

## Chicago Open 2014: A Redoubtable Coupling of Editors

Packet by Tippecanoe and Puma too! (Jarret Greene, Saajid Moya, Dan Puma, Ashvin Srivatsa)

Edited by Austin Brownlow, Andrew Hart, Ike Jose, Gautam & Gaurav Kandlikar, and Jacob Reed

### Tossups

1. One class of compounds with this therapeutic activity have two benzene rings fused to a cyclo-heptenylid-ene ring or a dihydro-azepine ring as a skeletal structure. In addition to those tricyclic compounds, this therapeutic activity may be present in hypericin and hyperforin. The efficacy of drugs with this therapeutic activity is measured using the Porsolt test. A non-traditional example of drugs with this activity includes agomelatine, in which melatonin's indole skeleton is replaced with naphthalene. One class of drugs with this activity insert into the extracellular Y176 and F335 residues of SERT. The earliest drugs with this activity were discovered because of their ability to inhibit the oxidation of tyramine, and examples of those drugs include tranylcypamine and iso-carboxazid. Those compounds with this activity inhibit the oxidation of monoamines. For 10 points, name these drugs that usually effect an increase in concentrations of neurotransmitters like serotonin and dopamine.

ANSWER: **antidepressants** [accept tricyclic **antidepressants** or melatonergic **antidepressants**; anti-prompt, i.e. "Can you be less specific?" on "MAOI" or "monoamine-oxidase inhibitors" or "melatonin and 5HT receptor agonist" or "SSRIs" or "selective serotonin reuptake inhibitors"]

2. This alleged pedophile often took photos of young boys in Genzano di Roma, which were reprinted in some issues of *The Yellow Book*; further evidence of his pedophilia is evident in his poem "Ballade of Boys Bathing." A posthumously published homoerotic novel by this man focuses on a writer who falls in love with his effeminate servant Zildo, whom he decides to dress as a gondolier. He also created a chain-smoking writer who lives with his cat Flavio; that character, George Arthur Rose, becomes the pope in a novel by this author. The adventures of this author of *The Desire and Pursuit of the Whole*, such as receiving a title from the Duchess of Sforza-Cesarini, are the subject of an "experiment in biography" in which the author tries to piece together his life like a sleuth in a detective story. For 10 points, name this eccentric author of *Hadrian the Seventh* who styled himself a baron, and whose life's details became the subject of a literary quest by A.J.A. Symons.

ANSWER: Baron **Corvo** [or Frederick William Serafino Austin Lewis Mary **Rolfe**] ["roaf"; accept reasonable phonetic pronunciations]

3. In 2009, the holder of this office announced that excavation of blocked-off hallways in the Ministry of the Interior revealed evidence of "horror chambers" instituted under a 1970s dictatorship. In 1999, the man who held this position signed a \$2.5 billion contract for Aguas del Tunari to provide water to his country's third-largest city, then passed Law 2029 to legalize that contract, leading to massive protests dubbed the country's "water war." That man, the founder of the Nationalist Democratic Action party, also held this office as a dictator in the 1970s, when his regime sheltered Nazi war criminal Klaus Barbie and instituted the Dignity Plan to attempt to eradicate illegal crops. Hugo Banzer once held this office, whose current holder had his plane grounded in 2013 due to suspicion that Edward Snowden was on board, and often wears to gatherings of world leaders the traditional sweaters of his Aymara ethnic group. For 10 points, name this office held by Evo Morales.

ANSWER: **President of Bolivia** [or **Presidente del Bolivia**; prompt on "leader of Bolivia" or other general equivalents]

4. The star of one of this director's movies refused to memorize his lines and suggested writing them on the ass of his costar, who wrinkled feathers by claiming in interviews that she was "bisexual completely" and used drugs. He directed another film in which the newly married title character visits Paris with his wife to see Professor Quadri, who he has been tasked to kill by an agent of the state named Manganiello. He directed a controversial scene in which a man anally rapes a 20-year-old woman using butter as lubricant in a film that starred Maria Schneider as a woman who ends an anonymous affair by shooting Marlon Brando's character. Another film by this director cast John Lone as the title character and made him the first Western director to receive permission to shoot in the Forbidden City of Beijing. For 10 points, name this Italian director of *The Conformist* and *Last Tango in Paris* who won the Best Director Oscar for *The Last Emperor*.

