

ACF Regionals 2015: A Livable Community

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Tossups

1. This composer's first symphony begins with a G minor movement marked *Andante orgoglioso* and has a finale concluding in C major. Only the winds and percussion play in the second movement "Humoreske" of this composer's sixth symphony. The *Andante pastorale* second movement in his third symphony features wordless solos for soprano and baritone. Another of his symphonies opens with an *Allegro colerico* and closes with an *Allegro sanguineo*. He instructed that two sets of timpani be placed as far as possible from each other on either side of the stage for a symphony in which they "duel" in the final movement. For 10 points, name this composer of symphonies nicknamed "The Four Temperaments" and "Inextinguishable," a native of Denmark.

ANSWER: Carl Nielsen

2. A 9th-century letter denying this event, opening with the words "Cogitis me," was written to Paula and Eustochium by a Pseudo-Jerome. St. John Damascene is sometimes called the "Doctor of" this event due to his three sermons on it. The 4th Glorious Mystery of the Rosary contemplates this event, which is traditionally held to have left lilies behind. The latest *ex cathedra* infallible declaration, *Munificentissimus Deus*, established this as dogma in 1950 under Pope Pius XII. A feast on August 15 honors this event, which in Eastern Orthodox tradition was preceded by a sleep called the Dormition. Like Jesus's resurrection, it left behind an empty tomb. For 10 points, name this unique event at the end of the Virgin Mary's life, in which she arose "body and soul" into Heaven.

ANSWER: Assumption of the Virgin Mary [accept Dormition of the Virgin before "Dormition" is read; accept answers containing "Theotokos" in place of "Virgin Mary"; prompt on descriptive answers such as "Mary rising to heaven;" prompt on "death of the Virgin Mary" even though that answer violates the Catholic doctrine]

3. In this television show, a character smells corn on a body, which leads him to a farm where he adds a "reflection of God" to a "mural" depicting an eye. A character in this show forces a hysterectomy on his sister so that she can't bear an heir to the family business. The protagonist has recurring hallucinations of a feathered stag while suffering from undiagnosed encephalitis, and he fakes the murder of TattleCrime blogger Freddie Lounds. Eddie Izzard appeared on this series as mental patient Dr. Abel Gideon, who was suspected of being the Chesapeake Ripper. Hugh Dancy stars on this show as an FBI profiler who investigates serial murders while seeing a psychiatrist played by Mads Mikkelsen. For 10 points, name this NBC series based on *Red Dragon*, titled for a cannibalistic killer.

ANSWER: Hannibal

4. A historian from this polity wrote of how a man escaped Antioch undetected by laying inside a coffin with a dead chicken inside. Through her marriage to Giovanni Orseolo, a woman from this place introduced the fork to Venice. Visitors to this realm's royal palace were required to put their foreheads to the floor as the emperor's throne rose up into the air by means of hydraulics. "Dung-named" and "the Khazar" were epithets of two of this realm's rulers. A princess from this place was married off to Vladimir the Great and later helped Christianize Kiev. Another princess from this empire recorded her father's role letting the First Crusade go through it in the *Alexiad*. For 10 points, name this Mediterranean empire whose powerful women included historian Anna Komnena and the empress Theodora.

ANSWER: Byzantine Empire [or Eastern Roman Empire]

5. This character faintheartedly commits herself to improving her studies after a night of reading Emerson alone in her house, and hushes Victor when he begins singing "Ah! Si tu savais!" While talking to a friend, she declares that she would give up the "unessential things" for her children, but she wouldn't give herself up. Doctor Mandelet advises this character's husband to permit her whims, which include moving into a "pigeon house" outside of her house on Esplanade Street. This mother of Raoul and Etienne watches Adele Ratignolle give birth on her last night alive, and romances Alcee Arobin and Robert Lebrun while living in New Orleans. For 10 points, name this woman who swims as far as she can into the Gulf of Mexico at the end of Kate Chopin's novel *The Awakening*.

