

TOSSUPS

1. A famous dramatist and translator of this language advocated its classical forms in the “Epistle on Poetry.” This language’s syntax and paragraph structures, though *not* this language itself, were used to write the innovative story “Poor Liza.” The “Apologia of a Madman” was written in this language by a man imprisoned as “clinically insane” because he had published his vituperative “First Philosophical Letter” in 1836. This language, used in the letter that sparked the Chaadaev Affair, is used in a paragraph that describes Genoa and Lucca as the “family estates” of the Antichrist. This language appears in the opening paragraph of *War and Peace* because it was the language of the *literati* in St. Petersburg. For 10 points, name this language spoken by the Russian elite and by the invading commander in *War and Peace*, Napoleon Bonaparte.

ANSWER: **French** [or le **français**]

2. A mythological text titled for one of these animals ends with Fer Loga traveling through Áth Luain after requesting that the women of Emain Macha (AH-mahn MAH-kah) sing to him every evening for a whole year. In that text titled for one of these animals, Conall Cernach throws Ánluan’s severed head at Cet mac Matach (KET mac MAH-tahk) during a dispute over the champion’s portion at a feast hosted by Mac Da Thó. Another of these animals, which poisons Menw fab Teirgwaedd (MEN-oo fob TEER-gwide) after he steals one of its hairs, is actually the transformed son of Taredd Wledig. Ysbaddaden (ISS-buh-DAH-den) claims that cutting his hair requires obtaining the comb and scissors that lie between the ears of that one of these animals, which leads to King Arthur and his knights hunting it on behalf of Culhwch (kul-HUUK). For 10 points, name these animals that include Twrch Trwyth (TURK TROO-ith) and an “Erymanthian” one captured by Heracles.

ANSWER: **pigs** [or **boars**; accept *Tale of Mac Da Thó’s* **Pig** or Erymanthian **Boar**]

3. Part Two of a film titled for this character opens with a series of chaotic shots of wolves, bears, and boars trampling through undergrowth, followed by shots of stampeding horses on a plain. In that film, this character crawls through a field picking flowers that he weaves into a necklace for himself, which he starts to eat in the next scene. Juri Jarvet (YOO-ree YAR-vet) played this character in the final film directed by Grigori Kozintsev. A controversial 1971 film titled for this character was directed by Peter Brook. Norman Mailer plays himself and Woody Allen plays Mr. Alien in a bizarre 1987 film titled for this character. In a 1985 film, a man in blue robes defiantly breaks a bundle of arrows after his brothers fail to do so, ruining a hands-on teaching moment planned by his warlord father, who is modeled on this character. For 10 points, name this Shakespeare character, the model for Hidetora Ichimonji in Akira Kurosawa’s *Ran* (RAHN), who foolishly abdicates and divides his kingdom among his children.

ANSWER: King **Lear**

4. This technique can be used to determine the oxygen environment of hepta-valent neptunium compounds, in particular whether oxygen ligands are bridging or not. Compounds that can be analyzed with this technique can have their vibrational energy levels probed with N·R·V·S. Spectra in this technique typically consist entirely of a doublet or sextet. The source for this technique must be moved to prevent it from being monochromatic, which is why shifts in this technique are measured in terms of millimeters per second. The most common source for this technique consists of a cobalt atom whose decay eventually emits a 14.4 kilo-electron-volt ray. Like NMR, this technique obtains information about the nucleus, as information about oxidation state and spin state can be obtained from the isomer shift and quadrupole splitting. For 10 points name this form of spectroscopy primarily used to study compounds containing iron-57, which relies on the recoil-free absorption of gamma rays.

ANSWER: **Mössbauer** spectroscopy

5. Many details about the religion of these people were compiled by Sebastian Englert, a German Capuchin missionary who was dubbed their “uncrowned king” during his 30 years stay among them. An artifact with apparent religious significance to them is known as the “Stolen Friend.” These people left the mythical island of Hiva after Hotu Matu’a sent seven explorers to discover a more fertile home. Leaders of these people could gain prestige by picking representatives who would swim to an island, climb a cliff, and retrieve the first egg of the sooty tern. That ritual was part of a cult religion which was named for tangata manu, or the “birdman.” According to one theory, their undeciphered script is a pictographic representation of their creation by the god Makemake (mah-kay-mah-kay). After death, important leaders of these people were deified and depictions of them were sculpted out of volcanic rock and placed facing the sea on stone platforms called ahu. For 10 points, name these people who sculpted massive stone heads called Moai.

