

2015 George Oppen: Questions courtesy of Anne Hathaway's cow-milking fingers
Written by Auroni Gupta, Stephen Eltinge, and Mike Cheyne
ROUND 5

TOSSUPS

1. A classic introductory text in this discipline was co-written by George Edward Hughes and his student Max Creswell. Quine devised three levels of involvement in this discipline, objecting to introducing quantification at the third, but his concerns were put solidly to rest by Ruth Barcan Marcus and her formula. The Finnish philosopher G.H. von Wright extended this discipline to ethics, founding a "deontic" variant of it. This discipline grew out of the S4 and S5 systems of (*) Clarence Irving Lewis, who originated the notion of strict implication. It's not philosophy of language, but the distinction between vivid and rigid designators is crucial to this discipline. This was the initial discipline for which a teenage Saul Kripke designed a set of semantics. This discipline uses accessibility relations, as well as the square and diamond symbols, to make statements about possible worlds. For 10 points, name this form of formal logic in which the operators can express possibility, impossibility, and necessity.

ANSWER: modal logic [prompt on logic]

2. In this battle, Joseph Dixon was the only casualty of a round of bombardment, when he was struck and killed by flying debris. During this battle, Methodist minister David C. Kelly was told "Parson, for God's sake, pray!" because "Nothing but God Almighty can save" the title location. It was at this battle where forces led by brigadier general John A. McClernand heard one of the first instances of the "rebel yell." John Floyd lost his courage in the midst of opening up an escape route during this battle. In this battle, the Confederate artillery wrecked a (*) flotilla of gunboats commanded by Andrew H. Foote which attempted to approach the title location down the Cumberland River. In the aftermath of this battle, Gideon Pillow relinquished command to Simon Bolivar Buckner, whose entreaties for a favorable truce were met with the reply "No terms except for unconditional and immediate surrender can be accepted." For 10 points, name this 1862 Union victory in Tennessee, where Ulysses S. Grant earned the nickname "Unconditional Surrender."

ANSWER: Battle of Fort Donelson

3. A man in this play yells "vomit on it!" and "I spit on it!," but doesn't finish his third exclamation, prompting a woman to cover her mouth after saying "I thought he was going to say 'shit on it.'" In this play's last scene, the protagonist observes that he learned three things during the war, and the curtain closes after he says "I forget the third thing." The plot thread of this play occasionally gets disrupted by "time slips," usually prompted by the protagonist speaking to his manservant Bennett. A character in this play composes a poem by tearing up the sonnets of Shakespeare and choosing words at random. Two characters in this play sue each other over funding for the tickets and costumes in a production of *The (*) Importance of Being Earnest*. Gwendolen and Cecily mix up folders in this play, which is set at a public library where characters periodically repeat "dada," and Vladimir Lenin mingles with Tristan Tzara and James Joyce. For 10 points, name this play in which an aged Henry Carr remembers his time in World War I Zurich, written by Tom Stoppard.

ANSWER: Travesties

4. In a procedure of this type, the product of a reaction with ethanol, hydrochloric acid, and DMAB is measured using Ehrlich units. A symptom of Waldenström's macroglobulinemia is a positive result for Bence-Jones proteins in a test of this kind. One of these assays produces false negatives for bacteria like enterococci or staphylococci, who cannot metabolize nitrates into nitrites. Another of these assays relies on the creation of benzoylcegonine in solutions of pH 7.0 or above. In increasing order of concern, these tests may turn up hyaline, RBC, or waxy casts. Because there is no test of this type for beta-hydroxybutyrate, a test of this type measuring acetoacetate must instead be used to measure (*) ketoacidosis. In a procedure of this type, a decrease in specific gravity may indicate diabetes insipidus. In perhaps the most widely-performed of these tests, the presence of hCG indicates pregnancy. For 10 points, identify these tests which can be carried out on plastic or paper ribbons known as dipsticks, designed to evaluate the content of an excreted liquid waste product.

ANSWER: urine tests [or urinalysis]

5. In a portrait by this man, a mirror reflects the bare back and buttocks of a woman who wears only a pair of pink slippers. This artist painted a woman holding a fan next to her top-hatted and mustachioed brother in a painting of his model and lover Dodo. This artist created several uncharacteristic alpine landscapes during his years spent in Davos receiving treatment for a mental breakdown sparked by his service in the First World War. This artist painted a nude model in his studio next to himself, with a cigarette in his mouth, clad in an artilleryman's uniform, in his *Self-Portrait as a Soldier*. A sharply angled pair of (*) streetwalkers wearing black and purple coats with fur lining travel down a pink walkway in this artist's best known painting. This artist, who depicted a nude woman relaxing under a Japanese parasol, shot himself a year after the Nazis declared his work degenerate. For 10 points, name this German artist, a member of Die Brücke who painted several Berlin "street scenes."

