



ACADEMIC COMPETITION FEDERATION

2014 ACF NATIONALS
PACKET 1 BY THE EDITORS

TOSSUPS

1. This god was often honored in a ceremony in which men hung captives over bronze cauldrons, priestesses slit their throats, and the contents of the cauldrons were tossed into lakes. An antidote charm mentions how this god used nine “glory-twigs” to smite a serpent into nine parts. This god’s wife once tricked him by turning their bed 180 degrees, so that he faced a group of women with hair combed over their faces, thereby taking advantage of his promise to grant victory to the first people he saw when he awoke, which happened to be those “longbeards.” This ancestor of Hengist and Horsa lives in a namesake weather-telling mountain, which is the start and end point of a ceremony in which he leads a team of ghosts in pursuit of animals or women. Tacitus identified Mercury with this god, since they both wore winged helmets and served as psychopomps. This god, who came to prominence at the expense of Tyr, names the third day of the week. For 10 points, name this Germanic equivalent of the head of the Norse pantheon.

ANSWER: WOTAN [or WODEN; or WOTANAZ; accept ODIN, though none of the clues are about the Norse Odin, but he’s basically the same god]

2. The zinc phosphodiesterase-encoding gene ELAC2 was the first hereditary gene linked to this disease to be identified. The gene encoding glutathione S-transferase placental enzyme 1 is hypermethylated in most patients with this disease. Patrick Walsh invented a “radical” surgical procedure to excise the lymph nodes and the affected organ of this disease. A two-level system for scoring the aggressiveness of this disease was developed by Donald Gleason. Cells affected by this disease are generally devoid of zinc, allowing them to divert ATP normally used to produce citrate to instead grow. In a false positive for this adenocarcinoma known as BPH, as well as in this disease itself, the serum levels of a kallikrein-related peptidase are elevated. Recently, the U.S. Preventive Services Task Force concluded that overdiagnosis of this cancer resulted from screening with its namesake “specific antigen.” For 10 points, name this cancer of a reproductive gland common in older men, often diagnosed with a rectal exam.

ANSWER: PROSTATE CANCER [or PROSTATE ADENOCARCINOMA; just PROSTATE fine after adenocarcinoma is read; generously prompt on CANCER]

3. This character compliments the disgusting manners of children pretentiously named Themistoclus and Alkides, and he later visits a house where all the furniture somehow shares the owner’s resemblance to a medium-sized bear. Nabokov claimed this character’s symbolic association with his snuffbox and traveling chest exemplify the idea of “poshlust.” A meeting held to determine his identity is sidetracked by the postmaster’s long, idiotic story about his resemblance to a soldier who lost an arm and a leg. This character leaves the town of N. in a mad rush, in a scene that compares his country to a carriage that is always racing forward but will not stop to think where it’s racing to. This character escapes from prison at the end of the novel after being caught forging an old widow’s will, and earlier he is mistaken for Captain Kopeikin after swindling Madame Korobochka and Manilov, before his scheme is exposed by the pathological liar Nozdryov. For 10 points, name this trickster who attempts to buy deceased serfs in Gogol’s *Dead Souls*.

ANSWER: Pavel Ivanovich CHICHIKOV [prompt on “Pavel”]

4. A royal member of this house was accused of having a gay affair with Kurt Haijby, to the exclusion of his wife, Victoria of Baden, and was involved in the Midsummer Crisis. Another member of this family had a personal masseuse named Felix Kersten who assisted him, and then feuded with him, over the “White Buses” operation. The founding member of this royal house was the first Prince of Pontecorvo, who reigned before the son of Joachim Murat, but he exchanged that title for the “Guadeloupe Fund,” which continued to be paid to members of this house by the British until 1983. The previous man with this surname was replaced by Ralph Bunche, after he was assassinated by the Stern Gang in 1948. This royal house included

two kings named Oscar and the Napoleonic marshal who ruled as Charles XIV John. For 10 points, name this current ruling house of Sweden, which provides the surname of the diplomat Count Folke.

ANSWER: BERNADOTTE

5. This artist used an oilcloth stamped with a chair-caning pattern in a work painted on an oval canvas that includes a folded piece of paper inscribed with the three letters “JOU,” which might refer to the word “journal” or to the verb “to play.” This artist’s painting *The Accordionist* was mistaken for a landscape since it had “Ceret” written on the back, and he showed his mistress Marcelle Humbert strumming the guitar in his portrait titled after the refrain of a popular song, *Ma Jolie*. This artist sculpted the bronze bust *Head of Woman* after painting more than sixty portraits of its model, Fernande de Olivier, and he created the first intentional collage in his *Still Life with Chair Caning*. In this artist’s most famous portrait, he decided to model the sitter’s head on Iberian masks after making her pose ninety times in a brown, broken armchair. This artist did notable portraits of Daniel-Henry Kahnweiler and Suzanne Bloch. For 10 points, name this Spanish artist who did a 1906 portrait of Gertrude Stein and pioneered synthetic cubism with Braque.

