



ACADEMIC COMPETITION FEDERATION

2015 ACF NATIONALS
PACKET 5 BY THE EDITORS

TOSSUPS

1. At one point, this text asks whether the “judging mind” has a need for a theory of Röntgen’s rays, a theory of “mind-stuff” and a conviction about the causality of conscious states. In its tenth and final numbered section, this essay cites Charles Secretan’s belief that “perfection is eternal” to illustrate the author’s sentiment that “the best things are the more eternal things.” This essay uses the example “choos[ing] between going out with your umbrella or without it” to distinguish between forced and avoidable options. This essay then defines a genuine option as one that is living, forced and momentous. This essay argues that it is our duty to know the truth and to avoid the error, and it takes issue with W.K. Clifford’s suggestion that it is wrong to engage in the title activity without sufficient evidence. For 10 points, name this defense of religious faith, a lecture by William James.

ANSWER: “The Will to Believe”

2. Several members of this group were captured in a surprise attack by the rebel leader Nameisis, whose horses died crossing the icy river of Lielupe, and whose castle at Tervete was burned down by this group. At that time, this group was based at Dobele Castle. One of its earliest leaders was Volquin, who based its operation at Cesis, but was defeated at the Battle of Saule, forcing this group to reorganize after a joint attack by the Zamgallians and the Samogitians. The lands conquered by this organization were known as Terra Mariana. Its final leader Gotthard Kettler was defeated at Ergeme and became the “Duke of Courland and Semigallia” after this group was dissolved in 1561, in the midst of a war which shares its name with this group. Originally known as the Brothers of the Sword, this group was pushed back at the Battle of Lake Peipus by the Novgorod Republic. For 10 points, name this order which worked with the Teutonic Knights to crusade against pagans in Lithuania.

ANSWER: Livonian Order [or Livonian Order after “order” is read; Livonian Knights; or Order of the Brothers of the Sword until it is read; or Fratres Militiae Christi; or Schwertbruderorden; or Livonian Militia of Christ; or obvious equivalents]

3. Synthesis of thiophenols from phenols can be performed using one of these reactions named for Newman and Kwart. Silyl ethers can be synthesized using one of these reactions named for Brook. This type of reaction is responsible for the “ring walk” in certain bicyclic compounds. Another example of this type of reaction involves the O-acylation of a hydroxamic acid followed by hydrolysis to produce a primary amine. This type of reaction produces an imine from a protonated hydrazone in the second step of the Fischer indole synthesis. The Lossen reaction is one of these reactions, as is the thermal decomposition of an acyl azide into an isocyanate via release of nitrogen gas. This type of reaction is exemplified by hydride shifts as well as a pericyclic isomerization of a 1,5-diene in a sigmatropic fashion. For 10 points, name these reactions which alter the carbon skeleton of a molecule, which include examples named for Curtius and Cope.

ANSWER: rearrangements

4. A tenor in this piece urges himself to remain patient while accompanied by contrasting calm legato notes and agitated dotted rhythms in the aria “Geduld, Geduld.” This piece uses the oboe da caccia to accompany tragic moments, such as the recitative “O Schmerz.” It begins with a *turba* in 12/8 time that becomes a call and response between two antiphonal choruses before a children’s choir joins in to sing the hymn “O Lamm Gottes.” This choral work features five chorales based on the hymn “O Haupt voll Blut und Wunden,” as well as the aria “Erbarme dich,” a lament sung by Peter. The Vox Christi in this work is accompanied by sustained strings until the words “Eli eli lama sabachthani.” In 1829, its composer’s reputation was revived when it was conducted by Felix Mendelssohn. For 10 points, name this choral work by Johann Sebastian Bach set to the first book of the New Testament.

ANSWER: St. Matthew Passion [or Matthaus-Passion; or BWV 244]

5. A long chapter of this book describes Foppl's brutal rape of an African slave named Sarah. This novel gives the backstory of Shale Schoenmaker, who was inspired to become a plastic surgeon after his idol, the pilot Evan Godolphin, disfigured his face in a plane crash. A chapter of this novel opens with one of the main characters learning about the theory of "psychodontia" from Dr. Dudley Eigenvalue. An early chapter of this book is a reworking of its author's short story "Under the Rose," and this book introduces the author's recurring character of Kurt Mondaugen, who witnesses the Great Herero Uprising while in German Southwest Africa. The beginning of this book features an alligator hunt through the sewers of Manhattan by a member of the Whole Sick Crew. It ostensibly follows Benny Profane and Herbert Stencil, who search for the mysterious title woman. For 10 points, name this first novel of Thomas Pynchon.