ANSWER: **Easter Islanders** [or **Rapa nui**]

6. This house consolidated control over the Holy Roman Empire at the Battle of Mühldorf; it later issued the Declaration of Rhense, disavowing the need for papal approval of the elected emperor. The first Holy Roman Emperor from this house sheltered Marsilius of Padua and William of Ockham, who constructed a theory of imperial supremacy to spite his enemy, Pope John XXII. A French queen from this house held the “Ball of Burning Men” and attended the signing of the Treaty of Troyes for her insane husband, Charles VI. Joseph II seized on the 1778 death of a member of this house to occupy their territory, only to be forced to withdraw by Frederick the Great in the Treaty of Teschen. Charles XII of Sweden came from a minor branch of this house, which built Neuschwanstein (noy-SHVAHN-styne) Castle and patronized Richard Wagner under King Ludwig II. For 10 points, name this German royal house that, from 1180 to 1918, ruled Bavaria.

ANSWER: House of **Wittelsbach** (“VITTLES-Bach”)

7. Colin Campbell argued that the “spirit” of this activity originates from 19th-century Romanticism. Increases in this activity are leading to a global crisis according to a book about its “shadows” by Peter Dauvergne (doh-vern). Racial disparities in this practice were explained economically in a study by Charles, Hurst, and Roussanov. The third and longest chapter of Sidney Mintz’s *Sweetness and Power* analyzes the changes in this activity among the working class in the Victorian United Kingdom. Daniel Miller applied his work from the Global Denim Project to a study of this practice “and its consequences.” In economics, a function explaining this activity is the subject of the life-cycle and permanent income hypotheses. Gambling is analyzed as a form of this practice in “The Belief in Luck,” a chapter of a book that attributes it to “pecuniary emulation.” For 10 points, name this practice of capitalist societies whose “conspicuous” variant was described by Thorstein Veblen.

ANSWER: **consumption** [or conspicuous **consumption**; or **consumerism**; or word forms]

8. In an essay by Sigmund Freud, this state is characterized by a cleavage between the critical ego and the ego altered by identification, which is caused by the withdrawing of free libido from an object into the ego. In that essay, a person in this title state can “know *whom*” but not “*what*” is its cause, the presence of unconscious elements serving to distinguish it from its title counterpart. James Boswell quoted Samuel Johnson remarking that “the only book that ever took him out of bed two hours sooner than he wished to rise” was a Renaissance treatise on this subject by the pseudonymous Democritus Junior. A poem about this condition argues that its personification is “only seen of him whose strenuous tongue can burst Joy’s grape against his palate fine.” In theories of the humors, this malady is caused by an excess of “black bile.” For 10 points, name this condition, the subject of an *Anatomy* by Robert Burton and an ode beginning “No, no, go not to Lethe,” written by John Keats.

ANSWER: **melancholy** [or **melancholia**; or **Melancholie**; do not accept wrong answers such as “sadness” and “depression”]

9. Alpha tubulin undergoes a post-translational modification in which chains containing four to six of this molecule are added near its C-terminus. In plants, algae, and bacteria, the starting point for porphyrin biosynthesis is the production of amino-levu-lin-ic acid from this molecule. Flux through the urea cycle is regulated by allosteric activation of CPS I by an N-acetyl derivative of this molecule. Vitamin K causes many proteins in the clotting pathway to undergo carboxylation at these residues. One of this compound's receptors is blocked by a magnesium atom which must be displaced for long-term potentiation to occur. A PLP-dependent enzyme decarboxylates this molecule to form the inhibitory neurotransmitter GABA ("gabba"). For 10 points, name this amino acid whose mono-sodium salt is responsible for the flavor of umami.

ANSWER: glutamate [or Glu; or E]

10. One member of this family argued that stereochemistry proved the persistence of consciousness, somehow, in *The Physical Basis of Immortality*. That first ordained female minister in the United States critiqued Darwin in *The Sexes Throughout Nature*. Another member of this family obtained a letter of introduction from William Lloyd Garrison to his future wife, with whom he founded the *Woman's Journal*. That man read out a six-point protest against coverture law during his wedding to Lucy Stone, who became the first American wife to keep her maiden name. The most famous member of this family helped found a London institution with the leader of the "Seven Against Edinburgh," Sophia Jex-Blake, after starting her career thanks to the entire student body of Geneva College voting ironically. For 10 points, name this family of reformers that included the first woman to graduate from medical school, Elizabeth.