ANSWER: Pablo PICASSO

6. According to Daniel Katz, these entities have four functions which he refers to as ego-expressive, ego-defensive, adaptive, and providing-knowledge. The way in which these entities form and the process by which they change was described by Richard Petty and John Cacioppo, in the Elaboration Likelihood Model. That model suggests that stable examples of these things are formed by the central route, whereas impermanent ones result from the peripheral route of elaboration. Richard LaPiere drove across the country with a Chinese couple visiting hotels and restaurants in order to observe how the actions of people contrasted with these constructs. The ABC model of them holds that they contain affective, behavioral, and cognitive components, and they can be changed by the process of persuasion. For 10 points, give this psychological term which refers to the beliefs that people have about some object.

ANSWER: ATTITUDES [prompt on “beliefs” or other reasonable synonyms]

7. This binary operation can be applied to a Sobel kernel and a target image to carry out edge detection in image processing. For a linear, time-invariant system, the response can be entirely characterized by performing this operation on the input and the impulse, or the Dirac delta function. An important theorem regarding this operation states that the Fourier transform of the result of this operation’s application to two functions is equal to the product of the Fourier transforms of the two functions. For two functions f and g , this operation is defined as the integral over some interval for the product of f of τ and g of t minus τ with respect to τ . For 10 points, identify this operation, usually symbolized with an asterisk, which measures the overlap of two functions as they are shifted over one another.

ANSWER: CONVOLUTION

8. A character hides at this location in a novel by disguising himself with blue body paint and wearing a sign inscribed “Sick Arab — but harmless when not out of his head.” The narrator of another book claims, “When I find a well-drawn character in fiction or biography I generally take a warm personal interest in him” because he had “met him” before at this place. T. S. Eliot’s phrase “a strong brown god” whose “rhythm was present in the nursery bedroom” is often co-opted to describe it since Eliot grew up nearby, and it was the subject of the first book ever written on a typewriter, which begins with the narrator’s apprenticeship under Horace Bixby. While traveling here, an author met Captain Isaiah Sellers, who wrote articles under a pen name that the author stole for himself. In a novel, this geographical feature is the setting of the protagonist’s first meeting with two men who claim to be a duke and the lost French dauphin, and it titles a memoir that describes the author training as a “cub pilot” on a steamboat after leaving his hometown of Hannibal, Missouri. For 10 points, name this American waterway which Mark Twain wrote about in an 1883 memoir about “Life on” it.

ANSWER: MISSISSIPPI River

9. This man aided his conquests by using Friar Victorio Riccio as an envoy to demand tribute, but tribute was refused and the areas of Ternate and Zamboanga were evacuated. In another incident, he tried to force the missionary Antonius Hambroek to demand the surrender of governor Frederik Coyet, but instead Hambroek gave a speech compelling the people of God to resist this man, and was executed. That led to this man’s successful siege of Fort Zeelandia, after which he forced a treaty and became ruler of the Kingdom of Tungning. An honorary surname was bestowed on him by the Longwu Emperor. Although

his father sided with the Shunzhi Emperor, this man used the island of Formosa as a base to continue fighting the Manchu army. He was the son of the pirate Zheng Zilong and Lady Tazawa, a mysterious Japanese woman. For 10 points, name this Chinese general who resisted the Qing Dynasty after it conquered the Ming, and whose battles were written about by Chikamatsu.

ANSWER: COXINGA [or ZHENG Chenggong before “Zheng”, or alternate spellings: Guoxingye, Kuesing, Koxinga]

10. At its founding, this institution purchased the collection of Leander Van Ess. Its graduates include Allen Wright, the chief of the Choctaw tribe who named the territory of Oklahoma. Several societies were established here by Phillip Schaff, and Albert Einstein’s article “Science and Religion” was published in this school’s paper. Its prominent leaders have included Henry Van Dusen, Roger Shinn, and its first female president is the incumbent, Serene Jones. This institution’s Burke Library houses the collection of David McAlpin. It became independent from the Presbyterian General Assembly in 1893 when professor Charles Briggs was suspended by the Presbyterian Church. In the years between 1928 and 1933, this institution invited Reinhold Niebuhr, Dietrich Bonhoeffer, and Paul Tillich to study at its halls. Known for promoting black liberation theology and feminist theology, this school founded a settlement house in East Harlem. For 10 points, name this independent seminary which is affiliated with Columbia University.