ANSWER: Bernardo **Bertolucci**

5. A neo-Freudian clinical psychologist of this name used his experience as the director of the Menninger Foundation in Topeka to write the book *Diagnostic Psychological Testing*. The slash-and-burn farming techniques of the Tsembaga Maring of New Guinea are documented in the book *Pigs for the Ancestors* by a cultural anthropologist with this surname and the first name Roy. One thinker with this surname, a cofounder of the Society for General Systems Theory Research, advocated systems theory as a solution to the problem of war in *The Origins of Violence and Peace: An Idea Whose Time Has Come*. That thinker of this surname, who authored the book *Fights, Games, and Debates*, proposed a result that was reported in Robert Axelrod's *The Evolution of Cooperation*. For 10 points, identify this surname of David, a Jewish-Hungarian psychologist, and Anatole, a mathematician who proposed that the best strategy for the iterative prisoner's dilemma was tit-for-tat.

ANSWER: **Rappaport** [accept alternate spellings]

6. These structures may be covered in a metallic case with five faces on it, one of which is assumed to be pointing skyward. A hill that took the form of fire, gold, and diamonds contains one of these structures named the "tejo" one, and is circum-ambulated by worshippers every full-moon night. The confusion of a Persian transliteration for one of these structures with that of a Semitic Goddess was a key factor in the destruction of that structure, according to a chronicle by Farruqi al-Sistani. Popular examples of these structures include a climate-change-afflicted stalagmite formation at Amarnath. Examples of these structures at Somnath and Ujjain are two of the 12 "radiant" examples of these structures, which are sometimes co-located with temples commemorating the self-sacrifice of Sati. These structures are often found along with their more feminine counterparts that represent Shakti, called the yoni. For 10 points, name these phallic structures that represent the destroyer god of Hinduism.

ANSWER: Shiva **linga** [or **lingam**; accept **temples** dedicated to **Shiva** or equivalents until "radiant"; prompt on "temples to Shiva" or equivalents after "radiant"]

7. In a Norwegian narrative, one of these figures is revealed after a little boy beats mittens on a rock, when the rock jumps into an ocean and reveals itself to be one of these figures. In another narrative, these figures can transform into seals, or into smoke, so that they can swim through solid rock. In that narrative, the stoning of Slickstone-Eye causes the appearance of another one of these figures, and another of these figures starts to appear when the rambunctious Hrapp is interred into his doorway. Typically, these figures have a light blue or maroon fluorescent hue that permeates their bodies. In a book named after Laxdaela, the bones of a once-powerful sorceress are turned into one of these figures. In another story, it is implied that one of these revenants inhabits the barrow of Kar the Old because the barrow is ringed with fire and Grettir is afraid of it. For 10 points, name these undead monsters who figure into many Germanic sagas.

ANSWER: **draugr** [or **draugar**; prompt on "(Norse) undead"; prompt on "revenant(s)" or "ghosts" or equivalents before "revenant"]