ANSWER: Blackwell family

11. This essay argues that from the perspective of the intellect, sin has no essence, but is "diminution or less," whereas the conscience feels sin "as essence," viewing it as "pravity or bad." This essay identifies the Fall of Man with the "unhappy...discovery we have made, that we exist." Denying the possibility of access to objective reality, this essay analogizes people to "colored and distorting lenses" that "we have no means of correcting...or of computing the amount of their errors." This essay lists "Illusion, Temperament, Succession, Surface, Surprise, Reality, Subjectiveness" as the "lords of life." The oft-quoted aphorism "We live amid surfaces, and the true art of life is to skate well on them" appears in this essay. This essay's author writes, "I grieve that grief can teach me nothing," after remarking, on a rare autobiographical note, that his son died over two years ago. For 10 points, name this essay by Ralph Waldo Emerson about the disappointments of the title phenomenon.

ANSWER: "Experience"

12. A bureaucrat from this country forges a manuscript about a 17th-century timekeeper to justify the title government agency in the satirical novel *The Time Regulation Institute*. In an allegorical novel from this country by the author of *The Forty Rules of Love*, Auntie Banu summons the djinns "Mr. Bitter" and "Mr. Sweet" to uncover her sister's incestuous rape. Another author from this country wrote a quartet about a bandit nicknamed "the Slim," who kills the feudal landlord Abdi only after losing his love Hache in a book followed by *They Burn the Thistles*. A more famous author from this country wrote about the failed siege of Doppio in a novel about a slave of the weapon-building Hoja, and described the death of Ruya at the end of a novel about Galip taking over the life of Celal. For 10 points, name this country that has enforced Article 301 against several of its own authors, most famously the author of *The White Castle* and *The Black Book*, Orhan Pamuk.

ANSWER: Republic of Turkey [or Türkiye Cumhuriyeti] [the unnamed novels are *The Bastard of Istanbul* by Elif Safak and *Memed, my Hawk* by Yasar Kemal]

13. This scientist names a phenomenon that has only been detected in Tololo-1247-232, Haro 11, and a handful of “green pea” galaxies. Himiko, a gaseous cloud half the diameter of the Milky Way that is the most massive structure known to have existed in the early universe, belongs to a class of objects named for this scientist. He also names a technique that enables the identification of star-forming galaxies with redshifts around z equals three based on the suppression of radiation at wavelengths shorter than 91.2 nanometers. At redshifts greater than z equals six, there is enough neutral hydrogen in the intergalactic medium to cause quasar emission spectra to exhibit a Gunn-Peterson trough rather than this scientist’s namesake “alpha forest.” For 10 points, identify this scientist whose namesake series is generated by electrons transitioning to the lowest energy level of the hydrogen atom.

ANSWER: Theodore **Lyman** [or **Lyman** continuum leakage; or **Lyman**-alpha blobs; or **Lyman** break technique; or **Lyman**-alpha forest; or **Lyman** series]

14. A woman who poisoned her neighbor was held to have standing to challenge the Chemical Warfare Act as violating this amendment in *Bond v. United States*. Between 1976 and 1985, this amendment was applied under the “traditional governmental functions” test, but that test was not replaced when *National League of Cities v. Usery* was overturned by *Garcia v. San Antonio MTA*. Parts of the Brady Bill that required local law enforcement to run background checks were invalidated as examples of “commandeering” that violated this amendment. James Madison opposed efforts to add the word “expressly” as an adjective describing delegated power in this amendment. This amendment states that the “powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.” For 10 points, name this last amendment of the Bill of Rights.

ANSWER: **10th** Amendment

15. Anton Reicha (RYE-kah) included eight fugues in a bizarre twelve-movement piece in this genre labeled “scientifique.” In a piece in this genre, the dynamic marking *mezza voce* dominates an A-flat major movement marked *Affettuoso e sostenuto* followed by a heavily syncopated *Presto* finale in the home key of E-flat. Six of Mozart’s early pieces in this genre follow the circle of fifths beginning with D major, then G major. The finale of Michael Haydn’s Symphony No. 23 in D major had a strong influence on the finale of a later G major composition in this genre by Mozart. Schubert quoted from his own lied (LEET) “Der Erlkönig” (dair AIRL-ker-nish) in the D minor tarantella concluding one of his pieces in this genre. Mozart’s Opus 10 consists of six pieces in this genre, including ones nicknamed “Dissonance” and “Spring,” and was dedicated to the composer of the “Erdödy” (AIR-der-dee) and “Sun” ones, Joseph Haydn. For 10 points, name this genre of pieces played by an ensemble consisting of two violins, a viola, and a cello.