ANSWER: Edna Pontellier [or Edna Pontellier]

6. A painter from this country showed his daughter sitting on a fence with her feet dangling above the wild grass in the painting *Dragonfly*. Another artist from here showed gulls flying over dark blue waters in front of two Viking ships in *Guests from Overseas*. The works of one painter from this country appeals to the peasant because he paints effect while Picasso paints cause, according to Clement Greenberg's "Avant-Garde and Kitsch." An artist from this country depicted a group of semi-nomadic warriors who are gathered around a table, laughing at the insulting letter they are drafting for Mehmed IV, and also painted eleven disheveled and exhausted men who drag a barge along the banks of the Volga. For 10 points, name this country home to Nicholas Roerich and Ilya Repin.

ANSWER: Russian empire [or Rossiya; accept any of the following due to the time-span in which Roerich was alive: Soviet Union; or USSR; or Union of Soviet Socialist Republics; or Soyuz Sovetskikh Sotsialisticheskikh Respublik; anti-prompt on "Ukraine" since Repin was raised there under Russian rule]

7. In 1999, the Zeilinger group reproduced this experiment with buckyballs by heating them up to 1000 Kelvin. The sum of the squares of two properties for objects produced in this experiment is less than or equal to one, according to the Englert-Greenberger relation. A variant of this experiment which shows entanglement by deleting information is called a quantum eraser. This experiment's resulting intensity is proportional to sinc^2 of the width times π times $\sin \theta$ divided by the wavelength; that function predicts light and dark bands on a screen. This experiment disproved Isaac Newton's corpuscular theory of light. For 10 points, name this experiment first performed by Thomas Young, in which a coherent beam of light is diffracted through two openings.

ANSWER: Young's double-slit experiment

8. In a play by this man, one title character counts the bruises caused by the other title character, who accuses her of looking behind her to find a dog on the road. This author also wrote a play in which two men stage an impromptu performance of Sophocles' *Antigone* after getting off their shifts as prison workers. This man created a teenager who debates the idea of a "Man of Magnitude" to aid his composition for an English class, as well two campers who take in an old man who does not speak English. A third play by this author of *Boesman and Lena* and *The Island* takes place just as the title antagonist's father is coming home from the hospital, which prompts him to be cruel to Sam and Willie, his black servants. For 10 points, name this South African playwright of *"Master Harold" ...and the Boys*.

ANSWER: Harold Athol Lanigan Fugard

9. The spectral index $n_{\text{sub-s}}$ is one parameter in this theory that quantifies its departure from scale invariance. Early versions of this theory involved false vacuum states that failed to account for the radiation needed for reheating. Newer models use a scalar field with a namesake parameter involving the ratio of the second time derivative of the Hubble parameter to the product of the Hubble parameter and its first time derivative: the "slow roll" parameter. This theory answers the question of why the universe is isotropic if different areas are not in causal contact, known as the horizon problem. The main process this theory predicts was finished by 10 to the negative 32 seconds after the Big Bang. Alan Guth developed, for 10 points, what theory which posits a rapid expansion of the early universe?

ANSWER: cosmic inflation theory

10. The dominant edition of this philosopher's works was revised in the 70s by P.H. Nidditch and first edited by Baronet L. A. Selby-Bigge. This man inspired "quasi-realism," a meta-ethical view formulated by Simon Blackburn. Elizabeth Anscombe's *Intention* rejected this thinker's two-component theory of motivation, in which a desire and a belief are the only things needed to produce action. This man's longest book claims that personal identity is a mere "bundle" of perceptions, and downplays the strength of reason in its second part, "Of Passions." This billiards enthusiast and secret atheist wrote that all ideas come from prior "impressions," except perhaps a spectrum's missing shade of blue. For 10 points, name this author of *A Treatise of Human Nature*, an 18th-century empiricist Scotsman.
ANSWER: David Hume

11. In this story, a woman suggests in a letter that the protagonist's worries are a product of "the phantom of our own selves." The final sentence of this story describes that woman's fate as a "quiet domestic happiness" unlike that which the protagonist would have given her. This story begins with a letter to Lothar that is intercepted by Clara. The protagonist of this story, which was later analyzed in Sigmund Freud's essay "The Uncanny," constantly sees a girl across the street whom he believes is Spalanzini's daughter Olympia, but who is actually an automaton. This story's protagonist associates the salesman Coppola with the fearsome Coppelius. For 10 points, name this E.T.A. Hoffmann story whose fabled title character supposedly plucks out the eyes of children who will not sleep.
ANSWER: "The Sandman" [or "Der Sandmann"]

