned infant. It stars Toshiro Mifune as a bandit who may or may not have killed a samurai and raped his wife. For 10 points, name this Akira Kurosawa film in which the story of an incident is told from four different perspectives.

ANSWER: *Rashomon*

10. A maid in this play notes that "Fire that's closest kept burns most of all." A comic character in this play reenacts his departure from his family using his shoes to represent his parents. That character takes the blame for urinating in the dining chamber to protect his dog from being beaten. Another character in this play is captured by a band of outlaws, though her one-time suitor Eglamour escapes. In this play, Julia disguises herself as the page Sebastian. Launce and his dog Crab serve one character in this play. At the end of this play, Thurio gives up his engagement to Silvia after a threat from one of the title characters. For 10 points, name this Shakespeare comedy that details the romantic designs of Proteus and Valentine.

ANSWER: The *Two Gentlemen of Verona*

11. This book's universality was attacked by Heidegger in the Davos debate, and its so-called "principle of significance" was attacked in Peter Strawson's *The Bounds of Sense*. This book compares logic to a courtyard in its B-preface, written six years after its A-preface. It says that we comprehend a "manifold" of sense-data via the "unity of apperception," and claims that space and time exist as "forms of intuition" in our heads. Its author simplified its four sets of contradictory "antinomies," and its split between phenomena and imperceptible noumena, for his *Prolegomena to Any Future Metaphysics*. This book's transcendental deductions show that " $7 + 5 = 12$ " is within the title mental faculty. For 10 points, name this book which showed that synthetic *a priori* truths exist, by Immanuel Kant.

ANSWER: *Critique of Pure Reason* [or *Kritik der Reinen Vernunft*]

12. One algorithm that implements this process moves two "fingers" towards one another and moves touched data to the other semispace to achieve compaction. Some implementations of this process, called "tracing", typically

identify targets described as “syntactic”, which are strictly unreachable. This process can be undone by “resurrection”, which can be triggered by a finalizer. The mark-sweep method, implemented in LISP, was the first method for doing this task, which is performed once there are no more strong references to an allocated location. Languages that implement this process prevent some classes of dangling pointer bugs and memory leaks. For 10 points, name this process that is done in languages like Java to automatically manage memory.  
ANSWER: garbage collection [or word forms; or GC; prompt on partial answer; prompt on “deallocating memory” or “freeing memory” or “compacting memory” or “(automatic) memory management” or word forms]

13. A ruler of this country unsuccessfully attempted to raise money by instituting the tartib tax on produce and livestock. A king of this country was nearly assassinated on the orders of his minister of defense Mohamed Oufkir while flying in a Boeing 727. Muhammad ben Arafat ruled this country for a little more than two years between the exile and return of Mohammed V. People from this country entered a neighboring territory during the Green March, which sparked a conflict with the Polisario Front. This country ruled by the Alaouite Dynasty was visited by the *Panther* and Wilhelm II, leading to two crises in the buildup to World War I. For 10 points, name this West African country that was held as a French protectorate for over forty years and lays claim to the territory of Western Sahara.  
ANSWER: Kingdom of Morocco [or Al Mamlakah al Maghribiyah]

14. An organization founded by this man won the lawsuit *U.S. v. 31 Photographs*, which he had filed after some of his research was impounded by U.S. Customs. He spent the first ten years of his career researching the subject of his doctoral thesis: gall wasps. Dean Rusk, who was then president of the Rockefeller Foundation, terminated this man’s funding after a congressional investigation by Tennessee representative B. Carroll Reece. Judith Reisman has attacked his work for its reliance on prisoner subjects and small sample sizes. He created a namesake 0-6 scale and an institute in Bloomington, Indiana. He published a pair of best-selling reports on male and female behavior in 1948 and 1953. For 10 points, name this American who pioneered research on human sexuality.  
ANSWER: Alfred Charles Kinsey