8. In the early 1960s, this man painted several versions of *Leda and the Swan* after marrying into the Franchetti art-collecting family. Upon viewing this painter's nine-part *Discourses of Commodus*, Donald Judd scoffed "there isn't anything to these paintings," which he derided as "a few drips and splatters." This artist painted a work that contains a rough sketch of a tulip below the name of the title Greek god, which appears to be written on greenish-white paint reminiscent of white-out. In 2007, Rindy Sam was forced to pay over 1,500 euros after she defaced this artist's painting *Phaedrus*, a blank white canvas, by kissing it. This painter of *Apollo and the Artist*, who lived in southern Italy for much of his life, imitated chalk scribbles in his "blackboard paintings." His unique style often involved sparsely smearing light-colored oil paints amidst pencil marks. For 10 points, name this American painter, many of whose works appear to be calligraphic scribbles, who died in 2011.  
ANSWER: [Edwin Parker] Cy **Twombly** [Jr.]
9. The rapidly random exploring tree algorithm is a Monte Carlo method that favors sampling the larger components of these structures. Bounding volumes combined with a "marching" algorithm named for these constructs is used to implement proximity queries in some collision-detection algorithms. These constructs may be used to approximate a surface's medial axis, of which they can be considered a discrete analogue. Duals to these constructs can be generated by the trivial "edge flip" algorithm. One of these constructs can be created by successive recomputation of centroids as part of Lloyd's algorithm. Non-convex polygons comprise one of these constructs when Manhattan distance is used as the norm, but in Euclidean space, these geometric constructs are constructed entirely of convex shapes and are the duals to Delaunay triangulations. For 10 points, name these eponymous diagrams that, given a set of seed points in a space, construct a tessellation by identifying the closest seed point for each point in the space.  
ANSWER: **Voronoi** diagram [or **Voronoi** tessellation; or **Voronoi** decomposition]
10. This immigrant group's protests of a July 12, 1871 parade led to riots in which they stormed another immigrant group's headquarters at Lamartine Hall. A bloody riot against this immigrant group prompted James W. Porter to write the song "See Our Torn Flag Still Waving." That riot, which began after a rumor spread that this group was trying to remove Bibles from public schools, engulfed the Southwark and Kensington neighborhoods of an east-coast city, and was only quelled when mayor John Morin Scott allowed George Cadwalader to bring in the state militia. This group, which was the target of the Bloody Monday riots in Louisville, was targeted by "Orangemen" in the 1871 Orange Riots in New York. The 1844 Philadelphia Nativist Riots also targeted this immigrant group, which, along with Germans, was a target of ire for the Order of the Star Spangled Banner that became the Know Nothing Party. For 10 points, name this immigrant group consisting of papists who fled a potato famine.  
ANSWER: **Irish Catholics** [prompt on "Irish" or "(Roman) Catholics"]
11. The first movement of this piece uses monothematic sonata form, with a theme that includes a rapid ascending scale from D up to four quick, staccato quarter note "A"s, followed by the slurred half notes "B-A." The Allegro spiritoso last movement of this piece begins with a low drone in the horns and low strings, over which the violins play a tune possibly derived from the Croatian song "Oj, Jelena." The slow introduction to this piece's first movement begins with the orchestra in unison and with a double-dotted rhythm going up from a fifth from D to A, then down a fourth from the same D to a lower A. Its composer's previous work in this piece's genre was an E-flat major symphony known for its opening drumroll. This symphony has acquired a nickname also applied to its composer's last 12 symphonies, which are alternately named for Johann Peter Salomon and were all written in the same European city. For 10 points, name this final symphony by Joseph Haydn.  
ANSWER: **Haydn**'s Symphony No. **104** in D major, H. I/104 [or **London** Symphony; accept Symphony No. **104** after "Haydn"]

12. One argument in this work is that previously ignored “inner strife” and “intrinsic contradictoriness” explain why a central concept has “lift[ed] off from itself” to become established “in the clouds.” The beginning of this work criticizes the conception that only the “theoretical” attitude is a genuine human attitude, and thus, that practice is only the “dirty-judaical manifestation” of theory. This work draws a distinction between contemplation-based and practical-experience-based “sensuousness” in its critique of existing theories of materialism. This work, which was first published as an appendix to a pamphlet titled for a certain person “and the End of Classical German Philosophy,” was originally a sketch of the first chapter of its author’s *The German Ideology*. Its final section states that “philosophers have hitherto only interpreted the world in various ways; the point is to change it.” For 10 points, name this set of 11 notes about the author of *The Essence of Christianity*, by Karl Marx.  
ANSWER: “**Theses on Feuerbach**”
13. This woman was the granddaughter of the first man in Rome to fatten peacocks for sale, Marcus Aufidius Turco. Tacitus reports a legal case involving Lucius Piso to demonstrate that Urgulania, by virtue of being this woman’s friend, was above the law. Her eldest son was a talented general whose troops erected a cenotaph, found in present-day Mainz, when he died after falling from his horse while fighting the Marcomanni. This woman, who was given her own house on the Palatine Hill, was accused of killing her husband’s nephew, Marcellus. Her husband married her after divorcing Scribonia, and Cassius Dio reports that she was given over in the wedding ceremony by her own former husband, Tiberius Claudius Nero, the father of her younger son, Drusus, and her older son, a future emperor. When her husband died, she was the first woman afforded the honorific “Augusta.” For 10 points, name this mother of Tiberius and wife of Octavian.  
ANSWER: **Livia** Drusilla [or **Julia Augusta**; prompt on “Julia”]
14. The speaker of one poem by this author calls the title feeling “the blissful cloud of summer” and states that “my sleep had been embroider’d with dim dreams.” Another poem by this author calls “ye clouds of Albion Begetters of our deep eternal theme,” and features a speaker who declares “betwixt damnation and impassion’d clay must I burn through.” The first poem by this man ends “vanish, ye phantoms! from my idle springs, into the clouds, and never more return!” The second poem by this writer recalls the pleasures of reading a “golden-tongued romance with serene lute” and ends with the speaker demanding “but when I am consumed in the fire, give me new phoenix wings to fly at my desire.” He described three temptresses named Ambition, Love, and Poesy in an 1819 poem that is addressed to the feeling of laziness. For 10 points, name this author of “On Sitting Down to Read King Lear Once Again” and “Ode On Indolence,” who also wrote “On First Looking into Chapman’s Homer.”  
ANSWER: John **Keats**
15. This system’s topologies belong to conjugacy classes of the free group on two letters. This system’s “goggles” and “yarn” topologies have reflection symmetries about two orthogonal axes of the shape-space sphere. This system has 16 known types of solutions, including the Broucke-Hénon and figure-eight families. Karl Sundman found a power series solution of this system that is a function of the cube root of time and converges for nonzero initial angular momentum. A special case of this system has a single constant of motion that equals negative two times total energy per unit mass in the synodic frame of reference. That restricted version of this system has five constant-pattern solutions known as Lagrange points. This system has no general solution that can be written in terms of algebraic expressions and integrals, as proven by Henri Poincaré. For 10 points, name this system exemplified by the motion of the earth, moon, and sun due to their mutual gravitational influence.  
ANSWER: classical **three-body** problem or system