ANSWER: **string quartets** [prompt on **quartets**]

16. This faction commissioned Stephen College to make effigies that it lit in bonfires organized by the Green Ribbon Club. This faction, whose use of crowds may have been the first instance of the term *mobile vulgus* becoming “mob,” especially reviled Lord Danby. Martyrs from this faction included the author of *Discourses on Government*, Algernon Sidney. This faction corresponded to the “Petitioners” during a crisis in which they nicknamed their opponents the “Abhorrers,” after Irish cattle thieves. This faction’s leader, the 1st Earl of Shaftesbury, engineered the Exclusion Crisis to exclude the Duke of York from succession in the aftermath of the Popish Plot. Several of this faction’s leaders were implicated in the Rye House Plot, which sought to kill Charles II and their nemesis James II. For 10 points, name this 17th-century faction of Protestant anti-monarchist Parliamentarians that opposed the Tories.

ANSWER: the **Whigs** [or the **Petitioners** until it is read]

17. In a set of five variations on this painting, the words “EAT,” “DIE,” “HUG,” and “ERR” encircle its central image superimposed on a red star. Robert Indiana titled a series for the “American dream” of the artist of this painting, who inscribed the words “Art Co.” on its right edge. This painting’s artist imitated sculptural depth by incising graphite ink into Upsom wallboard material used in advertising. This painting is one of a series of eight “poster portraits” its artist created of important figures in the 1920s, including Arthur Dove and Georgia O’Keeffe. It depicts a visit by its subject to Marsden Hartley’s apartment using criss-crossing diagonal shards to represent motion. The word “BILL” is written in billboard font on the top of this painting, which depicts a bar with two blaring sirens on the bottom of a figurative representation of a fire truck that inspired a poem by its subject. For 10 points, name this William Carlos Williams-inspired painting by Charles Demuth, which depicts its title number three times.

ANSWER: **I Saw the Figure Five in Gold** [or *The **Figure Five in Gold***]

18. This poem’s speaker compares a skittish animal to “one who takes everything said as personal to himself.” This poem is set among “tall slim trees too much alike to mark or name a place by so as to say for certain I was here or somewhere else.” This poem’s speaker encounters a bird who would “say no word to tell me who he was who was so foolish as to think what *he* thought,” fearing the speaker wants the white feather in his tail. Contemplating this poem’s title object, the speaker says “I thought that only someone who lived in turning to fresh tasks could so forget his handiwork on which he spent himself.” This poem, the penultimate entry in *North of Boston*, ends with the image of “the slow smokeless burning of decay.” For 10 points, name this Robert Frost poem in which the narrator “out walking in the frozen swamp” discovers the title mass, an abandoned “cord of maple.”

ANSWER: “The **Wood-Pile**”

19. According to legend, after this man was dismembered, his body parts were put together and buried by a woman named Azalea. This man granted honorary citizenship to soldiers in the Polish Legions who had switched to his side, who were the ancestors of the modern Polish population of Cazale. After holding the fort of Crete-a-Pierrot for weeks, this man surrendered and forced his former ally into exile on the ship *Heros*. By restoring that ally’s *fermage* forced labor system, and refusing to create a nobility, this man alienated the *gens de couleur* (zhens deh coh-LOOR) elite, who supported the insurrection of Alexandre Pétion (PAY-tee-on). He chose an Arawak word meaning “place in the mountains,” and a flag featuring a palm with a liberty cap, for the nation whose independence he declared. European nations embargoed his country after he ordered an 1804 massacre of the whites on Saint-Domingue (sahnt-doh-MAHNG). For 10 points, name this first Emperor of Haiti.

ANSWER: Jean-Jacques **Dessalines** [or Emperor **Jacques I**]

20. The combination of this phenomenon and the Jahn-Teller effect is responsible for the exotic behavior of the half-metal L·S·M·O. Axel Becke’s gradient-corrected approximation to the energy of this phenomenon is used in the B·3·L·Y·P hybrid functional. The reference layer in the read head of a hard drive is pinned at the point of maximum sensitivity on its hysteresis curve by this phenomenon’s namesake “bias.” The spin-statistics theorem classifies particles as bosons or fermions based on whether their wavefunctions are symmetric or antisymmetric with respect to this phenomenon. It is combined with electron correlation to define a namesake energy in the expression for the Kohn-Sham potential. For 10 points, name this quantum mechanical interaction between identical particles that manifests as a coupling between nearest neighbor spins in lattice models of magnetic systems, where it is denoted by a capital letter J.