15. The protagonist of this novel has a friend named Alec whose urine turns blue when he takes Dodd’s Kidney Pills. This novel’s protagonist spills food on Owad as the climax of an argument about whether or not a family should send their sons to a Catholic school. The editor Mr. Burnett is fired from a newspaper where the main character of this work publishes his “Escape” stories. After his birth at Bissoondaye’s hut, the protagonist of this novel is told to stay away from trees and water because he is born the wrong way and has six fingers. The protagonist of this work is married to Shama, who keeps retreating to Hanuman House, where the Tulsi family lives. For 10 points, name this novel in which fires keep preventing Mohun from building the title structure, a novel written by V. S. Naipaul.  
ANSWER: A House for Mr Biswas

16. This text compares a mountain home to a “joyous assembly” of angels to a mountain burning with fire which even animals are not allowed to touch. Ruth Hoppin used a reference to “those from Italy” in this text to argue that it was written by a woman named Priscilla. This text’s fourth chapter promises entry into God’s “rest.” This text defines faith as “the substance of things hoped for, the evidence of things not seen,” and speaks of Christ as “of the order of Melchizedek,” a man from Genesis who is mentioned eight times in this work. This text speaks of Christ as greater than the angels, Moses, and Joshua, and argues for treating Jesus as high priest. For 10 points, name this anonymous letter in the New Testament, which uses many Old Testament examples and is addressed to God’s chosen people.  
ANSWER: Epistle to the Hebrews [or Pros Hevraious]

17. Three of this work’s movements call for a tenor tuba, which is typically replaced with a euphonium in modern performances. This work’s second movement begins with a four-note, rising solo for two of the six horns. Unusually, both its first and last movements are written in quintuple meter. A theme from one movement of this work was adapted by the composer into the tune *Thaxted*, which was used to set Cecil Spring-Rice’s poem “I Vow to Thee, My Country.” This work’s final movement uses a fade-out technique as two offstage women’s choruses are separated from the rest of the orchestra by a closing door. For 10 points, name this seven-movement suite that includes movements titled “The Mystic” and “The Bringer of War,” which was composed by Gustav Holst.  
ANSWER: *The* Planets [or Seven Pieces for Large Orchestra]

18. Following this battle, a losing commander took refuge with the king Evagoras. Pausanias claimed that Tydeus was a traitor in this battle, along with the spared commander Adimantus. The losing side in this battle ignored the advice that it should move its camp to Sestos; the other side was commanded by Aracus and made its move out from Lampsacus. “No one slept” in a city after news of this battle was brought by the ship *Paralus*, according to the account of Xenophon. Xenophon also wrote that a surprise attack while soldiers were out gathering food forced Conon to flee from this battle with only nine triremes, losing all the other 170 Athenian ships. For 10 points, name this 405 BCE naval victory for Lysander’s Spartan fleet, which basically ended the Peloponnesian War.

ANSWER: Battle of Aegospotami

19. This poet described how the title animals “gore no more” and are now “lying low” with the Blackfoot and the Pawnees. One poem by this author of “The Flower-Fed Buffaloes” declares “Death is an Elephant” before a group of lines with parallel beginnings that say “steal the pygmies... kill the Arabs... kill the white men.” That poem by this author includes instructions such as “With a philosophic pause” and has a section called “Their Irrepressible High Spirits” which repeats the tune “boomlay, boomlay, boomlay, BOOM.” Another of his poems repeats the refrain “Are you washed in the blood of the Lamb?” For 10 points, name this author of “The Congo” and “General William Booth Enters into Heaven.”

ANSWER: Vachel Lindsay

20. The Horiuti-Polanyi mechanism governs this reaction. A phosphorus-boron zwitterion with frustrated ion pairs carries out this reaction on imines. To enantioselectively synthesize menthol, Noyori used a ruthenium BINAP catalyst for an asymmetric variant of this reaction. Cyclooctadiene is attached to an iridium atom in a more common catalyst for it. Like combustion, the enthalpy of this reaction measures the relative stability of endocyclic versus exocyclic alkenes. This reaction takes place at high temperatures and pressures and proceeds by the adsorption of one reagent to metal. It uses poisoned palladium, Lindlar’s catalyst, to reduce alkynes to cis alkenes. For 10 points, name this reduction in which unsaturated compounds become saturated through the addition of the lightest element.