16. This wrestler proclaimed a nemesis's hometown was the "redneck capital of the world" and sent videos instructing its residents how to use soap; his nemesis responded that this man's "mother wanted a girl, his father wanted a boy, and they were both satisfied." In one match, this wrestler stood in the middle of the ring and windmilled both arms wildly before he was suplexed. This wrestler fell from his chair after he was slapped, prompting him to throw water in another wrestler's face and call him a "fucking asshole," when he appeared wearing a neck brace with his rival on *Letterman*. His wrestling career began when he proclaimed himself the "Inter-Gender Wrestling Champion of the World" and issued a challenge that he would beat any woman who wanted to wrestle him. For 10 points, name this man, the rival of Jerry "The King" Lawler whose wrestling career is one plot point of the movie *Man on the Moon*, in which he was played by Jim Carrey.

ANSWER: [Andrew Geoffrey] Andy Kaufman

17. One character in this play cleans his teeth with a gold toothpick. While on trial, one character in this play states that, after he read about a black man who was killed in Georgia, he wished he was in Georgia with a pair of guns so that he could lynch the black man himself. Near the end of this play, the protagonist learns that in past incarnations, he existed as a monkey, a builder of Egyptian pyramids, a slave who fought in the Carthaginian wars, and a serf. Characters in this play include the remorseful corpse Shrdlu, and Daisy, with whom the protagonist talks while in the Elysian Fields. It ends after Lieutenant Charles tells the protagonist that his soul will be recycled, and he will be sent back to earth. In an earlier scene, the main character of this play was going to be replaced by the title object at his job, which leads him to murder his boss. For 10 points, name this Expressionistic play about Mr. Zero, by Elmer Rice.

ANSWER: *The* Adding Machine

18. The origin of this behavior is thought to be linked to the positive selection of DNA damage checkpoint and immune system genes according to Zhang et al.'s comparative study of *M. davidii* and *P. alecto*. Garner et al.'s model for this behavior posits that the asymmetry between remiges and retrices evolved relatively late. Groups of organisms that engage in this behavior may coordinate with one another in a way described by the chorus-line hypothesis. In one group of organisms, thoracic displacement causes the "indirect" form of this activity, in which the muscles responsible for this activity are attached to the tergum and the sternum. In some organisms, the supra-coracoideus and its antagonist, the pectoralis, are actuated as part of this behavior. A precursor to this behavior is called "incline running," and *Rhamphorhynchus* and *Quetzalcoatlus* are members of the first vertebrate clade to evolve this facility. For 10 points, name this mode of locomotion used by pterosaurs, which is unavailable to ostriches.

ANSWER: flight [or obvious equivalents; prompt on "gliding"]

19. This event included the establishment of Q Division by Rotha Lintorn-Orman and the derailment of the Flying Scotsman. During this event, a man gave a radio speech in which he declared "I am a man of peace" and asked listeners, "cannot you trust me to ensure a square deal and to ensure even justice between man and man?" In the lead-up to this event, the Samuel Commission was created on Red Friday. During this event, the *Daily Mail* refused to print the editorial "For King and Country" and the Organization for the Maintenance of Supplies produced a newspaper edited by Winston Churchill that ran for eight days. The Trades Union Congress organized this event in opposition to coal mine owners who wanted to reduce wages and lengthen working hours. In response to this event, Stanley Baldwin's government passed the Trade Disputes and Trade Unions Act of 1927. For 10 points, name this May 1926 event during which nearly two million British people refused to work.