12. This geographic feature was closed to Christians by traders called Karimi after Reynaud of Chatillon irked them. Purported cave dwellers on this body of water's western side were the first people called "Troglodytes." A port called "Mussel Harbor" abutted this body near Berenice according to an anonymous 1st-century text about its peoples. The city of Adulis traded with the Himyarite kingdom across this body of water, allowing Axum access to frankincense and myrrh traders who plied this sea. Ships sailed down from this sea toward the land of Punt during Queen Hatshepsut's reign. For 10 points, name this sea finally joined to the Mediterranean by the Suez Canal.
ANSWER: Red Sea [or Erythrean Sea; or Sea of Reeds; or Yam Suf; accept Indian Ocean during the first sentence ONLY and do not accept it thereafter]

13. The nature of this condition was debated by Heinz Kohut and Otto Kernberg. In an essay on this condition, a University of Rochester historian describes how "the happy hooker" replaced Horatio Alger as the image of success. Robert Raskin and Calvin Hall designed a test for it where subjects choose between statements like "Compliments embarrass me" and "I like to be complimented." In a book subtitled *American Life in an Age of Diminishing Expectations*, Christopher Lasch argued that postwar America is defined by a "culture of" this condition. Sigmund Freud's 1914 paper *On* this condition popularized its name, and DSM-5 includes "largely superficial" relationships and a "pervasive pattern of grandiosity" among its indicators. For 10 points, name this disorder of excessive vanity, named for a man from Greek myth.
ANSWER: narcissism [or narcissistic personality disorder; or pathological narcissism; or cultural narcissism; prompt on reasonable synonyms such as "egocentrism" or "megalomania" until "*Diminishing*" is read]

14. The fondness of a leader of this party for a certain flower inspired the creation of the Primrose League, which is dedicated to spreading its influence. A document summarizing this party's principles warned that future legislation had potential to cause "a perpetual vortex of agitation." After the elevation of another man to a Lordship, Stafford Northcote led this party in the Commons. This party ran a short-lived government called the "Who? Who?" Ministry under the Earl of Derby, and the Tamworth Manifesto, distinguished it from a predecessor led by the Duke of Wellington. This party was also led by a man who organized Britain's purchase of the Suez Canal and had a rivalry with William Gladstone. For 10 points, name this British political party of Robert Peel and Benjamin Disraeli.
ANSWER: Conservative Party [or Conservative and Unionist Party; or Tory Party; or Tories]

15. Along with five ammonia ligands, this molecule is bonded to a ruthenium(II) [two] metal center in a new complex prepared by Allen and Senoff in 1965. As a ligand, this molecule exhibits weak sigma-donation and strong pi backbonding. When silver(I) [one] oxide is added, this gas is evolved in the Arndt-Eistert homologation of carboxylic acids. When ketones are used as the starting product for the Schmidt reaction, this gas is evolved. This gas is also released as a byproduct of the Sandmeyer reactions. In plants, it binds to a molybdenum-containing enzyme. This gas can be produced by just heating diazonium salts or azides. This gas is often used as an alternative to argon for the creation of inert atmospheres. For 10 points, name this most common gas in Earth's atmosphere.

ANSWER: dinitrogen gas [or N₂]

16. Most scholars identify this deity with a figure named Saga who dwells in Sokkvabekk. Along with a servant, this deity helped to heal the horse of Phol. Hlin and Syn serve this figure, who told the women of Winnili to cover their faces with hair, thus helping to found the Lombards. Two other servants of this deity, who ride the horse Hofvarpnir and carry shoes respectively, are Gna and Fulla. At the hall Fensalir, this goddess spins the clouds on a loom. Loki accused this goddess of having affairs with Vili and Ve. After this goddess sent Hermod on a mission to Hel, the giantess Thokk refused to weep for her dead son because this goddess failed to get an oath from mistletoe to remain harmless. For 10 points, name this Norse goddess, the mother of Baldur and wife of Odin.