ANSWER: hydrogenation [prompt on reduction before it is read]

TB1. This activity was the principal interest of the Mayhew family, which bought and governed Martha’s Vineyard. Translator John Eliot dedicated his life to this activity, as did the founder of Dartmouth College, Eleazar Wheelock. Diego Ortiz Parilla blamed this activity for instigating the Pima Revolt. Gaspar de Portola led an expedition to enable this activity, with facilities linked by the Royal Highway. A man primarily engaged in this activity was one of the first Europeans to navigate the northern Mississippi when he traveled with Louis Jolliet. San Diego and San Francisco were originally built for this purpose by the “Apostle of California.” For 10 points, name this practice of Jacques Marquette and Junipero Serra that promoted the adoption of a new faith by inhabitants of the New World.

ANSWER: converting American Indians to Christianity [or converting Native Americans; accept equivalent answers such as providing missionaries to American Indians; or assimilating American Indians; accept specific American Indian tribes; prompt on “educating Native Americans”; prompt on partial answers]

**Bonuses:**

1. The movement to integrate this island with another country, called enosis, was supported by EOKA. For 10 points each:

[10] Name this island country that became independent from Britain in 1960 following the London-Zurich Agreements and was invaded in 1974 by Turkey.

ANSWER: Republic of Cyprus [or Kypros; or Kypriaki Dimokratia; or Kibris Cumhuriyeti]

[10] Enosis was a push by certain Cypriots to integrate the island into this mainland European nation, which has had three members of the Papandreou family serve as its prime minister.

ANSWER: Greece [or Hellenic Republic; or Ellas; or Ellada; or Elliniki Dimokratia]

[10] This archbishop of the Church of Cyprus also served as the first president of Cyprus for eighteen years, including surviving an attempted Greek-led coup in 1974 before the Turkish invasion.

ANSWER: Makarios III [or Mikhail Khristodolou Mouskos; prompt on “Makarios”]

2. This novel begins with Toni and Brenda agreeing to help the main character get back on his feet in Utah. For 10 points each:

[10] Name this novel in which Nicole Baker has a brief affair with Gary Gilmore, a man who murders two men and then demands his death penalty be delivered as soon as possible.

ANSWER: *The Executioner's Song*

[10] This author won a Pulitzer for *The Executioner's Song* and wrote about officers in the Vietnam War in *The Naked and the Dead*.

ANSWER: Norman Mailer

[10] This essay by Mailer, which was eventually collected in *Advertisements for Myself*, describes the title figure as a “philosophical psychopath,” because of his adoption of vernacular and music of another culture.

ANSWER: “The White Negro: Superficial Reflections on the Hipster”

3. Bulky groups oriented 60 degrees apart on these diagrams will have gauche interactions. For 10 points each:

[10] Name these projections used in conformational analysis to show dihedral angles between adjacent groups on a carbon-carbon single bond. They are drawn as a circle with six substituents directed radially outward.

ANSWER: Newman projections/diagrams

[10] Newman projections of this molecule explain that its hydrogen atoms are staggered to maximize hyperconjugation. This two-carbon alkane has formula C<sub>2</sub>H<sub>6</sub>.

ANSWER: ethane

[10] In conformational analysis, this type of strain arises from eclipsed or gauche alkyl groups, unlike staggered conformations. This type of strain is sometimes named for Pitzer.

ANSWER: torsional strain

4. Two people are dwarfed by a tree in a painting set “among the vines” in this city. For 10 points each:

[10] Name this French city, frequently painted by the Impressionists. Alfred Sisley’s paintings set here include one depicting early snow and one depicting the Chemin de la Machine.

ANSWER: Louveciennes

[10] Louveciennes was also a favorite subject of this Impressionist born in St. Thomas. He made a number of paintings of Sydenham and was the only artist featured in every Impressionist exhibition.

ANSWER: Jacob Abraham Camille Pissarro

[10] Pissarro painted this type of building in Rouen, which is also the subject of a series by Monet depicting it at different times of day.

ANSWER: cathedral

5. According to the OZI rule, decay modes that can be disconnected by cutting these constructs will be suppressed. For 10 points each:

[10] Name these curly, corkscrew-shaped constructs found in Feynman diagrams, four of which may meet at a vertex.