ANSWER: 1926 General Strike in the United Kingdom [accept 1926 strike or equivalents before "1926"]

20. Due to an outbreak of dysentery, a wedding in this story is held at the gates of a cemetery. At the beginning of this story, a character puts goat turds into the main character's hands. In its final paragraph, another character explains "no doubt the world is an imaginary world, but it is only once removed from the true world." While dreaming, one character in this story is told by the "spirit of evil" that "the whole world deceives you, and you ought to deceive the world in turn." In order to explain how a child was born only four months after a wedding, one character in this story is told that all women are descended from Eve. The title character goes "into the world" and becomes known as a storyteller when he leaves Frampol at this story's end. The title character of this story meets Elka as she stands in a tub and takes revenge against others by urinating in his bread, which he later buries. For 10 points, name this story about the title gullible baker, written by Isaac Bashevis Singer.

ANSWER: "**Gimpel the Fool**"

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### Bonuses

1. 19th-century composers loved to stretch the limits of sonata form. For 10 points each:

[10] This long, very difficult solo piano piece in F minor by Chopin uses a hybrid between sonata form and theme and variations. Another Chopin piece in the same genre alternates between placid F-major and stormy A-minor sections.

ANSWER: **Ballade** No. **4** [or Opus **52**; prompt on “Ballade”; accept equivalents for “No. 4” like “fourth”]

[10] This composer used a “multi-function” sonata form in pieces like his Piano Concerto No. 2 in A Major, his *Fantasia and Fugue on the chorale “Ad nos, ad salutarem undam”* for organ, and his Piano Sonata in B Minor. He also wrote some *Transcendental Etudes* and *Hungarian Rhapsodies*.

ANSWER: Franz [Ritter von] **Liszt** [or **Liszt** Ferenc]

[10] This composer began stretching the limits of sonata form with his extremely difficult, one-movement fifth piano sonata. His other piano pieces include “Vers la flamme.”

ANSWER: Alexander [Nikolayevich] **Scriabin**

2. Answer the following about ancient legal codes, for 10 points each.

[10] Italian officials were unable to stamp out this legal code, which still dominates Somalian conflict resolution to this day. Elders can improvise this code to solve disputes as long as people’s basic rights are protected.

ANSWER: **Xeer** [“Heer”]

[10] This 645 CE set of policies promulgated in Japan shortly after the death of Prince Shotoku established the *Ritsuryo*, a strange mix of Legalistic laws and Confucian rhetoric adapted for Japanese conditions.

ANSWER: **Taika** reforms [or **Taiki no Kaishen**]

[10] The law code of this empire was described in the Codex Mendoza. Other codices about this civilization include the Codex Barberini and Florentine Codex, which preserves its Nahuatl language.

ANSWER: **Aztec** Empire [accept **Triple Alliance** or **Excan Tlahtoloyan**]

3. STO-3G and 6-31G are frequently used examples of these constructs. For 10 points each:

[10] Name these collections of functions used in computational chemistry. Linear combinations of functions from these collections, which are not atomic orbitals, are used to construct molecular orbitals.

ANSWER: **basis sets**

[10] The STO-3G and 6-31G basis sets use basis functions of this type. This type of basis function is named for a German mathematician and has a radial part of the form “ $r$  to the  $k$  times  $e$  to the (minus  $a r$  squared),” much like the normal pdf.

ANSWER: **Gaussian** basis set [or **Gaussian** basis function; or **Gaussians**]

[10] When augmenting a Gaussian basis set to include these functions, one adds an asterisk to the name of the set. These functions correspond to higher-angular-momentum orbitals for light atoms, such as  $p$  orbitals for hydrogen.

ANSWER: **polarization**

4. This U.S. Supreme Court case occurred in the aftermath of the rape of Nevada Taylor. For 10 points each:  
[10] Name this case in which the Supreme Court held the jailers of Ed Johnson in contempt for allowing a mob to lynch him after the Supreme Court granted review of Johnson's case. It is the only criminal trial ever argued before the Supreme Court.

ANSWER: *United States v. Shipp* [accept in either order]

[10] Edward T. Sanford, who served as the U.S.'s chief prosecutor in the case, later served as a Supreme Court Justice, and wrote the majority opinion in this case that followed the publishing of a Left Wing Manifesto.