ANSWER: V.

6. A type 4 generating function for a canonical transformation is a function of time and this quantity before and after the transformation. Hamilton's characteristic function generates a transformation in which all values of this quantity become constants of the motion. For a charged particle moving in a magnetic field, the classical value for this quantity in absence of the field, plus the product of the particle's charge and the magnetic vector potential, gives its "canonical" value. A coordinate is "cyclic" if the coordinate's canonically conjugate value for the generalized form of quantity is conserved—this is the case for any generalized coordinate Q because it equals the partial derivative of the Lagrangian with respect to the generalized velocity \dot{Q} . It is said to be "conjugate" to position, since it is equal to the Fourier transform of position. For 10 points, name this quantity that, in Newtonian mechanics, is conserved in both inelastic and elastic collisions.

ANSWER: linear momentum [or generalized momentum; or canonical momentum; or conjugate momentum; do not accept "angular momentum"]

7. An enthusiast of this topic visited Amorphous Island, whose first king ate a monolith and had sex with his harem inside of it, and whose second king chased away all the fish by building railroads. Its major Canadian practitioner is Christian Bök, whose book *Crystallography* uses the study of crystals to explain language. A Boris Vian book asking "What's That?," in regards to this topic was published by a London college whose Committee for Hirsutism and Pogonotrophy is devoted to it. Practitioners of this discipline must make their language resemble syzygies, since "a word must transfix a momentary conjunction or opposition of meanings." Dr. Faustroll is a figure in this movement, which "seeks to understand the universe that is supplementary to our own." The study of what lies beyond metaphysics is at the center of, for 10 points, what "science of imaginary solutions" created by Alfred Jarry?

ANSWER: pataphysics

8. This kingdom was revived as a semi-independent state under two kings named Kamnaskires, who set up a mint to produce coins, which was later discovered by Alfred von Gutschmid. A governor in this kingdom, Athibu, is attested as ruling at its city of Kabnak. One king of these peoples, Khum-bannu-mena, was granted the epithet "Expander of the Empire" and was the fourth king of its Anzanite line. Another ruler of this kingdom installed his son Warad-Sin on the throne of Larsa. This kingdom's primary deity Inshushinak was said to rise to heaven every night from a temple built at its capital of Choga Zambil, which contains the massive ziggurat of Untash-gal. This kingdom destroyed the Kassites during their sack of Babylon in which they captured Hammurabi's stele. Based at the cities of Anshan and Susa, for 10 points, name this kingdom of ancient Iran.

ANSWER: Elamites [or Elymais; or Hatamti; or Atamti]

9. In the second scene of this play, a man quotes Friedrich Nietzsche, saying that "we can never entirely possess the female soul." The first scene in this play includes a conversation about how a character's mother took a trip to the south for which she borrowed that character's car jack. It joins the plays *Widows* and *Reader* in its author's "Resistance Trilogy." A character calls attention to a man's having said "Stud" instead of "Bud" during this play's climax, which ends with selections from Mozart's "Dissonant Quartet" being played while a mirror is lowered in front of the audience. A character named to the president's "Commission" is assisted after suffering a flat tire by the antagonist of this play. During much of this play, Gerardo defends Dr. Roberto Miranda, who is accused of torturing and raping Gerardo's wife Paulina Salas. For 10 points, name this anti-Pinchot play by Ariel Dorfman, which takes its name from a Franz Schubert string quartet.

ANSWER: Death and the Maiden

10. Later in life, this man purchased a vacation ranch in Hood River, Oregon, though he also owned a house named "Mount Hood" that he built in Winona Lake, Indiana. He hired Homer Rodeheaver and Virginia Asher to work under him, after initially working as an assistant to J. Wilbur Chapman. He married the daughter of an ice cream baron, and that woman Nell Thompson managed his business dealings. This man created the motto "Get on the Water Wagon" to support Prohibition and went on tours known as the "sawdust trail." He first came to national attention after Cap Anson convinced A.G Spalding that this man's tremendous speed would make him a fine outfielder for the Chicago White Stockings. For 10 points, name this baseball player who traveled the country to speak at wooden tabernacles, the best-known evangelical preacher in early 20th century America.