ANSWER: gluon lines [prompt on “gluon”]

[10] The OZI rule is useful in the analysis of decays governed by this force, whose carrier is the gluon. This force holds quarks together in nucleons and is described by quantum chromodynamics.

ANSWER: **strong** interaction [or **strong** nuclear force; accept **color** force]

[10] The OZI rule explains why the phi meson doesn't decay into three examples of this other type of particle, which Yukawa predicted carries the strong interaction.

ANSWER: **pion** [or **pi** meson; prompt on "meson"]

6. Answer these questions about the Egyptian goddess Hathor, for 10 points each.

[10] Hathor was most often depicted with this animal's head. Other mythological examples of this type of livestock animal include the Norse Audhumbla.

ANSWER: a **cow** [or **bovine**]

[10] In one story, Hathor turns into this other Egyptian goddess and goes on a rampage which almost destroys humankind. This warlike daughter of Ra was depicted as a lioness.

ANSWER: **Sekhmet** [or **Sekhet**; or **Sachmis**; be lenient with vowels]

[10] Iconography of Hathor included this special type of rattle whose bars are made of metal. The cat goddess Bast was also shown shaking this instrument, which was often used in Egyptian rituals.

ANSWER: **sistrum** [or **sistra**]

7. The protagonist of this novel chases after the cousin of her lover in order to get him to testify in the murder of Harry Carson. For 10 points each:

[10] Name this novel whose title character ends up marrying Jem Wilson after protecting her Chartist father John, the actual murderer of Carson.

ANSWER: **Mary Barton**

[10] *Mary Barton* was written by this female British author, who also wrote about the contrast between the contemptuous Margaret Hale and the hard-working John Thornton in *North and South*.

ANSWER: Elizabeth Cleghorn **Gaskell** [or Elizabeth Cleghorn **Stevenson**]

[10] The title character of Gaskell's *Ruth* is abandoned by Mr. Bellingham, who has this first name. In a Shakespeare play, a king of this name gives the St. Crispin's Day speech at Agincourt.

ANSWER: **Henry**

8. A.J. Ayer's criticism of this type of system can be found in *The Concept of A Person and Other Essays*, and the possibility of one of these systems is challenged by the "beetle-in-a-box" argument. For 10 points each:

[10] Name this type of communication system. One argument against them imagines a man who writes 'S' in his diary each time he experiences a specific sensation, though he lacks criteria for what that experience consists of.

ANSWER: a **private language** [or **private language** argument]

[10] This Austrian proposed the beetle-in-a-box thought experiment to disprove the private language argument in his *Philosophical Investigations*. He also wrote *Tractatus Logico-Philosophicus*.

ANSWER: Ludwig Josef Johann **Wittgenstein**

[10] This philosopher wrote the English introduction to *Tractatus Logico-Philosophicus*, coined the term "consequentialism" in "Modern Moral Philosophy", and described three modes of the title property in *Intention*.

ANSWER: Gertrude Elizabeth Margaret **Anscombe** [or G.E.M. **Anscombe**]

9. Mike Donovan, Gus Smith, and Jesse Jackson were unofficial mayors of these communities, which included Hardlucksville in New York. For 10 points each:

[10] Name these shantytowns that sprung up across the United States during the Great Depression and were named after a president.

ANSWER: **Hooverilles**

[10] In New York City, part of this location was renamed Hoover Valley, with makeshift houses built along Depression Street.

ANSWER: **Central Park**

[10] The unemployed lumberjack Jesse Jackson was a "mayor" in this West Coast city, where one of the largest and longest-lasting Hooverilles was built on the old site of the Skinner and Eddy Shipyard.

ANSWER: **Seattle**

10. The concert which was to be this dancer's next performance commemorated her death by playing the music of Saint-Saens and tracking an empty spotlight across the stage. For 10 points each:

[10] Name this ballerina for the Imperial Ballet and the Ballets Russes who was best known for a solo

choreographed by Michel Fokine.