ANSWER: UNION THEOLOGICAL Seminary [or UTS]

11. Jan van Hooff analyzed how the “relaxed open-mouth display” in chimps evolved into this type of face to signal mock-aggression rather than a real fight. A story offered as an example of this concept describes prison guards who allow a convict to play cards with them, but, when they catch him cheating, kick him out of prison. An essay claims that this action arises when one sees machine-like movement in the human body and argues that it operates as a “social reaction which punishes” and corrects deviant behavior. Another essay argues that this phenomenon releases nervous energy in safe physical movements that “have no object,” and an examination of “Der Witz” argues that it releases the psychic energy of repressed emotions. Schopenhauer defined it as “the sudden perception of the incongruity between a concept and the real objects,” and Herbert Spencer wrote a study on the “physiology” of this behavior that offers a representative view of the relief theory of this concept. For 10 points, name this behavior that titles a Henri Bergson essay “on the meaning of the comic.”

ANSWER: LAUGHTER [do not accept or prompt on “humor”]

12. Durer reversed this sculpture’s pose for the figure of Adam in his *Adam and Eve* engraving based on a popular Marcantonio Raimondi print of this statue. De Chirico superimposed this sculpture’s head on a wall above a green ball next to a pair of orange surgical gloves in his painting *The Song of Love*. Canova’s *Perseus with the Head of Medusa* was originally displayed on this statue’s pedestal, and was bought as a replacement after Napoleon looted this sculpture for France. The title figure of this statue is naked except for a narrow band around his hair called a “strophium” and a “chlamys” robe on his shoulder. Its name derives from a courtyard designed by Bramante outside the Vatican Palace where it was originally displayed, and Johann Winckelmann famously praised it as the greatest ideal of antique art. This statue, modeled on a lost original by Leochares, was owned by Julius II before he became Pope, and it shows the title figure standing with a quiver by his hip moments after releasing an arrow from his left hand. For 10 points, name this classical marble sculpture showing the god of music firing an arrow.

ANSWER: APOLLO BELVEDERE [or the PYTHIAN APOLLO]

13. Recent tests for the violation of this property have been done at the Max Planck institute by measuring the Doppler shift of lithium ions. In a spin-polarized torsion balance test, the absence of this property would result in a measurable net torque. As a consequence of this property, the interaction Hamiltonian of a quantum field theory possessing fermions must be a product of an even number of spinor fields. When this property holds, Noether’s Theorem guarantees that the center of mass is conserved. This property is possessed by both the spacetime interval and the proper time, and the fact that the Lagrangian for the electromagnetic field has this property means that Maxwell’s equations can be written in a fully covariant form. For 10 points, identify this property which requires that equations or quantities remain unchanged under boosts or transformations to different relativistic reference frames.

ANSWER: LORENTZ INVARIANCE [accept word forms]

14. A popular story says that, early in his life, this man killed the French fur trader Captain Shunar, aka Joseph Chouinard, at a

rendezvous on the Green River, because the Captain declared that all Americans were cowards. Along with Edward Beale, this man miraculously escaped from a siege on Mule Hill in the middle of the Battle of San Pasqual, which allowed reinforcements to be alerted. During his best-known action, his regiment launched a scorched earth strategy which included burning all of the peach trees in the Canyon de Chelly (de-SHAY), and then he laid siege to Fortress Rock during his pursuit of Barboncito. That victory led to the “Long Walk” to Bosque Redondo, during which this man’s regiment forced the Mescalero Apaches and the Navajo to relocate. For 10 points, name this frontiersman who was hired by John C. Fremont as a scout, and who gives his name to the capital of Nevada.

ANSWER: “Kit” CARSON [Christopher Houston CARSON]

15. Characters in this book incredulously repeat the phrase “the aunt of George Bernard Shaw” in several languages to confirm with a gardener that she was buried in a random house. In a cafe, its narrator imagines two officers playing a million games of billiards to determine their fates. The author of this book sorrowfully concludes that the world is “an abominable blood-logged plain, where people who love go out to fight people who hate,” after learning that a defeated prince chose a heavenly kingdom over an earthly one, when Elijah appeared to him in the form of the second title character. In a memorable passage from this book, the narrator describes touching the blackened, mummified hand of that prince. The narrator of this book develops a pathological hatred for several Germans, especially Gerda, the wife of her guide Constantine, but looks fondly upon her chauffeur Dragutin. For this book’s 1941 publication, its author wrote a foreword lauding the region where it’s set for resisting Nazi invasion. For 10 points, name this classic work of travel literature in which Rebecca West describes her six weeks in Yugoslavia.

ANSWER: BLACK LAMB AND GREY FALCON

16. In a piece with this title, an unusual augmented fifth consisting of F-sharp-B-flat is supported by the bass progression A-B flat-C-B flat-A. In that piece, a half-diminished B-D-F-A seventh chord represents a bout of lovemaking that is interrupted by a horn-based theme before resuming a half-step higher. Parisian audiences who turned out to see another composition of this title were given a derogatory epithet suggesting they were dandies, in contrast to the Wagnerian common folk. Charles Koechlin did the lion’s share of work orchestrating another piece with this title, which includes a constant triplet turn symbolizing a spinning wheel, though it is most famous for its G minor siciliene movement. An opera of this name frequently switches between formal and informal French singing, but is better known for a scene in which the female lead lets her hair down a tower window, and for a love scene preceding Golaud’s murder of the male lead. For 10 points, name this title of a symphonic poem by Schoenberg, a suite derived from incidental music by Faure, and Debussy’s only opera, all settings of a Maeterlinck play about two lovers.