ANSWER: **exchange** interaction [or **exchange** mechanism; or double **exchange**; or **exchange** bias; or **exchange** anisotropy; or **exchange**-correlation energy]

TB. During this war, a photograph of a screaming mother, the “Madonna of Bentalha,” was taken after a massacre that may have been one of many false-flag operations committed by O·J·A·L and O·S·S·R·A. This war was prolonged by the rejection of the Sant’Egidio platform by the hardline “eradicator” faction of the army. The hostility of the unemployed *hittistes* to the Westernized *chi-chis* was a major cause of this war. This war began when a military coup installed Mohamed Boudiaf after deposing Chadli Bendjedid, in response to elections that went well for the Islamic Salvation Front. Veterans from the Afghani jihad formed the brutal GIA in this decade-long conflict with over 200,000 casualties. For 10 points, name this war between Islamist insurgencies and the FLN in a former French colony in Africa.

ANSWER: **Algerian Civil** War

1. In Thomas Mofolo's most famous novel, this man is corrupted by the sorcerer Isanusi. For 10 points each:

[10] Name this historical figure who is also the subject of an epic poem passed down through oral tradition and compiled by Mazisi Kunene.

ANSWER: **Shaka** Zulu [or **Chaka**]

[10] Kunene wrote in Zulu and translated his own works into English, similar to how this Kenyan author of *Petals of Blood* wrote *Wizard of the Crow* and other late works in Kikuyu before translating them into English.

ANSWER: **Ngugi** wa Thiong'o

[10] This author attempted to preserve his Sotho dialect by publishing *Sechuana Proverbs and Their European Equivalents*. He also wrote about Zulu conquest in his novel *Mhudi: An Epic of Native Life a Hundred Years Ago*.

ANSWER: Sol **Plaatje** [or Solomon Thekisho **Plaatje**]

2. Plots of these two quantities contain yield strength, ultimate tensile strength, and rupture points. For 10 points each:

[10] Name these two second-order tensor quantities for which Hooke's law is the constitutive relation in the case of materials exhibiting linear elasticity. Young's modulus is the ratio of these two quantities along a given elastic axis.

ANSWER: **stress** and **strain** [either order is acceptable]

[10] On a ductile stress-strain curve, this process occurs beyond the ultimate tensile strength after the end of strain hardening. In this process, the localization of strain leads to elongation and a decrease in local cross-sectional area.

ANSWER: **necking**

[10] Stress and strain can each be written as the sum of a volumetric tensor and a traceless tensor that has this name. According to the von Mises criterion, yielding begins at a critical value of the second stress invariant with this name.

ANSWER: **deviatoric**

3. This writer's novella *The Princess with the Golden Hair* was included in his collection *Memoirs of Hecate County*, which was banned in the U.S. for thirteen years. For 10 points each:

[10] Name this writer who prepared F. Scott Fitzgerald's *The Last Tycoon* for posthumous publication. He is better known for such books of literary criticism as *Axel's Castle* and *Patriotic Gore*.

ANSWER: Edmund **Wilson**

[10] Wilson publicly feuded with his friend Vladimir Nabokov over Nabokov's English translation of this verse novel about a bored aristocrat who rejects but later falls in love with Tatyana Larina.

ANSWER: **Eugene Onegin** [or **Yevgeny Onegin**]

[10] Nabokov's hatred of Germans extended into the literary sphere, and he viciously attacked this German translator's Bollingen Prize-winning rendering of *Eugene Onegin*, which Wilson subsequently defended. He is also known for his meter- and rhyme-preserving translation of both parts of *Faust*.

ANSWER: Walter **Arndt**

4. This book questionably asserts that Norman colonization of Southern Italy created enduring feudal folkways that allowed the Mafia to rise in the 20th century. For 10 points each:

[10] Name this book analyzing "civic culture" in regional Italian governments, which concludes that high levels of engagement and "social capital" enable institutional success.

ANSWER: ***Making Democracy Work: Civic Traditions in Modern Italy***

[10] *Making Democracy Work* is a Gladwellian book by this political scientist, who analyzed declining social capital in the United States in *Bowling Alone*.

ANSWER: Robert **Putnam**

[10] Taking its title from Alexis de Tocqueville, this book by Robert Bellah et al. uses hundreds of interviews to argue that individualism, embedded in American language, endangers coherent discussion of a common good.