ANSWER: Ernst Ludwig Kirchner

6. A theorem extending this statement concerns the impossibility of embedding a set of non-commuting observables in a commutative algebraic structure; that extension is the Kochen-Specker theorem. In a quip reminiscent of Wolfgang Pauli, this statement's formulator declared a similar but faulty theorem by John von Neumann to be "not merely false but foolish" due to its unphysical assumptions. Aspect, Grangier, and Roger verified the predictions of this statement using two-photon atomic transitions from calcium cascade decay. The bounds that this statement places on the results of a two-channel (*) detector experiment are equivalent to the later-developed CHSH inequality. This theorem, which was introduced in the paper "On the Einstein Podolsky Rosen Paradox," is usually explained in terms of correlations between simultaneous measurements of entangled particles. For 10 points, identify this no-go theorem which asserts that local hidden variable theories are incompatible with quantum mechanics.

ANSWER: Bell's theorem [or Bell's inequality]

7. An out-of-place pop song plays during a cutscene in this game in which a girl wearing a white sweater clings to the protagonist during a motorcycle ride. The protagonist of this game is lured to a seemingly empty arcade, where a "skinhead" eats his boat ticket. Cassette tapes found throughout this game can be played at a hot dog cart owned by the dancing American Rastafari Tom. After beating this game once, it is possible to play again with the "Actual Weather" settings, based on real meteorological records collected from 1986-87. After being betrayed by their leader Terry Ryan, the protagonist of this game fights in a seventy-person melee against the entire (*) Mad Angels gang. The most-mocked aspect of this game is the roughly three in-game hours devoted to the protagonist's job operating a forklift. This game ends with the protagonist traveling to Hong Kong in pursuit of Lan Di, to avenge his father's murder in the family dojo. For 10 points, name this hilariously realistic 1999 open-world Dreamcast game starring Ryo Hazaki.

ANSWER: Shenmue [or Shenmue Chapter 1: Yokosuka; or Shenmu Issho: Yokosuka]

8. Multiple members of this profession identified Lord Arthur Somerset in the Cleveland Street Scandal, and appear in a novel published under the pseudonym "Jack Saul." In 1993, a mass grave consisting of 133 corpses from members of this profession was discovered in Dublin. William Acton produced a landmark 1857 study on workers in this profession. These people were targeted by a series of laws passed in 1864, 1866, and 1869, which forced many of them to be placed in lock hospitals. William (*) Gladstone personally donated large sums of money to reduce the number of people working in this profession. Many members of this profession were committed to Magdalene laundries. Josephine Butler actively campaigned on behalf of workers in this profession, five of whom were the universally-acknowledged victims of Jack the Ripper. For 10 points, name this profession in Victorian England, held by lower-class women subject to the Contagious Diseases Act.

ANSWER: prostitutes [accept less polite synonyms]

9. At a salon, a man in this novel states that a Japanese landscape was painted by "Hadusai," thereby committing a "phoophoo" requiring him to deposit a coin in a "Charity Fund." The protagonist of this novel mixes up the words "pepper" and "apperception," in the kind of pun that its author had celebrated in his essay "The Magic of Words." A child in this novel hallucinates an expanding bouncing ball that he nicknames "Pepp Peppovich Pepp." Throughout this novel, the narrator likens the citizens of the title location to the segments of a giant myriapod. The prologue to this novel poses the question "What is this Russian Empire of ours?" The protagonist of this novel wears a silly red domino in pursuing his best friend's wife Sofia Petrovna, and gets chased around by the (*) Bronze Horseman. In this novel, the revolutionary Dudkin

tasks Nikolai with delivering a sardine tin containing a time bomb to his senator father Apollon Apollonovich. For 10 points each, name this Russian precursor to *Ulysses*, a labyrinthine 1913 novel by Andrey Bely set in the-then capital city.

ANSWER: Petersburg [or Peterburg]

10. A piece with this noun in the title was composed by William Walton for the 125th anniversary of the New York Philharmonic. Trombones and tubas mimic the flute in the scherzo of a Leos Janacek piece dedicated to Otakar Hollmann, the second most famous World War I amputee musician, which is one of these "for piano left-hand and chamber ensemble." In a piece with this noun in the title, a drumroll leads into a fanfare for the trumpet that is continued by a solo violin, in a movement titled "Scene and Gypsy Song," and the clarinets in the first movement play a trill on C. The A and E strings imitate the flute while the G and D strings imitate horns in one of these pieces, and one in B-flat major is nicknamed (*) "Devil's Laughter." Nikolai Rimsky-Korsakov included an "Alborada" in a Spanish-influenced piece of this kind. The twenty-fourth and last of a set of them has its melody inverted in Rachmaninov's *Rhapsody on a Theme of* its composer. For 10 points, name these lively pieces, a set of which was composed by Paganini.