ANSWER: Anna **Pavlova**

[10] Pavlova's famous solo was named for a dying one of these animals. In a Tchaikovsky ballet, Rothbart turns Odette into one of these birds.

ANSWER: **swans**

[10] Pavlova played the part of Candide in this ballet, which also includes roles for fairy tale characters like Puss-in-Boots and Little Red Riding Hood.

ANSWER: **Sleeping Beauty**

11. The protagonist of this novel remembers an incident from his childhood in which he left a razorblade in his pockets, which caused his mother to cut her hand while washing clothes. For 10 points each:

[10] Name this novel in which Hannah asks her son not to marry Clara on her deathbed. Obi borrows money from Sam Okoli to pay for Clara's abortion when she gets pregnant.

ANSWER: **No Longer at Ease**

[10] Chinua Achebe, the author of *No Longer at Ease*, also wrote *Things Fall Apart*, which is set in the village of Umuofia in this country.

ANSWER: Federal Republic of **Nigeria**

[10] Chimamanda Adichie, a contemporary Nigerian author, wrote this novel that won the 2007 Orange Prize. In this novel, Olanna cheats on Odenigbo with Kainene's English lover, Richard, during the Biafran War.

ANSWER: **Half of a Yellow Sun**

12. This system acts in concert with the endonuclease Cas9 to degrade viral mRNAs. For 10 points each:

[10] Name this system by which prokaryotes insert short repeats of pathogenic DNA into their genomes, which can then function as adaptive immunity against the pathogen.

ANSWER: **CRISPRs** [or **C**lustered **R**egularly **I**nterspaced **S**hort **P**alindromic **R**epeats; or **CRISPR-Cas 9**]

[10] Gene therapy using CRISPR works because it induces this type of damage to a DNA strand. Repairing this class of DNA damage requires non-homologous end joining or homologous recombination.

ANSWER: **double-strand breaks** [or **DSBs**; prompt on "strand breaks"]

[10] Though CRISPR has been extensively studied in *Streptococcus thermophilus*, clustered repeats were actually first described in the 80s in this Gram-negative model bacterium that lives in your gut.

ANSWER: **Escherichia coli**

13. The outlined doctrine of the path towards God is called *tariqat* in this religious sect, which is the subject of the *Masnavi*. For 10 points each:

[10] Name this mystical sect of Islam that stresses motivation through love of God. Its adherents include the poet Rumi and many whirling dervishes.

ANSWER: **Sufism** [or **Tasawwuf**; prompt on "Islamic mysticism" or similar answers]

[10] This religion practiced by some Kurds in Northern Iraq, combines elements of Sufi and Zoroastrian doctrine. This group believes in seven guardians of the world called *heft sirr*, led by the "Peacock Angel" Melek Taus.

ANSWER: **Yazidism** [or **Yazidi**; or **Eziditi**]

[10] A Yazidi holy text of this name is revered alongside the *Black Book*. A Christian text with this English name begins with seven letters to the Asian churches and includes a vision of 144,000 Hebrews.

ANSWER: Book of **Revelation** [or Kitêba **Cilwe**; or Kitab al-**Jilwah**; accept **Apocalypse of John** or **Apokalypsis**]

14. In some of his works, this composer selected a fixed number of chords, which he called "gamuts," and arranged melodies without regard to the underlying harmonies. For 10 points each:

[10] Name this composer who is more famous for instructing the performer to sit around for 4'33".

ANSWER: John **Cage**, Jr.

[10] Cage was inspired by Indian philosophers to compose works like this collection of twenty pieces for prepared piano. Sixteen of the pieces are in AABB form.

ANSWER: **Sonatas and Interludes**

[10] This ballet collaboration between Cage and his partner, Merce Cunningham, was his first work composed for orchestra. Tchaikovsky wrote some solo piano pieces of this name, and Haydn wrote an oratorio of this name.

ANSWER: **The Seasons**

15. During the Noachian epoch, this planet's Tharsis bulge was created through volcanism. For 10 points each:

[10] Name this planet, which is home to the huge Olympus Mons volcano.

ANSWER: **Mars**

[10] This layer of the Martian surface dates to the Noachian epoch. Like its analogue on the moon, this fine-grained soil covering was produced mostly by meteoroid impacts and spallation.