ANSWER: ***Habits of the Heart: Individualism and Commitment in American Life***

5. This branch of geometric topology was pioneered by John Milnor, who discussed it in papers that constructed the first set of exotic spheres. For 10 points each:

[10] Identify this discipline of generating manifolds from well-defined topological sets using a namesake technique. In this discipline, a technique named after Max Dehn builds 3-manifolds.

ANSWER: **surgery** theory [or word forms, such as **surgical** theory]

[10] Exotic spheres built from surgery have this property with respect to normal spheres, but not a similar one that applies to infinitely differentiable manifolds. A topology has this property with respect to another topology if a continuous function and its inverse exists between the two topologies.

ANSWER: **homeomorphism** [or **topological isomorphism**; prompt on **isomorphism**; do not accept “diffeomorphism” or “homomorphism”]

[10] Surgery theory is most often used to classify manifolds with this property. This kind of manifold has n th order derivatives that exist for all C^N , where n goes to infinity.

ANSWER: **smoothness** [or **smooth** manifolds]

6. This man staged A. J. Conway’s dramatization of *Uncle Tom’s Cabin*, which created the character Penetrator Partyside and added a happy ending. For 10 points each:

[10] Name this pro-temperance lecturer who, in the 1870s, served as mayor of Bridgeport, Connecticut, the site of his estate “Iranistan.”

ANSWER: Phineas Taylor **Barnum**

[10] As a Connecticut state senator, Barnum introduced the 1879 law banning contraceptives that was overturned by this 1965 Supreme Court case in which Justice O. Douglas found a right to privacy in the “penumbras” and “emanations” of the Constitution.

ANSWER: **Griswold** v. *Connecticut*

[10] Barnum was also responsible for arranging the blockbuster American tour of this Swedish opera singer, who was known as the Swedish Nightingale.

ANSWER: Jenny **Lind** [or Johanna Maria **Lind**]

7. For 10 points each, answer the following about Cuba in classical music.

[10] This classically trained Cuban pianist and child prodigy composed the zarzuela *Maria la O*. His *Suite Andaluca* for piano concludes with a perennially arranged and performed *Malagueña*.

ANSWER: Ernesto **Lecuona**

[10] This American composer’s visit to Havana inspired his *Cuban Overture*. His other travel-inspired works include the symphonic poem *An American in Paris*.

ANSWER: George **Gershwin**

[10] While staying in Havana, this 19th-century American pianist from New Orleans wrote and premiered the first part of his Symphony No. 1 “Night in the Tropics.” His piano pieces inspired by Creole music include *Bamboula*.

ANSWER: Louis Moreau **Gottschalk**

8. Sometimes, coups don’t work out. Answer the following about that, for 10 points each.

[10] The withdrawal of planned air support for Brigade 2506 led to the failure of this 1961 attempt to overthrow Fidel Castro, which humbled the administration of John F. Kennedy.

ANSWER: **Bay of Pigs** Invasion [or Invasion of **Playa de Giron**]

[10] In 2004, Sir Mark Thatcher was convicted of financing the “Wonga Coup,” an attempt by Simon Mann to use former apartheid regime mercenaries to overthrow Teodoro Obiang in this oil-rich African country.

ANSWER: **Equatorial Guinea** [do not accept or prompt on any other Guinea]

[10] In 1981, Mike Hoare’s mercenaries, disguised as the “Ancient Order of Froth Blowers,” failed to overthrow the France-Albert Rene government in this country after one of Hoare’s men accidentally declared for customs, revealing their hidden AK-47s.

ANSWER: Republic of **Seychelles**

9. Guys. It's time for reverse game theory. For 10 points each:

[10] This result in what is often called reverse game theory states that no bilateral trading system can ensure that two parties with private valuations for a good will come to a mutually agreeable price even when it exists.

ANSWER: **Myerson-Satterthwaite** theorem

[10] The Myerson-Satterthwaite result challenges the relevance of this economic theorem, which holds that under conditions of public information, bargaining agents will come to a welfare-maximizing agreement. It is based on the paper "The Problem of Social Cost."

ANSWER: **Coase** theorem

[10] The Myerson-Satterthwaite theorem is a result in this economics subfield, which is also called "reverse game theory." Leonard Hurwicz, Eric Maskin, and Roger Myerson won the 2007 Nobel Prize for work in this field.

ANSWER: **mechanism design**

10. Name some jazz saxophonists who have benefited from intersections of jazz and popular music, for 10 points each.

[10] This musician, who experimented with "sheets of sound" on his album *Giant Steps*, borrowed a popular melody from *The Sound of Music* for his crossover hit "My Favorite Things."