ANSWER: Frigga [or Fricka; accept Frija with the standard English "j" sound; do not accept "Freya"]

17. Horatio Parker won a prize commissioned by this city for his opera *Fairyland*. With Artie Mason Carter, Philadelphia's Christine Stevenson founded a musical venue in this city with the goal of performing "Symphonies Under the Stars." Mark Swed criticized the "tyranny of technology" in the form of large LED screens installed in one venue in this city. Bassist Charles Mingus was raised largely in this city, where the Finnish-born Esa-Pekka Salonen began conducting at age 27. The mirror-like walls of the Founders Room of a concert hall in this city originally produced dangerous blinding glare. Inexpensive classical music performances are given at a natural amphitheater in this city known as the Bowl. For 10 points, name this city home to the Frank Gehry-designed Walt Disney Concert Hall.

ANSWER: Los Angeles, California

18. One poem by this author describes an island "long unknown and yet far kinder than our own" that produces figs, melons, and pomegranates. This poet laments the practice of men carving their beloveds' names into trees in a poem that states "no white nor red was ever seen / so am'rous as this lovely green." Still another poem by this author of "Bermudas" praises a man who "ruin[ed] the great work of time" and "cast the kingdom old / into another mould." The speaker of a fourth poem by this author of "The Garden" declares, "I would / Love you ten years before the Flood / And you should, if you please, refuse / Till the conversion of the Jews." For 10 points, name this 17th-century British poet of "An Horatian Ode Upon Cromwell's Return from Ireland" and "To His Coy Mistress."

Answer: Andrew Marvell

19. This eventual state's first territorial governor, Isaac Stevens, presided over settlers led by half-black pioneer George Washington Bush. An aviator coincidentally named Harry Truman refused to evacuate this home state of the Yakama tribe. A Supreme Court case originating in this state overturned *Adkins v. Children's Hospital* via Owen Roberts's "switch in time" saving a minimum-wage law. Plutonium for the Fat Man bomb was produced at this state's Hanford site. Police in this state attacked splinter groups such as DAN, who formed an anarchist "black bloc" at 1999 protests against the World Trade Organization. Elsie Parrish sued the West Coast Hotel in this state, where Spirit Lake was destroyed in a 1980 disaster. For 10 points, name this state where Mount St. Helens erupted.

ANSWER: State of Washington

20. Drugs treating some forms of this condition include Mircera and Aranesp. This condition can be caused by deficiencies of triosephosphate isomerase, pyruvate kinase, and glucose-6-phosphate dehydrogenase. The presence of Heinz bodies accompanies several potential causes of this condition. Although it's not gastritis, autoimmune destruction of parietal cells causes one type of this condition, and another type of this condition is characterized by the production of spherocytes. Some forms of this condition are treated with ESAs, or erythropoiesis-stimulating agents. Some causes of this condition confer resistance to malaria, and it is commonly caused by iron deficiency. For 10 points, name this condition affecting red blood cells that comes in "pernicious" and "sickle-cell" varieties.
ANSWER: anemia [or more specific types like pernicious anemia, hemolytic anemia, iron-deficiency anemia, and sickle-cell anemia]

TB. In this language, a first book on rightness, a second book on expediency, and a third book on the conflict between rightness and expediency make up a treatise *On Moral Duties*. At the end of a political theory text in this language, a general dreams of his grandfather's spirit showing him nine spheres full of stars. A six-book philosophical poem in this language concluded that the mind and soul dissolve quickly after their conjoined body dies, and popularized an older idea that free will derives from the unpredictable "swerve" of atoms falling in an infinite void. That poem, *On the Nature of Things*, was rediscovered by Poggio in 1417. For 10 points, name this language used by Lucretius, in which the "Dream of Scipio" was written to conclude *De Re Publica* by Cicero.
ANSWER: Latin [or lingua latina]

Bonuses

1. This sculpture's artist repeated a device from his earlier *St. Mark* by carving the base into a cushion on which the central man sits with his arms dangling behind him. For 10 points each:

[10] Name this bronze sculpture of two people, found in Florence's Palazzo Vecchio. It was originally gilded and bore an inscription dedicating it "to liberty and to fortitude."