ANSWER: **regolith** [accept **megaregolith**]

[10] Martian regolith is often swept up by these whirlwinds, smaller analogues of which also occur on Earth. On Mars, they leave behind winding trails, and on Earth, they are not associated with storm systems.

ANSWER: **dust devils** [accept **sand augers**; accept **dust whirls**; accept **willy-willy**; do not prompt on or accept “tornadoes”]

16. In December 2013, this nation's president Salva Kiir spoke of an attempted coup in this nation instigated by Riek Machar. For 10 points each:

[10] That coup attempt occurred in this African country, which gained autonomy in 2011. This nation's northern counterpart has its capital at Khartoum.

ANSWER: **South Sudan**

[10] The violence from the coup attempt was mostly localized in this capital city of South Sudan, located on the Nile River.

ANSWER: **Juba**

[10] Riek Machar is a member of this second-largest South Sudanese ethnic group, which has frequently clashed with the largest group, the Dinka.

ANSWER: **Nuer**

17. The teenager Abdon Alderon became a hero when he died after this battle, in which the Albion battalion and other troops sneaked around the slopes of Cotopaxi to attack Spanish forces. For 10 points each:

[10] Name this 1822 battle in which Antonio Jose de Sucre defeated Melchor Aymerich on the slopes of a namesake volcano.

ANSWER: Battle of **Pichincha**

[10] The Battle of Pichincha took place near the city of Quito in this South American country, which gained independence from Spain following the battle.

ANSWER: Republic of **Ecuador** [or Republica del **Ecuador**]

[10] In July, following the battle, Simon Bolivar moved into this city to make sure it became a part of Colombia rather than Peru. Jose Joaquin de Olmedo protested, but was ultimately removed from his role as its president.

ANSWER: **Guayaquil**

18. This man is told a story about an undertaker who dreams that his former customers arise from the dead and accuse him of overcharging them. For 10 points each:

[10] Name this character who is told five stories, including one in which Marya Gavrilovna's lover Vladimir gets lost on the way to their planned secret marriage, “The Blizzard.”

ANSWER: Ivan Petrovich **Belkin**

[10] *The Belkin Tales* were written by this Russian poet of *Boris Godunov* and *Eugene Onegin*.

ANSWER: Alexander Sergeyevich **Pushkin**

[10] Pushkin also wrote this long poem, whose first title character is a knight who rescues the second title character from the sorcerer Chernomor.

ANSWER: **Ruslan and Ludmila** [or **Ruslan i Lyudmila**]

19. The UCC generally treats these instruments as “firm offers.” For 10 points each:

[10] Name these contracts in which one party pays for the opportunity to buy from the other or sell to the other at a set price for a period of time.

ANSWER: **option** contracts [or **options**]

[10] Two answers required. These are the names given to the two general kinds of options, one an option to sell and one an option to buy.

ANSWER: **call** option and **put** option [accept in either order]

[10] The binomial option pricing model is often used in the pricing of this kind of option, which can be exercised at any point before the expiration date.



ANSWER: American style options

20. Tom Reiss wrote a 2013 Pulitzer Prize-winning biography of this man, who quickly rose to command the Army of the Alps, was likely saved by the Thermidorian Reaction from execution, and spent two years in a prison in Taranto before returning home penniless and in poor health. For 10 points each:

[10] Name this general born to a slave woman and French nobleman in Saint-Domingue whose son later used parts of his life in novels.

ANSWER: Thomas-Alexandre Dumas [or Thomas-Alexandre Davy de la Pailleterie]

[10] Dumas was called the Horatius Cocles of the Tyrol by this French commander, who later became emperor.

ANSWER: Napoleon Bonaparte [or Napoleon I]

[10] Dumas and Napoleon did not get along, especially during Dumas's time leading the cavalry during the failed expedition in this country, which started with a 1798 invasion and ended in failure in 1801. Dumas's attempted journey back to France from this country led to his imprisonment in Italy.

ANSWER: Arab Republic of Egypt [or Jumhuriyat Misr al-Arabiyyah]