ANSWER: *Gitlow v. New York* [accept in either order]

[10] Gitlow applied this amendment to the states through incorporation. This amendment was also applied in *Near v. Minnesota* and *New York Times Co. v. Sullivan*.

ANSWER: **First** Amendment

5. At the end of this novel, readers learn that Father Salvi regularly used Captain Tiago's daughter, a nun, for sex. For 10 points each:

[10] Name this novel in which Frey Damaso convinces Tiago to disallow Maria Clara from marrying the protagonist after that protagonist gets excommunicated from the Catholic Church.

ANSWER: *Noli Me Tangere* [or *Touch Me Not*]

[10] This Filipino author and revolutionary wrote *Noli Me Tangere* and its sequel, *El Filibusterismo*.

ANSWER: Jose [Protacio] **Rizal** [Mercado y Alonso Realonda]

[10] Ambeth, a scholar with this last name, tried to reconstruct the final novel of Jose Rizal. Other authors with this surname include the only female who helped compile *The Book of Fantasy*, and a sibling of that author who published the literary magazine *Sur*.

ANSWER: **Ocampo** [Those writers are Ambeth, Silvia, and Victoria Ocampo.]

6. Australian physicist Sundance Bilson-Thompson has proposed an extension to this theory in which fundamental quantities such as charge and color are topological properties of spacetime ribbons called helons. For 10 points each:

[10] Name this "theory of everything" candidate that attempts to link quantum mechanics and general relativity by describing the universe as a spin foam arising from the interaction of spin networks quantized at the Planck length.

ANSWER: **loop quantum gravity** [prompt on "LQG"]

[10] Loop quantum gravity uses these variables to rewrite the metric canonical coordinates of general relativity in terms of an SU(2) [**S-U-2**] gauge field, thereby turning the Hamiltonian constraint into a polynomial expression.

ANSWER: **Ashtekar** variables

[10] An open problem in LQG is the value of the Immirzi parameter, which depends on the result of applying this technique to the universal gravitational constant. This technique consists of replacing physical constants with measurable quantities via the addition of virtual particle loops.

ANSWER: **renormalization**



7. Angels with progressively darker colors and yellow banners with inscriptions accompany the title events of this altarpiece in chronological order from left to right. For 10 points each:

[10] Name this triptych, now held in Antwerp, with a middle scene depicting a large crucifixion above the Eucharist. It employs dramatic linear perspective to give the illusion of depth to its setting, the interior of a cathedral.

ANSWER: *The Seven Sacraments Altarpiece*

[10] The Seven Sacraments Altarpiece is a masterwork by this early Flemish artist, who showed the body of Christ being lowered in his *Descent from the Cross*.

ANSWER: Rogier Van Der Weyden [or Roger de la Pasture]

[10] Van der Weyden created this triptych as a memorial for Jehan of Tournai. The landscape in the background is continuous across panels depicting John the Baptist, Jesus with Mary and John, and Mary Magdalene.

ANSWER: *The Braque Triptych* [or *The Braque Family Triptych*]

8. Judge Edmund Bonner earned the nickname “bloody” during this series of trials. For 10 points each:

[10] Name this series of trials during which Thomas Cranmer was killed, along with about 300 other Protestants, on the orders of a Catholic queen.

ANSWER: Marian Persecutions [accept descriptive answers involving Mary I or Bloody Mary persecuting or trying Protestants for heresy]

[10] The Marian Persecutions were meticulously documented in the *Actes and Monuments*, popularly known as this man’s “book of martyrs.”

ANSWER: John Foxe [accept *Foxe’s Book of Martyrs*]

[10] The first edition of *Actes and Monuments* chronicled the earlier persecution of the Lollards, followers of this 14th-century English Bible translator.

ANSWER: John Wycliffe

9. This character’s fiancée Gordon is the namesake of her son by the doctor Ned Darrell. For 10 points each:

[10] Name this woman who becomes an army nurse and eventually marries Sam Evans. She chooses to abort Sam’s child because Sam’s family has a history of insanity.

ANSWER: Nina Leeds

[10] Charles Marsden is a novelist who loves Nina Leeds in this play. Stage directions in this play indicate that many of its soliloquies are used to depict the conscious thoughts of its characters.

ANSWER: *Strange Interlude*

[10] *Strange Interlude* is one of the plays by this author for which he won the Pulitzer Prize; other such plays include *Anna Christie* and *Beyond the Horizon*.