ANSWER: William Ashley "Billy" Sunday

11. When this artwork is closed, one can see kneeling donor portraits of Angelo Tani and Caterina Tanagli in front of grisaille statues of the Virgin and Child and reptilian demons clinging to the armor of St. Michael. Though it is not the Portinari altarpiece, Tommaso Portinari can be seen in this painting, in which he is carried by an angel with peacock wings that is wearing a red brocaded robe and armor made of gold. The left side of this painting features angels sitting on a Gothic façade, as people are led up a crystal staircase. The center of this polyptych features a lily of mercy and red sword of justice levitating above the head of Jesus Christ, who appears in a red robe as he rests his feet on a sphere of gold. The bottom of the central panel of this triptych features St. Michael using a scale and crosier to separate the damned and the saved. For 10 points, name this triptych depicting the end times, which was created by Hans Memling.

ANSWER: Hans Memling's The Last Judgment [or Hans Memling's The Last Judgment]

12. The toxin streptolysin O works by binding to this compound. This compound is hydroxylated twice prior to reacting with HSD3B7 in the beginning of an "acidic pathway" which converts it to CDCA. Type C Niemann-Pick disease is typically diagnosed by filipin staining to detect the presence of this compound. This compound and its fungal analogue can be removed from cells by nystatin, amphotericin B, or methyl-beta-cyclodextrin. The enzymes DHCR7 and CYP51 catalyze the biosynthesis of this compound, which is regulated by the transcription factor SREBP-2. Macrophages which have ingested large amounts of this compound turn into foam cells. This compound is the starting point for the synthesis of bile acids in the liver. This compound's synthesis includes intermediates such as mevalonate and squalene and is suppressed by HMG-CoA reductase inhibitors. For 10 points, name this steroid whose levels are lowered by statins, which is carried by HDL and LDL in its good and bad forms.

ANSWER: cholesterol

13. In one of this man's novels, Kuprasso's cafe is revealed to hide the Garden-house of Suliman the Red, where several characters are hypnotized by the dancing of the Companions of the Rosy Hours. Peter Pienaar and Sandy Arbuthnot often accompany one of this man's characters, who poses as "Twisdon" and gives an impromptu speech on free trade for the political candidate Sir Harry. Early in a novel by this man, the protagonist disguises himself as a milkman to escape his apartment after the death of Franklin Scudder. The protagonist of his most famous novel discovers that the Black Stone, a ring of German spies, are plotting to assassinate the Greek Premier Karolides and invade England, causing that character to flee both to and from the Scottish countryside. For 10 points, name this Scottish author who, in addition to being the 15th Governor-General of Canada, wrote about the adventures of Richard Hannay in novels like *Greenmantle* and *The Thirty-Nine Steps*.

ANSWER: John Buchan [or Lord Tweedsmuir; or the 1st Baron Tweedsmuir]

14. In the ninth century, this city's duke Andrew II entered the Pactum Sicardi after calling in Saracen mercenaries to repel an attack of Sicard. Rebels based in this city were defeated at the Battle of Rieti, after which it was occupied and administered by Karl von Ficquelmont. The marble calendar of this city claims its first bishop was Asprenas, who was converted by an old woman called Candida the Elder. A republic named for this city was set up after a revolt against viceroy Rodrigo Ponce de León, the Duke of Arcos under Philip III. In 1224, Frederick II established the first public university in this city. In September 1943, a group of street boys spearheaded a Nazi resistance effort called the "Four Days" of this city. Republics based in this city include one led by the fisherman Masaniello, and a six-month state called the Parthenopean Republic in 1799, before it was ruled by Joachim Murat under Napoleon. For 10 points, name this capital of the Campania region just west of the slopes of Mount Vesuvius.

ANSWER: Naples

15. In one section of this work, a man sings about “pen knives [that] felt shut up” and “scissors [that] declared themselves cut out” due to the magnet’s attraction to a silver churn. In another section of this work, an ugly woman appears on stage with a cello and sings “Silvered is the Raven’s Hair.” A colonel and chorus sings “if you want a receipt for that popular mystery” in this work, which opens with twenty maidens spurning their former loves, the Dragoon Guards. Near the end of its first act, the title character sings “True love must single-hearted be” before not romantically selecting Grosvenor, who later on cuts his hair to appear ordinary and to avoid a curse from his rival. In this satire on the aesthetic movement, the poet Bunthorne falls in love with the title dairy maid, but in the end nobody ends up being his bride. For 10 points, name this comic opera by Gilbert and Sullivan.