ANSWER: PELLEAS UND MELISANDE [or PELLEAS AND MELISANDE; or PELLEAS ET MELISANDE]

17. In *De Profundis*, Oscar Wilde describes Alfred Douglas by quoting an image from this play about a lion’s cub who destroys the nobleman who charitably raised the cub in his house. Robert F. Kennedy famously misquoted a line from this play, replacing the word “despite” with “despair,” in a speech given after Martin Luther King Jr.’s assassination that culminates “even in our own despair, against our will, comes wisdom through the awful grace of God.” This play begins with a speech by a character who claims to “know the stars by heart” and has spent the last year “awake” watching the sky for a fiery beacon. The title character is goaded into walking across a carpet of purple tapestries to enter his home. This play begins with the Watchman’s speech, and ends when a chorus of old men from Argos taunt a man returning from exile, for letting his female lover kill the title king in his bath, as vengeance for sacrificing his daughter Iphigenia. For 10 points, name this play whose title character is murdered by his wife Clytemnestra, which precedes *The Libation Bearers* as the first part of Aeschylus’s *Oresteia*.

ANSWER: AGAMEMNON

18. An eleven step synthesis of this compound with poor stereoselective control was devised by Milan Uskokovich. The conversion of a silyl protecting group to a mesyl one enables the final ring closure in another synthesis of this compound. This compound is the end product of a six-step procedure involving the addition of aluminum powder, devised by Paul Rabe, who determined its connectivity, but was criticized because nobody could repeat his results. In 1853, Louis Pasteur obtained a new compound by subjecting this compound to acid-catalyzed isomerization. Using Prelog’s interconversion of an allyl piperidine to a related compound, W.E. Doring and Bob Woodward came up with a total synthesis which won them public attention due to this compound’s wartime scarcity. A gamma-lactone was used as the starting product of Stork’s stereoselective synthesis of this compound, accomplished nearly two centuries after it was isolated from the cinchona tree. For 10 points, name this

alkaloid with anti-malarial properties.

ANSWER: QUININE

19. This city was the home of scholar Demetrius Kydones, whose “monody” describes how men in this city revolted in 1342 AD and formed a people’s republic called the “Commune of Zealots,” which held out for a decade as an independent exclave until it was conquered by John Kantakouzenos. An edict named for this city was also known as the “Cunctos Populos” and was jointly issued in 380 AD by Valentinian II, Gratian, and Theodosius I to command subjects to adhere to the Catholic faith. Boniface of Montferrat set up a kingdom in this city in 1204 after the Fourth Crusade; that vassal state of the Latin Empire lasted until it was conquered by the Despotate of Epirus, which then used this city as a capital after 1264. This city was also the birthplace of the brothers Cyril and Methodius, and served as capital of the Roman prefecture of Illyricum. For 10 points, name this second most populous city in the medieval Byzantine Empire, which was the namesake of two epistles in the New Testament by Paul.

ANSWER: THESSALONICA [or THESSALONIKI, or SALONICA, or SALONIKI]

20. This philosopher argued that “for one who is committed to naturalism, the continuity between logic and metaphysics cannot be broken,” in a paper which answered in the negative the title question “Can Logic be Divorced from Ontology?” In the 1977 John Dewey lectures, this philosopher elucidated a systems-level view of teleology in biological systems; that lecture was later published as *Teleology Revisited*. This philosopher probably coined the present sense of the term “analytic philosophy” with two papers, both titled “Impressions and Appraisals of Analytic Philosophy in Europe,” and he criticized Hans Reichenbach’s frequentist approach to probability in his 1939 book, *Principles of the Theory of Probability*. This philosopher’s most famous work outlined a framework of intertheoretic reduction and examined the role of both substantive and formal analogies in the title discipline. For 10 points, identify this American analytic philosopher best known for his work in the philosophy of science, which included his magnum opus, *The Structure of Science*.