ANSWER: Eugene [Gladstone] O’Neill

10. Answer the following about Anabaptism, for 10 points each.

[10] Most Anabaptists adhere to a strict and literal interpretation of this collection of sayings by Jesus; it includes the command to “be perfect, as your heavenly Father is perfect,” and includes the Beatitudes.

ANSWER: Sermon on the Mount [or sermo in monte]

[10] The earliest Anabaptist confession was written in Schleithem in this modern-day country, where Felix Manz, Conrad Grebel, and George Blaurock started an early Anabaptist group of “brethren.”

ANSWER: Switzerland [or Schweiz; or Swiss Confederation; or Confederatio Helvetica; accept Swiss Brethren]

[10] Most members of this Anabaptist sect live in Canada or the upper Great Plains in the U.S. Its members live in nearly self-sufficient “colonies” in which all property is owned collectively.

ANSWER: Hutterites [or Hutterer]

11. The goddess Nana in this culture's mythology is a fertility goddess. For 10 points each:  
[10] Name this culture that venerates Sakpata, the god of insanity who inflicts smallpox on humans. It venerates numerous thunder deities, including Hevioso and his twin brother Gun.  
ANSWER: **Fon** mythology [or **Dahomey** mythology]  
[10] The supreme deity of Fon mythology is Mawu-Lisa, who has this characteristic. Another mythological figure who had this characteristic is nearly raped by Salmacis and is the offspring of the goddess of love and a messenger.  
ANSWER: **hermaphroditic** [or **androgynous**; or **double-sexed**, accept equivalents]  
[10] The god of rainbows for these people, Ungud, was androgynous. One of the rivers used by these peoples was supposedly inhabited by evil merfolk called Muldjewangk.  
ANSWER: **aborigines** [accept native **Australians**]
12. For 10 points each, answer the following about works of literature with something in common.  
[10] This book by Izaak Walton presents a series of debates between Venator and Piscator and, according to Wikipedia, "celebrates the art of fishing in verse and prose."  
ANSWER: *The **Compleat Angler***  
[10] John Breval's "A Compleat Key to the Nonjuror" accuses this author of plagiarizing from Moliere. This hack wrote about Amanda seducing her husband Loveless to reform him in *Love's Last Shift*.  
ANSWER: Colley **Cibber**  
[10] Stories by Fletcher Platt and this writer appear in *The Compleat Enchanter*, which contains this man's *The Mathematics of Magic*. This fantasy author of the "Harold Shea" books wrote about Martin Padway's travels in 6th-century Rome in *Lest Darkness Fall*.  
ANSWER: [Lyon] L. Sprague **de Camp**
13. The Greenshields model of this phenomenon posits a linear relationship between speed and density, thus giving a parabola on the fundamental diagram. For 10 points each:  
[10] Name this phenomenon studied by civil engineers that may be "calmed" using devices like chicanes and "bulb-outs."  
ANSWER: **traffic** flow [accept anything that indicates **auto traffic**]  
[10] Traffic flow is modeled using network flows, which are directed graphs in which edges have an associated capacity. Vertices in which the net flow is negative are called sinks, while ones where the net flow is positive are given this name.  
ANSWER: **sources**  
[10] For pipe network flows, this method allows one to determine the flow of any particular area in the pipe by iteratively solving the Hazen-Williams or Darcy-Weisbach equation. It sounds like it's doubly eponymous, but it is named for a single University of Illinois structural engineer.  
ANSWER: Hardy **Cross** method
14. Pierre Ronsard's poem *Discourse* was written in the aftermath of this event. For 10 points each:  
[10] Name this event in which a group of Huguenots were burned in a church, a massacre that helped spark the French Wars of Religion.  
ANSWER: Massacre of **Vassy** [or Massacre of **Wassy**; accept reasonable equivalents including **Vassy** or **Wassy**]  
[10] The Vassy Massacre was carried out by Francis, who held this title. Francis's son, who also held this title, founded the Catholic League.  
ANSWER: **Duke** of **Guise** [or **duc de Guise**; accept **Prince** of **Joinville**]  
[10] The latter Duke de Guise had this first name; he was one of three men with this name who contested the eighth and final conflict in the French Wars of Religion.  
ANSWER: **Henry** [accept War of the Three **Henrys**]