ANSWER: Patience [or Bunthorne’s Bride until “Bunthorne” is read]

16. A proposed experimental step to this process would make use of organisms that engage in “dark fermentation.” The optional, tertiary forms of this process include the use of powdered activated carbon and ion-exchange resins. Early steps of this process often make use of a communitor, a type of shredder, after which a cyclone degritter might be used. During one portion of this process, a material, such as alum, is added to a flash mixer. An optional, late stage of this process involves the use of a mass of microorganisms called “activated sludge” to remove suspended solids. Stages of this process include coagulation and flocculation, in which impurities precipitate out. Ultraviolet light or ozone is used as a disinfectant during the final stage of this process, which is followed with effluent discharge. For 10 points, name this process by which H₂O is purified and sent back to the environment.

ANSWER: waste water treatment [or water reclamation; or sewage treatment]

17. The appendix to this book contains pictures of various properties in Port-Au-Prince and their prices, as well as a map showing human settlement in that city. An excerpt from Fernand Braudel’s *The Wheels of Commerce* provides this text’s recurring metaphor of a certain part of the world as being a Bell Jar that is closed off from the rest of the world. The author of this treatise spent 289 days trying to register a business in his home country to argue that it and other nations should develop a system in which information is easily dispersed and assets are made fungible. This book argues that a system of titles, deeds and articles of incorporation backed by a legal infrastructure explains “why [the title economic system] triumphs in the West and fails everywhere else.” For 10 points, name this book, a follow-up to *The Other Path*, which was authored by Peruvian economist Hernando de Soto.

ANSWER: The Mystery of Capital

18. This man and his retinue comes to a bridge over black, devilish, water and think they see two lions tethered to a large rock, but that turns out to be an enchantment. In an early episode, this hero foolishly ignores the advice of a maiden and sleeps in a bed; at the stroke of midnight a lance with a blazing pennant falls onto the bed and nearly burns him to death. Later on, he uses his bare hands to remove iron bars from a cage which causes him to bleed; he then makes love with his lady while bleeding, leading Sir Kay to be accused of adultery. This man crosses a bridge shaped like a sword to enter the kingdom of Gorre, which is ruled by King Bagdemagus. He kills the dishonorable Meleagant and received his nickname by riding a vehicle that is reserved for criminals to be pilloried. For 10 points, name this “knight of the cart” who rescues Guinevere in a poem by Chretien de Troyes.

ANSWER: Lancelot [or The Knight of the Cart until it is read]

19. This politician introduced bills including the “Log Cabin Pre-emption Law” and the Graduation Act, which fixed prices for public land to be sold on a scale from twelve-and-a-half cents to one dollar. In his autobiography, he documented living at the home of Charles Gratiot and his close friendship with fur trader Pierre Chouteau, who financed his career. As an attorney, he feuded with rival lawyer Charles Lucas, and killed him in a duel on Bloody Island. This author of the initial Homestead Act gained the nickname “Old Bullion” for his hatred of paper money. Along with his brother Jesse, he also feuded with William Carroll, which led to a street fight in Nashville where this man was threatened with a horsewhip, and then shot Andrew Jackson in the arm. Later, his daughter eloped with John C. Fremont. For 10 points, name this Missouri senator who shares his full name with the American muralist who was his descendant.

ANSWER: Thomas Hart Benton

20. A character in this novel collects fencing strokes marked with different constellations in a book called *The Finest Signatures of the Saber*, and is named Averkie Skila. While in prison, another character in this novel writes letters to herself that all end with the line “Our false victim saved us from death.” In 1999, Han Shaogong won a libel case against critics who had accused him of plagiarizing this novel. Dorothea Schultz’s reaction to some Xeroxed pages of a work by Cyril given to her by Dr. Muawia makes up a crucial paragraph of this novel, which claims that Samuel Cohen, Yusuf Musudi, and Avram Brankovich are its three “authors.” This novel includes three sections detailing Princess Ateh’s response to a certain “Polemic.” It is divided into sections representing Christianity, Judaism, and Islam, and it comes in “male” and “female” versions. For 10 points, name this “lexicon novel” about the religious conversion of the title people, written by Milorad Pavic.

ANSWER: Dictionary of the Khazars: A Lexicon Novel [or Hazarski Recnik]

TIEBREAKER

21. This event was set in motion by the February printing of a false announcement in the *New Times*, which was edited by John Stoddart, known as “Doctor Slop.” Those eventually tried for their participation include John Thomas Brunt and a Jamaican-born cabinet maker, William Davidson, who was part of the Marylebone Union Reading Society. Its supporters were inspired by the author of works like *Rights of Infants* and *End of Oppression*, who advocated a plan including public ownership of land. This incident, broken up by George Ruthven and magistrate Richard Birnie, was precipitated by the passage of the Six Acts and was led by Arthur Thistlewood, a member of the Spenceans. For 10 points, identify this 1820 conspiracy to overthrow the British government by killing various cabinet ministers named for a meeting place in London.