ANSWER: Ernest NAGEL

TIEBREAKER

21. In one of this author’s poems the speaker frantically sings, “I am lonely, lonely, / I was born to be lonely, I am best so” while performing the title action in front of a mirror. He wrote about the title plant spreading across a meadow until “the whole field” becomes “a white desire, empty, a single stem . . . a pious wish to whiteness gone over — or nothing.” This author wrote about a woman who ruminates about “sinking into the marsh” near the “trees of white flowers” after the death of her husband in a poem that begins, “Sorrow is my own yard.” The speaker asks “Who shall say I am not / The happy genius of my household?” at the end of his poem “Danse Russe.” This poet, who published “Queen-Anne’s-Lace” and “The Widow’s Lament in Springtime” in his collection *Sour Grapes*, repeats the theme “no ideas but in things” throughout his six-book epic poem about a town in New Jersey poem, and ends another poem with the declaration, “Forgive me / they were delicious / so sweet / and so cold.” For 10 points, name this Modernist poet who confessed to eating the plums in the icebox in “This is Just to Say” and claimed “so much depends” upon “The Red Wheelbarrow”.

ANSWER: Williams Carlos WILLIAMS

BONUSES

1. Name these contemporary American magazines, for 10 points each.

[10] This left-wing magazine based in San Francisco is named after one of the founders of the Industrial Workers of the World and came to national prominence for releasing the video containing Mitt Romney's "47 percent" comment.

ANSWER: MOTHER JONES

[10] This experimental literary journal claims only fifty-six issues will be published. Past issues of this magazine edited by Dave Eggers include one packaged to look like a bundle of mail and one designed as an Icelandic tabloid.

ANSWER: Timothy McSweeney's Quarterly Concern

[10] This Brooklyn-based literary magazine was founded by Keith Gessen, Benjamin Kunkel, and Chad Harbach and opens every issue with a section called "The Intellectual Situation." Its best-known contributor is probably Elif Batuman.

ANSWER: N + 1

2. This man referred to Jeffersonians as "fire eating salamanders" and "poison-sucking toads," and he joined George Cabot and Timothy Pickering to form the Essex Junto after he became furious at John Adams for nominating William Vans Murray as minister to France. For 10 points each:

[10] Name this Massachusetts-born Federalist, who wrote a bunch of essays for the *New England Palladium*.

ANSWER: Fisher AMES

[10] The most famous speech by Ames secured the passage of this 1794 treaty, which provided for ten years of peaceful trade with Great Britain. It was named for the first Chief Justice of the Supreme Court.

ANSWER: JAY's Treaty [or "Treaty of AMITY, COMMERCE AND NAVIGATION", prompt on the "Treaty of London"]

[10] Fisher Ames was an early member of a society formed at Marsh Tavern in Dedham, Massachusetts for the express purpose of apprehending these types of criminals. An example of a criminal of this kind was the California-born George King, who married Ned Kelly's mother.

ANSWER: HORSE THIEVES [prompt to be more specific with answers like "thieves" or "outlaws" or "robbers;" they need to mention HORSES]

3. The carbonium ion is often used to study this property, because the barriers for proton exchange in it are lower than zero point energy. For 10 points each:

[10] Identify this property of a molecule in which you can observe atoms interchanging between symmetry-equivalent positions. The different atomic configurations of molecules with this property show up as separate signals.

ANSWER: FLUXIONALITY [accept DYNAMIC EXCHANGE process; reverse prompt on "Berry pseudorotation"]

[10] Compounds with this geometry, such as iron pentacarbonyl or phosphorus pentafluoride, exhibit a form of fluxionality known as the Berry pseudorotation. These compounds have two axial and three equatorial groups.

ANSWER: TRIGONAL BIPYRAMIDAL

[10] Fluxionality is also observed between the axial and equatorial hydrogens in the chair-chair conformation change of this compound with formula C₆H₆.

ANSWER: CYCLOHEXANE

4. Michael Riffaterre theorized about a "super" version of this kind of person who treats literature as a "one way street." For 10 points each:

[10] Name this kind of person whose "response" is the subject of a school of literary theory pioneered by Hans-Robert Jauss and Stanley Fish.

ANSWER: the READER [accept READER RESPONSE theory or SUPER READER]

[10] Stanley Fish established reader-response theory in his book *Surprised by Sin*, which studied individual readers' reactions to this 17th-century epic poem whose stated goal is to "justify the ways of God to men."

ANSWER: PARADISE LOST

[10] Wolfgang Iser argues that every novel creates this type of hypothetical reader who "embodies all those predispositions necessary for a literary work to exercise its effect." Wayne Booth applied this adjective to authors to describe an author's second self in a text.

ANSWER: IMPLIED

5. Books 7 and 8 of this work are concerned with the ontology of material substances, while its first book is concerned with the definition of “wisdom.” For 10 points each:

[10] Identify this loosely unified work comprising fourteen books, whose account of substances rejects its author’s earlier formulation in the *Categories*.

ANSWER: the METAPHYSICS [do not accept or prompt on “Physics”]

[10] *Metaphysics* and *Categories* were both written by this philosopher, who also wrote a guide to proper argumentation, called *Rhetoric*.

ANSWER: ARISTOTLE

[10] Book XII of the *Metaphysics* is concerned with Aristotle’s demonstration of the necessity of this entity, which Aristotle argues is a “principle [on which] depend the heavens and the world of nature.”