ANSWER: John **Coltrane**

[10] This saxophonist, who led the fusion band Weather Report with Joe Zawinul, expanded his audience by collaborating frequently with Joni Mitchell and appearing on Norah Jones' recent album *Day Breaks*.

ANSWER: Wayne **Shorter**

[10] This tenor saxophonist released his 2015 debut *The Epic* after touring with Lauryn Hill and featuring on several tracks of Kendrick Lamar's album *To Pimp a Butterfly*.

ANSWER: Kamasi **Washington**

11. Colley Cibber was renowned for his portrayals of this type of character, such as Sir Novelty Fashion in his play *Love's Last Shift*. For 10 points each:

[10] Name this type of stock character from Restoration comedies. This term is sometimes embedded in the names of characters who exemplify it, such as the title character of George Etherege's *The Man of Mode*.

ANSWER: **fop**

[10] Colley Cibber's foppish successes came at the cost of a literary feud with Alexander Pope, who lampooned Cibber in this mock-epic about the goddess Dulness.

ANSWER: *The* **Dunciad**

[10] Cibber won raves for his performance as Lord Foppington in a sequel to *Love's Last Shift* written by this other playwright. His other successes include *The Provoked Wife*.

ANSWER: John **Vanbrugh** (VAN-bruh)

12. This book contrasts its subject with what it calls "*egoisme a deux*," instead arguing that its four central characteristics are care, responsibility, respect, and knowledge. For 10 points each:

[10] Name this 1956 work of philosophy which argues that "the ability to be alone" and the ability to "know the other" are central to the title form of intimacy.

ANSWER: *The* **Art of Loving**

[10] *The Art of Loving* was written by this German psychoanalyst, who analyzed the psychological roots of Nazi totalitarianism in *Escape from Freedom*.

ANSWER: Erich **Fromm**

[10] This subject of Pope John Paul II's doctoral thesis argued that philosophy was the "love-determined movement of the inmost personal self." Criticizing his teacher Edmund Husserl's "bracketing" technique, this philosopher argued that intuition of consciousness required the suspension of "impulse," or *Drang* (drahng).

ANSWER: Max **Scheler** (SHAY-lur)

13. The most discussed poems in this book include a draft of “The Love Song of J. Alfred Prufrock” including a later-excised 38-line section in the middle and some ribald verses including “The Triumph of Bullshit.” For 10 points each:
[10] Name this book, first published in 1996 with annotations by Christopher Ricks, presenting transcriptions of many unpublished poems written from 1909-1917 during the formative phase of their author’s career.

ANSWER: **Inventions of the March Hare**

[10] The poems in *Inventions of the March Hare* were written by this American poet whose late output includes *Four Quartets*.

ANSWER: T. S. **Eliot** [or Thomas Stearns **Eliot**]

[10] *Inventions of the March Hare* includes many early drafts of poems published in *Prufrock and Other Observations*, such as this four-part poem with a musical title that concludes, “The worlds revolve like ancient women gathering fuel in vacant lots.”

ANSWER: “**Preludes**”

14. Dextran blue is used to measure the void volume in this technique. For 10 points each:

[10] Name this technique that can be used to separate a mixture of polymers based on their hydro-dynamic radii. Typically, larger molecules elute before smaller molecules in this technique.

ANSWER: **size-exclusion chromatography** [or **SEC**; or **gel-filtration chromatography**; or **GFC**; or **gel permeation chromatography**; or **GPC**; or **molecular sieve chromatography**]

[10] In these solvents, polymer chains behave like an ideal random walk that can intersect itself. These solvents have a Mark-Houwink (“mark” HOH-vink) coefficient of one-half.

ANSWER: **theta** solvents

[10] The Flory-Huggins theory can be used to calculate this value for the mixing of a polymer and a solvent. It is normally calculated as enthalpy minus the product of entropy and temperature.

ANSWER: **Gibbs free energy** [or **delta G**]

15. The largest extant offshoot of this movement is the Unity Church, which is known for its widely disseminated Daily Word inspirational messages. For 10 points each:

[10] Name this religious movement that was founded by Phineas Quimby in the late 19th century and which emphasized healing through mental concentration.

ANSWER: **New Thought** movement

[10] This author of *Science and Health with Key to the Scriptures* used her experience as a patient of Phineas Quimby to found Christian Science.