ANSWER: Cato Street Conspiracy [or obvious equivalents of “conspiracy”, such as “plot” or “plan”]

BONUSES

1. A summary of this now-lost epic poem in five books is preserved in the *Chrestomatheia*. For 10 points each:

[10] Identify this epic poem, which chronicles the voyages from many heroes, including Menelaus and Ajax the Lesser, made after the Trojan War.

ANSWER: Nostoi [or The Returns]

[10] This hero, who makes a return voyage with Phoenix, is one of the heroes of *The Nostoi*. During the war, he callously killed Priam at an altar and took Andromache as his concubine after throwing the baby Astyanax from the walls of Troy.

ANSWER: Neoptolemus [or Pyrrhus]

[10] Perhaps the most notable poem on the *nostos* theme is *The Odyssey*, which Homer begins by using this epithet, meaning “well-travelled”, to describe Odysseus, without referring to him by name until 20 lines later.

ANSWER: polytropos [or polutropos]

2. David Brookshaw has been responsible for most of the English translations of this author’s works, including his short story collection *Voices Made Night* and his novel *The Last Flight of the Flamingo*. For 10 points each:

[10] Name this contemporary author. Tuahir and Muidinga find and read through a set of notebooks written by Kindzu in this man’s most famous novel, *Sleepwalking Land*.

ANSWER: Mia Couto [or António Emílio Leite Couto]

[10] Couto, like many modern Mozambican authors, was heavily influenced by this Brazilian modernist, whose novels include *Gabriela, Clove, and Cinnamon* and *Dona Flor and her Two Husbands*.

ANSWER: Jorge Amado [or Jorge Leal Amado de Faria]

[10] Couto’s predecessor as winner of the Neustadt International Prize was this Parsi author of *Tales from Firozsha Baag*. In 2010, complaints from relatives of Bal Thackeray led the University of Mumbai to remove his first novel, *Such a Long Journey* from its curriculum.

ANSWER: Rohinton Mistry

3. This man commissioned William Buckland and William Sears to build his family seat on the Potomac River in 1759. For 10 points each:

[10] Identify this master of Gunston Hall, who drafted the Fairfax Resolves and the Virginia Declaration of Rights, which formed the basis for the United States Bill of Rights.

ANSWER: George Mason [or George Mason IV]

[10] This Massachusetts politician joined Mason in bringing a motion to add a Bill of Rights to the Constitution. Along with Charles Cotesworth Pinckney and John Marshall, he was one of the diplomats sent in the XYZ Affair.

ANSWER: Elbridge Gerry

[10] Elbridge Gerry was succeeded as Governor of Massachusetts by this man who opposed the War of 1812 during his time in office, and secretly negotiated with Nova Scotia to return territory seized by the British.

ANSWER: Caleb Strong

4. You are Dr. Jean Carlo Montague and your Monte Carlo algorithm is taking too long to converge. Answer some questions about what you might do, for 10 points each.

[10] You consider employing techniques such as stratified sampling to reduce this quantity for your estimator. It is given by the expectation of a random variable squared minus the square of the expectation of a random variable.

ANSWER: variance [do not accept or prompt on “bias”]

[10] You consider using this specific variance-reduction technique in which for every point X in between 0 and 1 you sample, you sample 1 - X.

ANSWER: the method of antithetic variables [or antithetic variates]

[10] By using variance reduction techniques, this band of values becomes smaller. This set of values is the possible values that the true estimate may be given the point estimate. 95% and 99% ones are often calculated.

ANSWER: confidence intervals [or confidence levels]

5. The Dayr, or Monastery, at this site was dedicated to the deified king Obodas I, while its Khasneh or Treasury of the Pharaoh contains a 40-meter façade cut directly into the mountainside. For 10 points each:

[10] Name this ancient capital of the Nabataean kingdom, a site sometimes known as the lost city of rocks.

ANSWER: Petra [or al-Batra]

[10] The 13 rock-hewn churches at Lalibela are located in this modern-day country, home to Lake Tana and the city of Addis Ababa.