ANSWER: FIRST CAUSE or UNMOVED MOVER or PRIME MOVER or FINAL CAUSE [prompt on “God”]

6. This type of programming paradigm is exemplified by languages like Scheme and Haskell, in which every expression returns a value. For 10 points each:

[10] Identify this programming paradigm, derived from the lambda calculus. It generally tries to avoid side effects by ensuring that, unlike imperative programming, its namesake computations don’t modify state.

ANSWER: FUNCTIONAL programming

[10] Functional-style languages such as Lisp and Scheme support these constructs, which are functions that have access to free variables defined outside the function’s own lexical scope.

ANSWER: CLOSURE

[10] Pure functional programming languages such as Haskell enforce this property, in which any expression can be replaced by its result for a given input without altering the logic; functions which do not have side effects have this property.

ANSWER: REFERENTIAL TRANSPARENCY [or word forms, prompt on “transparency” or word forms]

7. This man was appointed foreign minister of Argentina in 1932 upon the ascension of President Agustín Justo, after which he successfully pushed for Argentina to join the League of Nations. For 10 points each:

[10] Name this Argentine legal scholar, who became the first Latin American to win the Nobel Peace Prize in 1936.

ANSWER: Carlos Saavedra LAMAS

[10] Lamas worked with Tomás Elío to bring an end to this conflict between Paraguay and Bolivia in 1935.

ANSWER: CHACO War [or GRAN CHACO War]

[10] Lamas denounced Bolivia and Paraguay for fighting over a “Green Hell” of wilderness, referring to the Chaco Boreal land north of this river. It rises in Bolivia and flows east to meet the Paraguay River in Asunción; in the process, it forms much of the border between Paraguay and Argentina.

ANSWER: PILCOMAYO River [or PILKU MAYU, or YSYRY ARAGUAY in Guaraní]

8. This man’s illegitimate son Licymnius was the only survivor of a melee that ensued when six Taphians came to claim a share of their kingdom. For 10 points each:

[10] Identify this king who was succeeded by Sthenelus after being killed by a club that was thrown by his nephew and deflected by a cow’s horns.

ANSWER: ELECTRYON

[10] Electryon was one of the nine children of this hero, who rescued his wife Andromeda from a sea monster.

ANSWER: PERSEUS

[10] Electryon and Sthenelus ruled this city, which Perseus reportedly founded at the site where either his scabbard auspiciously fell to the ground, or where he found a water spring near a mushroom. Eurystheus was the last king from Perseus’s dynasty to rule this city.

ANSWER: MYCENAE

9. Evidence from the artist’s letters suggests this engraving was inspired by Erasmus’s *Handbook of the Christian Soldier*. For 10 points each:

[10] Name this Dürer engraving that shows a rotting, corpse-like figure with an hourglass in his hand assailing an armored warrior riding a huge horse through the wilderness.

ANSWER: KNIGHT, DEATH AND THE DEVIL [or RITTER, TOD UND TEUFEL]

[10] Durer's *Knight, Death and the Devil* forms a group with *St. Jerome in his Study* and *Melancholia I* that are collectively known by this term, and are often interpreted as an unfinished allegorical series of the four temperaments.

ANSWER: MEISTERSTICHE [or MASTER PRINTS; or MASTER ENGRAVINGS]

[10] In *St. Jerome in his Study*, this plant hangs from the ceiling beam, referring to St. Jerome's debate with St. Augustine over the translation of the Hebrew word "kikiyon" as "ivy" in a passage from the Old Testament.

ANSWER: GOURD [or CUCURBITACEAE; go ahead and accept specific varieties of GOURDS as well]

10. This group includes characters with such ridiculous names as "Curly Beard," "Dog-Scratcher," and "Libyan Hothead," and are often interpreted as Dante's attempt at black humor. For 10 points each:

[10] Name this bumbling band of thirteen winged demons led by Malacoda, who use hooks to fish out sinners from a pit of boiling tar. Their name literally translates as "evil claws."

ANSWER: MALEBRANCHE

[10] The Malebranche guard corrupt politicians in the fifth section of this penultimate circle of Dante's *Inferno*, which is divided into ten pits or "bolgie" and is usually called the Malebolge.

ANSWER: the EIGHTH circle

[10] To descend to the eighth circle, Dante rides on this winged monster, which has an honest man's face, a dragon's body, a lion's paws, and a scorpion's tail. It is usually interpreted as Dante's image of fraud.

ANSWER: GERYON

11. Immanuel Kant wasn't the only thinker who loved writing prolegomenas. Answer stuff about some other examples, for 10 points each.

[10] This linguist wrote about the expression plane and the content plane in his most famous book *Prolegomena to a Theory of Language*. This Danish guy is best known for founding the Copenhagen School of Linguistics.