ANSWER: **Judith and Holofernes**

[10] *Judith and Holofernes* is by this sculptor of the aforementioned *St. Mark* housed in Orsanmichele and a statue of the mercenary Erasmo da Narni.

ANSWER: **Donatello** [or Donato di Niccolo di Betto **Bardi**]

[10] Donatello is best remembered for this bronze sculpture, which is often called the first freestanding nude since antiquity even though its smiling, androgynous Biblical hero wears a cap.

ANSWER: **David**

2. Name some things from microeconomics and consumer choice theory, for 10 points each:

[10] This economics equation relates uncompensated and compensated forms of demand, also known as Marshallian and Hicksian demand. It includes terms accounting for the substitution and income effects.

ANSWER: **Slutsky** equation

[10] The derivation of the Slutsky equation uses an "indirect" function for finding a consumer's maximal value for this quantity given income and price level. This term denotes the personal value a consumer gets from a good.

ANSWER: **utility** [or indirect **utility** function]

[10] The aforementioned derivation invokes this lemma, which states that for a fixed level of utility and prices, Hicksian demand for a good equals the derivative of the expenditure function with respect to the price of the good.

ANSWER: **Shephard's** lemma

3. The first expedition of this type was begun by Tlacaelel after a mutual agreement to begin it at a specific time and place. For 10 points each:

[10] Name this term for battles undergone in Mesoamerica with the aim of capturing prisoners for human sacrifice. They may have been largely ceremonial.

ANSWER: **flower** wars [or **xochiyaoyotl**, or guerras **floridas**]

[10] This empire fought "flower wars" under both its rulers named Montezuma. It was conquistador'd by Hernan Cortes's men.

ANSWER: **Aztec** Empire [or **Aztec** Triple Alliance; or **Aztecas**; or **Tenochcas**; or **Excan Tlahtoloyan**; prompt on "Nahua"; prompt on "Mexico"]

[10] This independent state, a victim of the flower wars, was completely surrounded by the Aztecs by the time Cortes landed. It eventually allied with Cortes's Spaniards to destroy their long-time rivals.

ANSWER: **Tlaxcala** [or **Tlaxacalans**; or **Tlaxcaltecs**]

4. The differential form of Gauss' Law states that this quantity's divergence is equal to charge density divided by the vacuum permittivity. For 10 points each:

[10] Name this vector field generated by charged objects.

ANSWER: **electric** field [or **E** field]

[10] In this phenomenon, application of an electric field changes the refractive index of a material by a shift that is *quadratic* with respect to the electric field.

ANSWER: **Kerr** effect [or **quadratic electro-optic** effect; or **QEO** effect]

[10] This quantity is defined as the electric field crossed with the magnetic field, divided by vacuum permeability. It shows the energy flux density, and its time-average is proportional to radiation pressure.

ANSWER: **Poynting** vector [prompt on "S" or "S vector"]

5. While in this position, the speaker of a poem confesses, "I know I am restless, and make others so; I know my words are weapons, full of danger, full of death" to a man he calls "Camerado." For 10 points each:

[10] Name this configuration. As *The Murder of Gonzago* starts, Ophelia rejects Hamlet's offer of it, to which Hamlet retorts: "Do you think I meant country matters?"

ANSWER: lying with one's head in/upon another's lap [accept any phrasing that makes it clear that someone's head is in or upon someone else's lap; accept "As I Lay With (My) Head In Your Lap, Camerado"; prompt on partial answers such as "lying down" or "in someone's lap"]

[10] This author's collection *Leaves of Grass* was criticized for the sexual nature of many of its poems, including the homoerotic "As I lay with Head in your lap, Camerado."

ANSWER: Walt Whitman

[10] This other Whitman poem compares the author's Soul, surrounded by "oceans of space," to a creature that launches "filament, filament, filament, out of itself."