ANSWER: Ethiopia

[10] Another example of rock-cut architecture are these grottoes on the Yi River located in the south of Luoyang City in Henan Province, China. These grottoes contain thousands of Buddhist statues, dating from the Northern Wei and Tang Dynasties.

ANSWER: Longmen Grottoes [or Dragon's Gate]

6. The background of the left-hand side of this painting features mauve and orange, which is designed to match the subject's dress. For 10 points each:

[10] Name this 1905 portrait of its artist's wife, which is usually named for the splotch of color that runs down the subject's forehead and nose.

ANSWER: The Green Stripe [or The Green Line; or La Raie Verte; or the Portrait of Madame Matisse]

[10] *The Green Stripe* was painted shortly before Henri Matisse joined Andre Derain in this colorful art movement, whose name means "wild beast."

ANSWER: fauvism [or word forms]

[10] Inspired by *The Green Stripe*, this other fauvist painted a portrait of Andre Derain featuring a partly green nose, a partly yellow forehead, and blue eyelids. His other fauve works include *The River Scene at Chatou*.

ANSWER: Maurice de Vlaminck

7. Answer the following questions about techniques used in the field of "reverse genetics." For 10 points each:

[10] This common technique used in reverse genetics was famously used by Capecchi, Evans, and Smithies, who won the 2007 Nobel Prize in Medicine for their use of this technique to create namesake transgenic mice. It is contrasted with a similarly-named technique in which a gene is inserted into a specific site in the genome.

ANSWER: gene knockout [or KO; do NOT accept or prompt on "knock-in"]

[10] Gene knockout is a commonly used technique to study this diploid flowering plant from the mustard family. It is the first plant to have its genome sequenced entirely.

ANSWER: Arabidopsis thaliana [or A. thaliana; or thale cress; or mouse-ear cress]

[10] This technique used in reverse genetics was developed in 2000 for use with *Arabidopsis*. This technique first uses a chemical mutagen like EMS or ENU to induce point mutations, then uses a high-throughput DNA analyzer to identify the mutations in the specific gene or genes of interest.

ANSWER: TILLING [or Targeting Induced Local Lesions in Genomes]

8. Thomas Dekker apparently had trouble writing plays on his own. For 10 points each.

[10] He collaborated with Thomas Middleton on the first of two parts of this play, in which the Duke of Milan fakes Infelice's death to disrupt her relationship with Hippolito, who himself is pursued by Bellafront, the would-be title character.

ANSWER: The Honest Whore

[10] Dekker was mocked in Ben Jonson's *The Poetaster*, and in turn caricatured Jonson as "Horace" in this play, co-written with John Marston, which was subtitled "The Untrussing of the Humorous Poet."

ANSWER: Satiromastix

[10] Dekker worked with this playwright on *Christmas Comes but Once a Year*, as well as both *Westward Ho!* and *Northward Ho!*. On his own, this man wrote plays like *The Devil's Law Case* and *The Duchess of Malfi*.

ANSWER: John Webster

9. The founder of this dynasty engaged in war with Menander, reportedly over the theft of a horse, and his son Agnimitra was a governor under him who conquered Vidarbha by defeating Yagnasena. For 10 points each:

[10] Name this dynasty established when its founder Pushyamitra murdered the previous ruler at a military parade.

ANSWER: Sunga Dynasty

[10] Pushyamitra allegedly destroyed a bunch of Buddhist temples because a priest foretold that it was the only way he'd surpass the fame of this great Mauryan king, whose support of Buddhism can be seen in his Rock and Pillar Edicts.

ANSWER: Asoka Maurya [or Ashoka]

[10] One source for the history of the Sunga Dynasty is this pillar built near the city of Besnagar around 113 BCE. It's named for an ambassador who served under king Antialcidas, and visited the court of the Sunga king Bhagabhadra.

ANSWER: Heliodorus Pillar [or Heliodorus Column]

10. This psychiatrist established Kingsley Hall, a place where he lived with his patients afflicted with mental illness and helped them regress to infancy so that they would cure themselves. For 10 points each:

[10] Name this psychiatrist, whose book *The Divided Self* argued that insanity was not a mental illness. Instead, he stated “insanity is a perfectly rational response to an insane world.”

ANSWER: Ronald David Laing

[10] R.D. Laing’s views on antipsychiatry were presaged by that of this Hungarian psychiatrist, who wrote *The Myth of Mental Illness* and *The Manufacture of Madness*.

ANSWER: Thomas Stephen Szasz

[10] R.D. Laing’s concept of a person’s ontological security was derived from his readings of this philosophical movement, whose writers included Jean-Paul Sartre and Albert Camus.