ANSWER: Louis Trolle HJELMSLEV

[10] This sociologist's *Prolegomena to a Theory of Social Institutions* incorporates the AGIL paradigm that he had developed in his book *The Structure of Social Action*.

ANSWER: Talcott PARSONS

[10] This author of *Prolegomena to a Theory of Word Formation* is a Latvian-born linguist who formulated a theory of generative metrics. He's remembered for collaborating with Noam Chomsky on the book *The Sound Pattern of English*, and with Roman Jakobson on *Preliminaries to Speech Analysis*.

ANSWER: Morris HALLE [or Moriss PINKOVICS or Morris PINKOWITZ]

12. Egyptian-American composer Halim El-Dabh created the first piece using this medium, *The Expression of Zaar*. For 10 points each:

[10] Name this medium, in which Steve Reich achieved "phasing" with his pieces "Come Out" and "It's Gonna Rain."

ANSWER: magnetic TAPE [or TAPE LOOPS; or prerecorded music; prompt on ELECTRONIC music]

[10] This composer scored his *Williams Mix* for eight simultaneously-playing magnetic tapes, but is better known for frequently consulting from the *I Ching*, and for his entirely environmental piece *4'33"*.

ANSWER: John (Milton) CAGE Jr.

[10] This American serialist created an electronic music piece that combines synthesizer with a live and recorded soprano's voice, titled *Philomel*, and defended his music from charges of inaccessibility in a *High Fidelity* article notoriously titled "Who Cares If You Listen?"

ANSWER: Milton (Byron) BABBITT

13. In one method of performing this technique, superparamagnetic microbeads are used as a solid-phase substrate for antibodies. For 10 points each:

[10] Name this general technique, whose "chromatin" subvariety is used to find DNA binding sites for proteins of interest. It is used to bring an antigen out of solution by using an antibody specific to it.

ANSWER: IMMUNOPRECIPITATION [or IP; accept chromatin IMMUNOPRECIPITATION or ChIP]

[10] In ChIP, this chemical is often used to cross-link DNA-binding proteins to DNA. It is better known in biology for being used as a fixative and as a preserving agent.

ANSWER: FORMALDEHYDE [accept METHANAL from paid IUPAC skills]

[10] In this optional procedure, non-antigen components from the lysate that are likely to react with the antibody are removed by incubating the sample with a non-specific antibody of the same species.

ANSWER: PRE-CLEARING

14. Name these things which served as sacred images in ancient Mesoamerica, for 10 points each.

[10] Building L at Monte Alban is known as the temple of these figures, which are inscribed on over 300 Olmec stones, almost entirely in the oldest strata. These unique figures are thought to represent captives of the Olmec rulers.

ANSWER: DANZANTES [accept DANCERS or DANCING figures]

[10] A temple of these animals overlooks the great ballcourt at Chichen Itza. The Olmecs worshipped the “were-” type of these animals, the Zapotecs venerated them in the form of the god Cosijo, and the Mayans believed that we were living under the “sun” of this animal, which plunged into the underworld each night.

ANSWER: JAGUARS [or PANTHERA ONCA; prompt on “panther;” I suppose you can also prompt on “cat”]

[10] These pits, found throughout the Yucatan, were created by the collapse of limestone, revealing groundwater underneath. The Sacred one of these at Chichen Itza, often called the Well of Sacrifice, held religious importance to the ancient Maya.

ANSWER: CENOTES

15. Answer the following about the career of Jack Spicer, for 10 points each.

[10] Spicer taught his historic “Poetry as Magic” workshop at a college in this city where he helped spark the Beat Movement. Lawrence Ferlinghetti founded the City Lights Bookstore in this city.

ANSWER: SAN FRANCISCO

[10] Jack Spicer wrote the elegy “They Murdered You” for this older poet, who was a godfather figure for the San Francisco Renaissance and was often erroneously dubbed “The Father of the Beats.” He was a prolific translator of Asian poetry and wrote “The Signature of All Things.”

ANSWER: Kenneth REXROTH

[10] With five painters, Spicer founded this art institution in San Francisco, which was the location of the legendary 1955 poetry reading where Allen Ginsberg first performed *Howl*.

ANSWER: 6 GALLERY [or GALLERY 6]

16. A noted sculpture of a sobbing cherub, known as the “Weeping Angel” of this location, became a popular postcard for soldiers during World War I. For 10 points each:

[10] Name this Gothic cathedral, the tallest complete cathedral in France, whose western portal has a gallery of sculptures of local saints holding their decapitated heads. It was originally built to house the alleged head of John the Baptist.

ANSWER: AMIENS Cathedral [or NOTRE-DAME D’AMIENS; prompt on “Notre Dame”]

[10] Amiens Cathedral was built around the same time as this other Gothic cathedral, where the coronation ceremony of French kings was held. In place of the traditional tympanum, its central façade has a statuary called the “Gallery of Kings” that depicts the baptism of Clovis.