ANSWER: Mary Baker **Eddy**

[10] Phineas Quimby was himself a follower of this German physician, who taught that the gravitational attraction of the planets influenced an invisible fluid found in all humans.

ANSWER: Franz Anton **Mesmer**

16. The RAF and US Army Air Forces attempted to alleviate this event by organizing food drops termed Operation Manna and Operation Chowhound. For 10 points each:

[10] Name this massive famine that took place in German-occupied Netherlands at the end of World War II.

ANSWER: **Hongerwinter** (HON-ger-vin-ter) [or **hunger winter**; or **hungry winter**]

[10] The Allies had liberated the south of the Netherlands in the summer of 1944, but the north remained occupied because of the failure of this airborne operation that was stymied when the British lost at Arnhem.

ANSWER: Operation **Market Garden**

[10] During World War II, the Netherlands was led from exile by this queen, who gave inspirational radio broadcasts from London. She is the longest reigning monarch in Dutch history.

ANSWER: **Wilhelmina**

17. In contrast to their counterparts, which are built sequentially onto a ribose ring, biosynthesis of these compounds involves production of an orotic acid intermediate which is then appended to ribose. For 10 points each:

[10] Name this class of nitrogenous bases that contain a six-membered ring with nitrogens at the one and three positions. They include thymine, uracil, and cytosine.

ANSWER: **pyrimidines**

[10] The synthesis of thymine from uracil, catalyzed by thymidylate synthase, involves the donation of a methyl group from the activated methylene bridge of this cofactor. Regeneration of this cofactor by its reductase is targeted by the chemo-therapeutic metho-trexate.

ANSWER: tetra-hydro-**folate** [or di-hydro-**folate**; or methyl-ene-tetra-hydro-**folate**; or **folic acid**; or **vitamin B9**; or **THF**]

[10] Pyrimidine biosynthesis begins with the A-T-C-ase-catalyzed reaction of this compound with aspartate. This molecule reacts with ornithine to produce citrulline in the first step of the urea cycle and is synthesized from bicarbonate, ammonia, and ATP.

ANSWER: **carba-moyl phosphate** [or **carbamoyl-P**]

18. The title character of this painting commands five cherubim, one of whom seems to be an Indian and two of whom are operating some kind of flux capacitor. For 10 points each:

[10] Name this painting that appears on the cover of *The Portable Enlightenment Reader*. This painting depicts an old man in a heroic pose absorbing lightning into his palm while sitting on a pedestal in the clouds.

ANSWER: **Benjamin Franklin Drawing Electricity from the Sky**

[10] *Benjamin Franklin Drawing Electricity from the Sky* is an insane painting by this Anglo-American artist better known for creating the first history painting with subjects in contemporary dress, *The Death of General Wolfe*.

ANSWER: Benjamin **West**

[10] In this final major painting by West, lightning explodes out of the raised hands of the title character, who heads an army of demons against swooning victims in classical garb.

ANSWER: **Death on the Pale Horse** [or **Death on a Pale Horse**]

19. Erie, Pennsylvania bitterly resisted the standardization of this value because of the economic gain it received from forcing passengers to switch trains. For 10 points each:

[10] Name this value of the width between the rails of a train track, which in the UK caused a conflict won out by the “standard” 4 feet 8.5 inches advocated by George Stephenson.

ANSWER: railway **gauge**

[10] The losing broad gauge was championed by Isambard Kingdom Brunel, whose crowning achievement may have been this steamship that would be unsurpassed in size for 40 years. It had a disastrous maiden voyage but laid the first successful Transatlantic Cable.

ANSWER: The **Great Eastern**

[10] The British railroad system was finally nationalized in 1948 under this Labour Prime Minister, who led the UK after World War II.

ANSWER: Clement **Attlee**

20. Name some things about Mexican celebrations, for 10 points each.

[10] Music for the traditional “jarabe” (ha-ra-bay) dance is usually played by one of these string and vocal ensembles, whose members often wear matching ornamental clothes and large sombreros.

ANSWER: **mariachi** band

[10] In Oaxaca (wuh-HAH-kuh), wedding guests often drink this beverage which is sometimes poured on the ground in the shape of a cross. Unlike tequila, which is made by fermenting blue agave plants, this beverage is made by fermenting any other kind of agave plant.

ANSWER: **mescal** [or **mezcal**]

[10] In this Mexican custom held just before Christmas, representations of Mary and Joseph proceed through the town with candles and knock on doors before joining a town-wide party.

ANSWER: Las **Posadas**