ANSWER: existentialism [or word forms]

11. This composer wrote the string quartet “Musica de Feria,” as well as a three-movement *Homage to Federico Garcia Lorca*. For 10 points each:

[10] Name this Mexican composer, who used a poem by Nicolas Guillen as the basis for his symphonic poem *Sensemaya*.

ANSWER: Silvestre Revueltas

[10] An earlier Mexican composer, Juventino Rosas, is best known for writing one of these dances named “Over the Waves.” Popular Viennese ones included “Tales from the Vienna Woods.”

ANSWER: waltzes

[10] Revueltas’s *Musica para charlar* opens with the strings depicting one of these things and was adapted from the score of a documentary about their use in Baja California. The toccata that closes the second *Bachianas Brasileiras* suite is titled for a “little” one of these things “of Caipira.”

ANSWER: trains [or trenzinho; or railroads; or ferrocarriles]

12. Answer the following about the question of Schleswig-Holstein, for 10 points each.

[10] This 1865 meeting between Otto von Bismarck and Gustav von Blome at a spa town in the Austrian Alps resulted in Prussia gaining rule of Schleswig, Austria receiving Holstein, and the area of Saxe-Lauenburg being purchased by the Prussian king.

ANSWER: Gastein Convention [or Gasteiner; or Convention of Badgastein]

[10] During the following year, the Peace of Prague admitted both Schleswig and Holstein to this customs union, which was formed as a free-trade association of German states in 1834.

ANSWER: Zollverein

[10] This Prussian field-marshal nicknamed Papa headed up cavalry in the First Schleswig War, where he refused to withdraw his troops until a treaty was ratified by the Frankfurt Parliament. At age eighty, he was called back to lead the combined Austro-Prussian army during the Second Schleswig War.

ANSWER: Friedrich Graf von Wrangel [or Friedrich Heinrich Ernst Graf von Wrangel]

13. In this story, Joey Hart explains the meaning of unusual questions like “Are you lifting the oxcart out of the ditch?” to the protagonist, an employee of F&S named Mr. Martin. For 10 points each:

[10] Name this short story in which Martin plots to “rub out” his new coworker Ulgine Barrows.

ANSWER: “The Catbird Seat”

[10] In this fable by the author of “The Catbird Seat,” a husband is offended by his wife calling him a “booby” after he tells her about the title animal. The wife calls the police and a psychiatrist that end up taking her away when he denies having seen the animal.

ANSWER: “The Unicorn in the Garden”

[10] “The Catbird Seat” and “The Unicorn in the Garden” were written by this regular contributor to *The New Yorker*, who also wrote “The Secret Life of Walter Mitty.”

ANSWER: James Thurber [or James Grover Thurber]

14. This thinker analyzed the *Meditations* of Marcus Aurelius in *The Inner Citadel*. For 10 points each:

[10] Name this philosopher who analyzed Heraclitus's quote "Nature loves to hide" using both a "Promethean" and "Orphic" approach in his book *The Veil of Isis*.

ANSWER: Pierre **Hadot**

[10] In another work, Pierre Hadot examined the "simplicity of vision" contained in the works of this Neoplatonist philosopher, who authored *The Enneads*.

ANSWER: **Plotinus**

[10] Plotinus's philosophy of reality consists of the "the One," "the Soul" and this concept, which is responsible for the beauty of Forms. The Greek version of this term gives its name to a journal reviewed by Ernest Sosa.

ANSWER: the **intellect** [or **nous**]

15. The chiral projection operators are defined as one-half times one plus or minus this quantity. For 10 points each:

[10] Name this quantity, whose eigenstates are the right-handed and left-handed particle spinors. The anti-commutator of this quantity with any of a set of 4 related quantities equals zero.

ANSWER: the **fifth gamma matrix** [or **gamma-5**; do NOT prompt on partial answers]

[10] In the high-energy limit, chiral eigenstates are equivalent to the eigenstates defined by this quantity, which is defined as the projection of a particle's spin onto its direction of motion, or the dot product of spin and momentum divided by the magnitude of the momentum.

ANSWER: **helicity**

[10] Every single one of these particles is in a left-handed helicity state, while all of their antiparticles are in a right-handed helicity state. There exist 3 of these particles, corresponding to the electron, the muon, and the tauon.