ANSWER: caprice [or capriccio]

11. This man is told about "horses swifter than leopards, fiercer than wolves at dusk," belonging to men who "collect captives like sand." The fact that "the law is paralyzed, and justice never prevails," is the crux of this man's "first complaint." According to the Zohar, this man was born to the childless woman of Shunem who had shown Elijah hospitality by letting him stay with her, because Elijah promised her that she will "embrace a son," and this man's name is similar to the Hebrew word for "embrace." This man, who uniquely among the prophets directly calls out God's inaction, is instructed by an angel to take some stew to Daniel in the lion's den in the story of "Bel and the Dragon." Several of the Pauline epistles build on the idea found in this man's book that "the (*) just shall live by his faith." That book contains an "Oracle of Woe" and a "Psalm" following this man's discussion with God. For 10 points, name this minor Old Testament prophet whose bald head led to Donatello's statue of him being nicknamed "The Pumpkin."

ANSWER: Habakkuk

12. For any real number x , a function denoted by this letter equals the sum of the logarithms of all prime numbers less than x . This letter is used to write the first Chebyshev function, as well as a "homogeneity operator" in the theory of Bessel functions equal to z times the derivative with respect to z . Another function named for this letter solves the one-dimensional heat equation with periodic boundary conditions, and can be expressed as a product using the triple product identity. This (*) non-Roman letter identifies a class of quasiperiodic functions whose most common example is named for Jacobi, as well as a non-continuous function equal to the integral of the Dirac delta function. In addition to denoting the Heaviside step function, this letter is paired with ϕ to indicate the polar and azimuthal angles in spherical coordinates. For 10 points, identify this Greek letter usually used to denote an angle measure.

ANSWER: theta

13. An investigative journalism show followed a paper trail left by this current leader in the "Route of the K-Money" scandal. The printing house Ciccone received contracts from this leader's bass guitar-playing former vice president Amado Boudou. During a state visit to China, this leader unwisely tweeted asking if Chinese people wanted "lice and petroleum." This leader completely ignored a large-scale protest known as 18A, and was hospitalized in October 2013 after a head injury caused blood to seep into her brain. This president lost the support of labor leader (*) Hugo Moyano during her reelection campaign. Prosecutor Alberto Nisman was mysteriously found dead after accusing her of covering up Iran's role with Hezbollah of the 1994 bombing of a Jewish community center. In 2007, this member of the Justicialist Party succeeded her husband Nestor. For 10 points, name this current president of Argentina.

ANSWER: Cristina Fernandez de Kirchner [or Cristina Elisabet Fernandez de Kirchner]

14. This group once retreated after the opposing army armed peasants with scythes that glistened in the sunlight, and placed them on a hill with his army to create the illusion of large numbers. This group is depicted as the Lernaen Hydra being slaughtered by Hercules in a painting by Toussaint Dubreuil. This group issued coins in the name of Charles de Bourbon, whom they considered king. This group gained

Spanish support by the terms of the Treaty of Joinville, and it coalesced following the Treaty of Monsieur, so-named because it was negotiated by a king's brother. A member of the "Forty-Five" bodyguard allied with this group, who traveled to a camp in Saint-Cloud and drove a knife into his target's spleen, was named (*) Jacques Clement. The Council of Sixteen, convoked by this group's leader, coordinated the Day of the Barricades. The royalists and this group were defeated by a man who said "Paris is well worth a mass." For 10 points, name this group established by Henry, Duke of Guise during the French Wars of Religion, a rabidly anti-Protestant faction.
ANSWER: Catholic League of France [or Holy League]

15. A 1969 book claims that the words "even if," "since," "it may be," "if," and "or" in this poem serve to make all of its nouns indistinguishable from one another. The middle stanza of this poem includes the image of "a summer sound / Repeated in a summer without end / And sound alone." A character in this poem interrupts the "meaningless plungings," "theatrical distances, bronze shadows heaped / On high horizons," and the "mountainous atmospheres" of the landscape by making "the sky acutest at its vanishing." The speaker of this poem observes how the "glassy (*) lights" in town "mastered the night... fixing emblazoned zones and fiery poles, arranging, deepening, enchanting night." The last stanza of this poem invokes the "maker's rage" at the words "of ourselves and of our origins, in ghostlier demarcations, keener sounds." The speaker of this poem asks Ramon Fernandez if he remembers what happened after "she sang beyond the genius of the sea." For 10 points, name this Wallace Stevens poem set on an island south of Florida.
ANSWER: "The Idea of Order at Key West"