ANSWER: "A Noiseless Patient Spider"

6. The FALANT, or Farnsworth Lantern Test, can diagnose this condition. For 10 points each:

[10] Name this condition also diagnosed using Ishihara plates.

ANSWER: color blindness

[10] Some types of color blindness are caused by this kind of mutation, in which a single nucleotide is replaced by a different one.

ANSWER: point mutation

[10] This term denotes point mutations in which a purine is substituted for another purine or a pyrimidine is substituted for another pyrimidine.

ANSWER: transitions

7. A leader of this country escaped by helicopter from the Central Committee building as a mob tried to attack him, and issued Decree 770, which tried to boost population by banning abortion and contraception. For 10 points each:

[10] Name this Eastern European country that was led by Nicolae Ceausescu until a revolution in 1989 executed him by firing squad.

ANSWER: Romania

[10] This other man led Romania through most of World War II. Called *Conducator*, he dissolved the Iron Guard when it launched the Legionnaires' rebellion against him, and was executed for war crimes in 1946.

ANSWER: Ion Victor Antonescu

[10] This ethnically Jewish woman, Romania's foreign minister under Gheorghiu-Dej, later gained effective power as leader of the country's Communist party. During World War II, she led the Muscovite faction of exiles.

ANSWER: Ana Pauker [or Hannah Rabinsohn]

8. This play begins with a maidservant reporting the coming death of the title character. For 10 points each:

[10] Name this Euripides play in which the drunken but nonetheless noble Heracles gets to bring the title woman back to life after wrestling with Death.

ANSWER: Alcestis

[10] This title woman of another Euripides play murders king Creon of Corinth, her husband Jason's new lover Glauce, and her own children in her quest for revenge.

ANSWER: Medea

[10] T.S. Eliot loved Euripides and used plot elements from *Alcestis* in this play, in which Henry Harcourt-Reilly brings Lavinia back after she flees an event she was slated to host with her husband Edward Chamberlayne.

ANSWER: *The* Cocktail Party

9. This industry's decline hastened when the Union bought a third of the ships involved in it, loaded them with stones, and sank them to blockade Charleston harbor during the Civil War. For 10 points each:

[10] Name this maritime industry whose products included baleen, used in the making of corsets, and sperm oil.

ANSWER: whaling industry

[10] With Nantucket, this other Northeast city dominated the whaling trade, with about half of all whaling ships listing it as their home port. Black inventor Lewis Temple invented the toggle harpoon in this city.

ANSWER: New Bedford, Massachusetts

[10] This state's town of Titusville discovered the first viable petroleum well in 1859, rendering whale oil obsolete. Later fossil fuel workers in this state dealt with the Molly Maguires and Theodore Roosevelt's Square Deal.

ANSWER: Pennsylvania

10. This quality exists in order to further "soul-making," according to a theodicy by John Hick. For 10 points each:

[10] Name this quality whose coexistence with an omnipotent, omniscient God is a problem in Christian thought.

Augustine claimed it doesn't *exist* per se – it's a mere "privation" or absence, since God only creates good things.

ANSWER: evil [or malum; accept problem of evil; prompt on "suffering," "bad things," etc.; do not accept "sin"]

[10] In this Middle East faith, souls are pieces of the World of Light trapped in our evil bodies. Its Gnostic-ish backstory, told in the *Arzhang*, includes three creations and a bout of demon sex resulting in Adam and Eve.

ANSWER: Manichaeism [or Manicheans]

[10] Further east, this "veil" of illusion leads to evil by preventing us from seeing the eternal beyond present distractions according to the *Granth Sahib*. It also features in Hindu thought.

ANSWER: maya [or maidmoh; or veil of maya]

11. This structure is often contrasted with the boat structure. For 10 points each,

[10] Identify this most stable three-dimensional structure of cyclohexane.

ANSWER: chair structure

[10] This subset of stereoisomerism is produced when rotations are made around single bonds. The chair and boat are both examples of this type of stereoisomerism.

ANSWER: conformational isomerism [or conformers; or rotamers]

[10] These diagrams are often used to visualize different molecular conformations. Unlike in Newman projections, the bond of interest is visualized from an oblique angle and groups attached to carbon atoms are represented without wedges or dashes.