15. This man's major aesthetic work contrasts resemblance with representation, denotation with exemplification, and the autographic with the allographic. For 10 points each:  
 [10] Name this author who offered an analytic approach to aesthetics in *Languages of Art*.  
 ANSWER: [Henry] Nelson **Goodman**  
 [10] In *Fact, Fiction, and Forecast*, Goodman invented "bleen" and this other time-dependent predicate in order to illustrate his "new riddle of induction."  
 ANSWER: **grue**  
 [10] W.V.O. Quine applied Goodman's "grue" and "bleen" and discussed "natural types" in a treatment of this man's "raven paradox," in which he pointed out that seeing a green apple could logically make it more likely that all ravens are black.  
 ANSWER: Carl Gustav **Hempel** [or **Peter Hempel**]
16. The dominant mutant marker *Sb[1]* ["S-b-one"] is included on the Tm3 version of these structures, and all of them contain recessive deleterious mutations and inversion breakpoints. For 10 points each:  
 [10] Name these chromosomes that are used to maintain deleterious mutations.  
 ANSWER: **balancer** chromosomes  
 [10] Balancer chromosomes are most commonly used by geneticists who study this organism, whose use as a model was spearheaded by Thomas Hunt Morgan.  
 ANSWER: **Drosophila melanogaster** [or **fruit flies**; or **D. melanogaster**; or **Dmel**]  
 [10] Larval fruit fly salivary cells can house these gigantic chromosomes, which form when cells undergo endoreplication, during which they perform DNA replication but do not undergo mitosis.  
 ANSWER: **polytene** chromosomes [accept word forms like **polyteny**]
17. This poem states "twice victorious I crossed Acheron: / taking turn to play on Orpheus' lyre / the sights of the saint and the fairy's screams." For 10 points each:  
 [10] Name this French-language poem from the collection *The Chimeras*, which begins "I am the dark one, the widower, the unconsolated." It is titled for a pseudonym that Walter Scott's *Ivanhoe* uses in a tournament.  
 ANSWER: "El **Desdichado**"  
 [10] The manuscript for this last work of Gerard de Nerval was found in the pockets of his coat when he died. This lucid piece of writing begins "dreams are merely a second life" and contains passages that explain Nerval's descent into madness.  
 ANSWER: **Aurelia**  
 [10] Gerard de Nerval was savagely attacked by this writer, the author of *The Clemenceau Case* and *The Lady of the Camellias*, which inspired *La Traviata*. He is the son of the author *The Man in the Iron Mask*.  
 ANSWER: Alexandre **Dumas**, fils
18. This book was written under the direction of Gunnar Myrdal and drew upon the author's previous research on the Dahomey. For 10 points each:  
 [10] Name this 1941 work of anthropology that attempted to debunk the idea that Africans brought to the Americas share no cultural history from the places where they originated.  
 ANSWER: *The **Myth of the Negro Past***  
 [10] *The Myth of the Negro Past* was written by this student of Franz Boas and father of African-American studies who founded the first ever African Studies department at Northwestern.  
 ANSWER: Melville [Jean] **Herskovits**  
 [10] One of Herskovits' students was this linguist and developer of a system that classified African languages into four families. His essays on the topic were collected in 1963's *The Languages of Africa*.  
 ANSWER: Joseph [Harold] **Greenberg**

19. Name some historical regions of the Middle East, for 10 points each:

[10] The area to the east of the Caspian Sea was roughly split into Khwarezm in the northwest, Khorosan in the south, and this region to the northeast. Its Greek name signifies that it was beyond the Oxus river.

ANSWER: Transoxiana [or Mawarannahr; accept Sogdiana or Turan]

[10] This region, which was an independent kingdom from 1916 to 1921, encompassed the western coast of Arabia and included Mecca and Medina.

ANSWER: al-Hejaz

[10] This region of southern Asia Minor, between Lycia and Cilicia, spoke a dialect of Greek similar to Cypriot and Arcadian, and had its historical capital at Perga on the Mediterranean coast.

ANSWER: Pamphylia

20. The chapel of this building contains a fresco cycle painted by Benozzo Gozzoli. For 10 points each:

[10] Name this Florentine building that contains the *Procession of the Magi* paintings in its Magi Chapel.

ANSWER: Palazzo Medici Ricciardi [or Medici Ricciardi Palace; prompt on less-specific answers including “Medici”]

[10] The Medici Palace is the magnum opus of this repetitively named 15th-century Florentine architect of the Brancacci Tomb in Naples.

ANSWER: Michelozzo di Bartolomeo Michelozzi [accept either underlined name]

[10] Michelozzo designed one of these buildings on the island of San Giorgio Maggiore. Michelangelo designed the staircase for the Laurentian building of this type in Florence.

ANSWER: library [or biblioteca]