ANSWER: REIMS Cathedral [or NOTRE-DAME AT REIMS; prompt on “Notre Dame”]

[10] This nineteenth-century French architect was renowned for restoring medieval French cathedrals, including Notre Dame and Saint Denis. He often signed his buildings with a winged bat whose wingspan resembled a Gothic vault.

ANSWER: Eugène VIOLLET-LE-DUC

17. Answer the following about Ross Nichols, for 10 points each.

[10] Nichols belongs to the “neo”-branch of this religious movement, a nature-loving Celtic pagan cult that celebrates the harvest festival Samhain. Pliny the Elder’s description of a ritual in which these people climbed oak trees to cut down mistletoe led to the mistaken belief that they worshipped trees.

ANSWER: DRUIDS [or DRUIDRY]

[10] This ancient script used by Druids in divination rituals is called the “Celtic tree alphabet” because it ascribes the names of trees to characters. It was used to write inscriptions in archaic Irish, Old Welsh, and Latin at sites such as Pembrokeshire, and it’s also referred to as “Beith-luis-nin” for the order of its letters.

ANSWER: OGHAM

[10] According to Nichols’s concept of the Wheel of the Year, good Druids should observe this many festivals every year, including Samhain and Lughnasadh.

ANSWER: EIGHT

18. First proven by Callen and Welton, this theorem relates a system's non-equilibrium response to statistical variations of its values at equilibrium. For 10 points each:

[10] Identify this basic theorem of statistical mechanics.

ANSWER: FLUCTUATION-DISSIPATION theorem

[10] A classic use of the fluctuation-dissipation theorem is to calculate the RMS value of the voltage produced by the Johnson-Nyquist type of this phenomenon as a function of temperature and bandwidth. The "white" type of this phenomenon contains all frequencies with equal power.

ANSWER: NOISE

[10] This physicist used the fluctuation-dissipation theorem to derive a result that linked fluctuations with macroscopic transport coefficients, yielding a set of relations named for him and Melville Green.

ANSWER: Ryogo KUBO

19. It originated in 1295 AD, when an agreement at Dunfermline Abbey cemented a marriage between Edward Balliol and Jeanne de Valois. For 10 points each:

[10] Name this military union between France and Scotland, which lasted for several centuries and was meant to control English expansion.

ANSWER: AULD Alliance

[10] The Treaty of Corbeil renewed the Auld Alliance in 1326 when Thomas Randolph was sent by this Scottish king, who was seeking insurance for his claim to the throne after his victory at Bannockburn.

ANSWER: ROBERT THE BRUCE [or ROBERT I; or ROBERT DE BRUS; prompt on ROBERT]

[10] Soon after the death of Robert the Bruce, the second war for Scottish independence broke out and the Scottish loyalists under Archibald Campbell were smashed at this 1333 battle, which resulted when Edward III tried to install the traitor Edward Balliol on the Scottish throne.

ANSWER: Battle of HALIDON HILL

20. In this poem, an old shepherd plaintively gazes at a "withered tree" that was once fit for a boy to climb, but that has been reduced to a "sad emblem now." For 10 points each:

[10] Name this long, two-book 1783 poem, which mocks an apothecary who "first insults the victim who he kills," and sympathizes with the inhabitants of a parish workhouse.

ANSWER: The VILLAGE

[10] George Crabbe wrote *The Village* in response to the unabashed romanticism of "The Deserted Village," a poem by this English author of *She Stoops to Conquer*.

ANSWER: Oliver GOLDSMITH

[10] Crabbe's poetry is primarily written in this form, commonly used in epic poetry, consisting of pairs of rhyming line written in iambic pentameter. Dryden mastered this form, which Pope used to write *The Rape of the Lock* and Nabokov used for the title poem in *Pale Fire*.

ANSWER: HEROIC COUPLETS

EXTRA BONUS

21. Bills of attainder were used by British Parliament starting in the 15th century to declare persons "corrupt of blood," execute them for treason, and strip them of their lands without a trial. Answer some stuff about that, for 10 points each.

[10] The first rash of those bills occurred during this conflict, fought from 1455 to 1487, which resulted in several Yorkists like the Duke of Clarence executed by the rival Lancastrians.

ANSWER: Wars of the ROSES

[10] The last ever bill of attainder was used to execute Lord Edward Fitzgerald for his association with the military arm of this society, which was founded in 1791 by Theobald Wolfe Tone and James Napper Tandy.

ANSWER: Society of UNITED IRISHMEN

[10] When the punishment was not death, but merely the extinguishing of the subject's political rights, it was referred to as this kind of bill. Parliament tried to pass a bill by this name in 1820 to dissolve King George IV's marriage to Caroline of Brunswick

by accusing her of adultery.

ANSWER: PAINS AND PENALTIES Bill [or the singular “Pain and Penalty” or accept the opposite order]