ANSWER: sawhorse projection

12. During his travels, this man dedicated a temple to Apollo at Cumae, and he built a statue of brass and a statue of tin on the Electridae islands. For 10 points each:

[10] Name this father of Icarus who fled Crete after building the labyrinth to house the Minotaur.

ANSWER: Daedalus

[10] This nephew of Daedalus invented the saw after examining the spine of a fish. Daedalus grew so jealous of him that he pushed him off a cliff, but Athena transformed him into a partridge, saving his life.

ANSWER: Perdix [or Talos; or Talus]

[10] Daedalus hid from Minos in the court of this man, the king of Kamikos in Sicily, but was discovered when he used an ant to thread a seashell. This king's daughters later killed Minos while he was taking a bath.

ANSWER: Cocalus

13. This character learns that "the law of nature teaches us to kill our neighbor." For 10 points each:

[10] Name this indigenous Peruvian valet who takes half the fortune stolen from El Dorado to buy back Cunégonde but finds himself enslaved by Turks.

ANSWER: Cacambo

[10] Cacambo appears in this author's satire *Candide*. This man also described a philosophical journey undertaken by two giants from space in "Micromégas."

ANSWER: Voltaire [or Francois-Marie Arouet]

[10] In this novel by Voltaire, the title character becomes King of Babylon after he wins over Queen Astarte with demonstrations of his intelligence, such as resolving the question of which foot people should use to enter a temple.

ANSWER: Zadig, or the Book of Fate [or Zadig ou la Destinée]

14. In this oratorio, a chorus proclaiming a nation's gladness is based on a canzona by Johann Caspar Kerll. For 10 points each:

[10] Name this 1739 oratorio with a libretto consisting of passages from Exodus and Psalms that was probably compiled by Charles Jennens. It includes the double chorus "The Lord shall reign for ever and ever."

ANSWER: Israel in Egypt

[10] *Israel in Egypt* was composed by this German-English composer, who included a famous "Hallelujah" chorus in his other oratorio *Messiah*.

ANSWER: George Frideric Handel

[10] After its instrumental overture, Handel's *Messiah* opens with this accompanato for tenor drawn from Isaiah.

ANSWER: "Comfort ye my people"

15. This king was present at the 1745 Battle of Fontenoy, where his general Maurice de Saxe won one of his signature victories as part of the War of the Austrian Succession. For 10 points each:

[10] Name this French Bourbon king who, despite being married to Marie Leszczyńska, is much better known as the lover of the Madame de Pompadour.

ANSWER: Louis XV of France [or Louis the Beloved]

[10] Louis' regent, Philippe II, Duke of Orléans, was targeted in this conspiracy named for a title held by Antonio del Guidice, the Spanish Ambassador. This plot's goal was to make Philip V of Spain the new regent.

ANSWER: Cellamare Conspiracy

[10] Louis allegedly said one of these events would occur after his death, foreshadowing the French Revolution. Savonarola's prediction of one of these events was symbolically confirmed by Charles VIII's invasion of Italy.

ANSWER: floods [or deluges]

16. This university department employs T.M. Scanlon, who describes moral judgments as those which others cannot reasonably reject in his book *What We Owe to Each Other*. For 10 points each:

[10] Name this department including the neo-Kantian author of *The Sources of Normativity*, Christine Korsgaard, and an online lecture pioneer who wrote *What Money Can't Buy: The Moral Limits of Markets*, Michael Sandel.

ANSWER: Harvard University Department of Philosophy [prompt on partial answers]

[10] Sandel gained fame for critiquing this other Harvard professor's *A Theory of Justice*. This man posited the hypothetical "veil of ignorance" in his vision of justice as fairness.

ANSWER: John Bordley "Jack" Rawls, Jr.

[10] While not bashing Rawls, Robert Nozick used counterfactuals in a "truth tracking" theory of this concept. Gettier problems and the "Cow in a Field" scenario challenge definitions of it.