ANSWER: **neutrinos**

16. He designed an ivory baton for Richard Wagner and a synagogue in the Moorish Revival Style in Dresden. For 10 points each:

[10] Name this German architectural historian, whose *Preliminary Remarks on Antiquity* presented the thesis that the Greeks painted all of their now-white buildings in gaudy colors. He discussed the barbarian origins of the hearth, the roof, the enclosure and the mound as the titular *The Four Elements of Architecture*.

ANSWER: Gottfried **Semper**

[10] To collect evidence for the polychrome hypothesis, Gottfried Semper travelled to Athens and scraped off ancient paint on this building. Phidias sculpted its statue of Athena.

ANSWER: **Parthenon**

[10] Gottfried Semper's now widely accepted polychrome hypothesis dismantled the neoclassical idea of austerity, which was promulgated when this other art historian wrote *History of Ancient Art*.

ANSWER: Johann Joachim **Winckelmann**

17. This man was captured by William Skeffington and put to death in an action known as the "Maynooth Pardon." For 10 points each:

[10] Name this Earl of Kildare who was given a nickname due to the fancy helmets worn by his soldiers. He led a failed rebellion against Henry VIII after he became convinced that his father was being held prisoner in the Tower of London.

ANSWER: **Silken Thomas** [or Thomas **Fitzgerald**]

[10] Archbishop Alen tried to stop Silken Thomas from attacking, but was executed at this site. This place is better known for being the name of the battle where high king Brian Boru defeated a Viking band led by Sigurd of Orkney in 1014, but was killed in the process.

ANSWER: **Clontarf** [or Cath **Chluain Tarbh**]

[10] All of these wonderful tales are recounted in the Annals of the Four Masters, along with lots of tales about this patron saint who chased all the snakes out of Ireland and into the sea.

ANSWER: St. **Patrick** [or St. **Padrig**; or St. **Padraig**; or St. **Qatrikias**; or St. **Patricius**]

18. Answer the following about the life and times of Rainer Maria Rilke, for 10 points each.

[10] Rilke met his artistic muse, the sculptor Clara Westhoff, while studying at this art colony near Bremen. A diary of his time spent here records his complicated thoughts about Lou Andreas-Salome.

ANSWER: Worpswede

[10] The death of Vera Knoop inspired Rilke to write this poetry collection, the nineteenth entry of which refers to the title figure as the “god with the lyre”.

ANSWER: Sonnets to Orpheus [or Die Sonette an Orpheus]

[10] Many of Rilke’s experiences as a destitute writer in Paris inspired this title character of his only novel, who asks “Is it possible that the whole history of the world has been misunderstood?”

ANSWER: Malte Laurids Brigge [accept either; or The Notebooks of Malte Laurids Brigge; or Die Aufzeichnungen des Malte Laurids Brigge]

19. Answer the following questions about enantioselective reactions, for 10 points each.

[10] David Evans’ oxazolidinone chiral auxiliaries are commonly used to control the resulting stereochemistry of this reaction, in which an enolate attacks a carbonyl at the alpha-carbon, producing an addition product which contains an alcohol beta to an aldehyde. Then, a condensation is typically performed to produce an enone.

ANSWER: aldol reaction [or aldol addition; or aldol condensation]

[10] The Sharpless asymmetric dihydroxylation uses potassium ferricyanide to regenerate a catalyst based on this compound. In a method sometimes named for the Upjohn company, this compound is used to convert alkenes to vicinal diols.

ANSWER: osmium tetroxide [or OsO₄]

[10] David MacMillan developed chiral imidazolidinone catalysts for controlling the stereochemistry of this reaction. Niobium pentachloride is a common Lewis acid used to catalyze both this reaction and a similar, less famous reaction.

ANSWER: Diels-Alder reaction

20. The name of this movement literally translates as “value creation society,” and its current president Daisaku Ikeda founded the Komeito political party. For 10 points each:

[10] Name this Buddhist religion founded in Japan by Tsunesaburo Makiguchi, and later led by Josei Toda, which stresses the ritual chanting of the Lotus Sutra.

ANSWER: Soka Gakkai

[10] Soka Gakkai teaching is based on the writings of this Japanese Buddhist monk of the Kamakura Period who retired to Mount Minobu late in life to write on his interpretation of the Lotus Sutra. Earlier, he’d been banished to the Izu Peninsula for writing “Rissho Antoku Ron.”

ANSWER: Nichiren

[10] The aggressive conversion techniques of Soka Gakkai often created domestic incidents, much like this cult Japanese religion which carried out a sarin attack in the Tokyo subway system in 1995.

ANSWER: Aum Shinrikyo [or Aleph]