16. Immediately after the recording of this album, two of its personnel were forced to cancel a gig with Richie Powell and Clifford Brown, because they died in a car crash. In his influential article titled for this album's composer "and Thematic Improvisation," Gunther Schuller presents a bar-by-bar analysis of its last track. This album pays homage to trumpeter Freddie Webster, who died of a heroin overdose in the Storde Hotel, with its track "Storde Rode," which includes a duet between the bandleader and the bassist Doug Watkins. The second side of this album consists of an instrumental adaptation of "Mack the Knife" titled (*) "Moritat," followed by a track on which Max Roach drums a triplet rhythm figure. The first track on this album is a calypso-inspired piece adapted from a nursery rhyme the composer's mother sang to him during his childhood living in the title Virgin Island. For 10 points, name this album which includes "Blue Seven" and "St. Thomas," a hit for Sonny Rollins titled for his mastery of a woodwind instrument.
ANSWER: Saxophone Colossus

17. A woman with this surname has a habit of mumbling out all but the first syllable of medical words such as "hysterectomy" and "testicles." Another character with this surname forms a poem out of the most frequent words to appear in Keats's poetry, after befriending the programmer Griza. The novel in which they first appear ends with a letter advising two men from this family to "Never make love with pants on" and "Trust in the Lord." A woman from this family finances the creation of "The Only Floating Gift Shoppe in New England" from the (*) wreckage of her husband's ferry, the *SS Topaze*. The fishing village of St. Botolphs is home to this family, headed financially by the imperious Aunt Honora. This family's patriarch Leander sires the autobiographical bisexual Coverly and his mischievous brother Moses. For 10 points, name this family that appears in novels titled for their *Scandal* and *Chronicle*, by John Cheever.
ANSWER: Wapshot

18. Rubredoxin was crystallized from a material exhibiting this phenomenon in a form of crystallography named for this phenomenon developed by Zawadzke and Berg. In the Takahashi Taxol synthesis, the final product, baccatin III, exhibits this phenomenon. This phenomenon can be eliminated through interaction with neighboring compounds via the Pfeiffer Effect. Octahedral complexes are hypothesized to undergo this process via the Bailar or Ray-Dutt twists. Using ruthenium catalysts, Ryoji Noyori developed a way to hydrogenate imines and carbonyls (*) without introducing this phenomenon. This process can be prevented by using sulfonamide derivatives, oxazolidones, and other auxiliaries. For substances that undergo this process, the ee drops to 0%. Louis Pasteur observed the first instance of this phenomenon in tartaric acid. Optical resolution separates mixtures exhibiting this phenomenon, yielding compounds that rotate plane polarized light in different directions. For 10 points, name this process which forms an even mixture of enantiomers of a chiral compound.
ANSWER: racemization [accept word forms, like racemic; accept optic inactivity or similar answers before "optical" is read]

19. An old being of this type is struck by either a divine rod or a simple wooden mallet, and banished to a cave along with his 808 followers. Another of them sells leaves by making them look as if they were made of gold. One of these beings receives a hot pepper salve to rub on his burns as punishment for killing and cooking an old woman in soup. A skeptical hunter who fires an arrow at the apparition of a radiant, elephant-riding Bodhisattva is vindicated when he finds that he has killed one of these beings. In a well-known story, a (*) tea kettle put on the fire transforms back into one of these beings and runs away. Sado Island, Kagawa, and Awaji Island are home to the "three famous" ones. These shapeshifters are often cast as the bumbling, sake-loving counterparts to the more elegant kitsune, and they portend financial luck with their most famous anatomical features. For 10 points, name these big-balled raccoon dogs from Japanese folklore.

ANSWER: tanuki [prompt on raccoons]

20. A banknote bearing this leader's portrait depicted, on the reverse, this former minister plenipotentiary to the Soviet Union being mobbed by supporters in Moscow. This leader accused Bruno Kreisky, the Chancellor of Austria, of "succumbing to terrorist blackmail" after he closed a transit facility. The controversy raised by the findings of the Agranat Commission forced this prime minister to resign. This leader's house served as the location for unofficial Cabinet meetings whose attendees were served cake, inspiring the nickname "Kitchen Cabinet." This politician delivered the zinger "We've been waiting 2,000 years. Is that hurrying?" during a meeting in disguise with King (*) Abdullah I. This Prime Minister ordered a retaliatory anti-terrorist campaign known as Operation Wrath of God. This successor to Levi Eshkol correctly ignored Moshe Dayan's recommendation for a preemptive strike after Syrian forces crossed the Golan Heights. For 10 points, name this Israeli Prime Minister during the Munich Massacre and the Yom Kippur War, who like Thatcher was known as the "Iron Lady."