ANSWER: knowledge [do not accept "justified true belief" since all the things mentioned reject that definition]

17. In a painting by this artist, a woman with a hooked nose and a red shawl above her black dress leans forward at her table; a sculpture by this man features a sugar cube sitting on top of a spoon. For 10 points each:

[10] Name this artist of *Glass of Absinthe*, whose other works about absinthe include a portrait whose upper half is made hazy by the pipe smoke of its subject, Angel Fernández de Soto.

ANSWER: Pablo Ruiz y **Picasso**

[10] Picasso brought this art movement to fame in paintings such as *Les Femmes d'Alger*. Other members of this art movement included Georges Braque and Jean Metzinger.

ANSWER: **Cubism**

[10] In this work from Picasso's Rose Period, the title figure is dressed in a blue smock and sits in front of a reddish-brown background that is decorated with flowers. He also wears a wreath of flowers on his head.

ANSWER: **Garçon à la Pipe** [or **Boy with a Pipe**]

18. Dick Cheney claimed that this document was "full of crap." For 10 points each:

[10] Name this 6,000 page document partly released in December 2014. It concludes that the subject organization's use of enhanced interrogation techniques did not result in otherwise unobtainable information about terrorism.

ANSWER: the Senate's **CIA Torture Report** [or **Committee Study of the Central Intelligence Agency's Detention and Interrogation Program**; accept any answer indicating a document about **torture** and/or **enhanced interrogations** carried out by the **CIA**]

[10] When the CIA Torture Report was released, this Californian and oldest active Senator chaired the Senate Select Committee on Intelligence. Richard Burr replaced this Democrat as committee chairman in January 2015.

ANSWER: Dianne **Feinstein**

[10] In 2002, the CIA hired two former air force men as consultants in creating their torture program, providing them with \$81 million in compensation. Name either of them.

ANSWER: Bruce **Jessen** or James **Mitchell**

19. The Perseid one of these events, which happens in late August, is derived from a debris cloud created by the comet Swift-Tuttle. For 10 points each:

[10] Name these celestial events in which the namesake cosmic debris falls from space.

ANSWER: **meteor showers**

[10] As opposed to stony-iron and iron meteorites, these meteorites are entirely made from rock. C-type meteorites in this class are characterized by the presence of carbon-containing molecules, like amino acids.

ANSWER: **chondrites**

[10] These small, irregular, and highly refractory inclusions are found in carbonaceous chondrite meteorites, and are probably the oldest materials in the solar system. They consist of minerals that were among the first to solidify from the protoplanetary disk.

ANSWER: **calcium-aluminum-rich inclusions** [or **CAIs**; prompt on partial answers]

20. The author of this memoir enlisted in the army to get away from Charterhouse School and postpone going to Oxford. For 10 points each:

[10] Name this memoir, in which the author recounts being traumatized after a defeat at Auchy and taking on a series of desk jobs after a shrapnel wound in his lungs led to chronic bronchitis.

ANSWER: **Good-bye to All That**

[10] This poet and author of the novel *I, Claudius* described his memoir *Good-Bye to All That* as a "bitter leave-taking of England."

ANSWER: Robert **Graves**

[10] This other war poet imagined his death bringing aspects of England like "Her sight and sounds; dreams happy as her day; / And laughter... / In hearts at peace, under an English heaven" to "a foreign field" in "The Soldier."

ANSWER: Rupert **Brooke**

21. This form of search evaluates nodes by combining its path cost from the start node with a heuristic estimating the distance to the goal node. For 10 points each:

[10] Name this widely-used form of best-first search differentiated from uniform cost search by its usage of a heuristic. The graph-search version of this technique is guaranteed to be optimal if its heuristic is consistent.

ANSWER: **A star** search

[10] For optimality in the tree-search version of A star, the search's heuristic must have this property, meaning that it never overestimates the distance to the goal state.

ANSWER: **admissibility** [or **admissible**]

[10] The A-star search is a modified form of this original algorithm, developed by a Dutch computer scientist in 1959. This algorithm finds the shortest path between two nodes in a graph for nonnegative edge weights.

ANSWER: **Dijkstra**'s algorithm