ANSWER: Golda Meir [or Goldie Myerson; or Goldie Mabovitch]

TB. The Lannan Foundation undercut an attempt by this organization's head Bill Ivey to prevent money from ending up in the hands of the Zapatistas. A task force packed with people like Joseph Coors and Charlton Heston thwarted Reagan's plan to kill this organization. Holly Hughes, John Fleck, Tim Miller, and Karen Finley became known as this organization's "four" after they sued for failing to receive money despite clearing a peer-review process. In 2009, this organization came under fire when its communications director (*) Yosi Sergeant took part in a conference call urging people to support Obama. The film *Damned in the USA* examined the campaign led by Jesse Helms and Donald Wildmon against this organization for sponsoring Andreas Serrano, the creator of *Piss Christ*. Such initiatives as Poetry Out Loud and The Big Read were headed by a man widely considered to have saved this organization, Dana Gioia. For 10 points, name this federal agency that funds creative projects.

ANSWER: National Endowment for the Arts [or NEA]

BONUSES

1. This artist stacked black boxes filled with found objects like spindles and chair legs for her installation *Sky Cathedral*. For 10 points each:

[10] Identify this Russian emigre who staged the solo exhibition Moon Garden + One, and was known for her monochrome wooden wall sculptures, like *Dawn's Wedding Feast*.

ANSWER: Louise Nevelson

[10] Many of Nevelson's sculptures are housed in this museum in New York City's Upper East Side, which hosts a biennial exhibition of up-and-coming artists.

ANSWER: Whitney Museum of American Art

[10] While working as an assistant on his mural *Man at the Crossroads*, Nevelson began an affair with this Mexican muralist.

ANSWER: Diego Rivera [accept, but axe-murder anyone who says, Diego Maria de la Concepcion Juan Nepomuceno Estanislao de la Rivera y Barrientos Acosta y Rodriguez]

2. This book is the source of the adages "It is better to live rich, than to die rich," and "Patriotism is the last refuge of a scoundrel." For 10 points each:

[10] Name this lengthy, digressive book, teased by the author's earlier *The Journal of a Tour to the Hebrides*, which describes its author's time with a slovenly wit who loved his favorite cat Hodge and wrote *The Vanity of Human Wishes*.

ANSWER: **Life of Johnson** [or **Life of Samuel Johnson, LL.D.**]

[10] Boswell's *Life of Johnson* preserves a conversation in which this poet made Johnson laugh by telling him a fable about fishes wanting to become birds, then responded: "if you were to make little fishes talk, they would talk likes WHALES." The Three Jolly Pigeons alehouse is the setting of this author's play *She Stoops to Conquer*.

ANSWER: Oliver **Goldsmith**

[10] In the entry of his own series of biographies, *The Lives of the Poets*, about this man, Johnson criticized his "discovery of occult resemblances in things apparently unlike" and remarked that "those writers who lay on the watch for novelty, could have little hope of greatness," turning critical consensus against this man's style of poetry until its reputation was rescued by a 1921 T.S. Eliot essay.

ANSWER: Abraham **Cowley**

3. This region lends its name to a style of lighthouse now predominant in the West Coast where the tower is directly attached to the keeper's dwelling, and you enter through a staircase leading up to the top floor. For 10 points each:

[10] Name this Massachusetts peninsula that hooks out into Atlantic Ocean.

ANSWER: **Cape Cod**

[10] South of Cape Cod, on the island of Martha's Vineyard, lives one of America's oldest communities for people with this trait.

ANSWER: **deafness**

[10] Hurricane Bob devastated the inhabitants of this bay, whose most significant port is New Bedford, which is connected by Cape Cod Canal to Cape Cod Bay. Its name is a misnomer, since colonists actually spotted ospreys on its shore.

ANSWER: **Buzzard** Bay

4. Following the murder of Stephen Lawrence, the Macpherson Report concluded that there was institutional racism in this organization. For 10 points each:

[10] Name this law enforcement organization founded by Robert Peel, or identify the metonymic name of its headquarters in London.

ANSWER: **Scotland Yard** [or **Metropolitan Police Service**; or **MPS**; or the **Met**; prompt on **Bobbies**]

[10] 2,000 Australian, American, and Canadian servicemen squared off against 50 MPS officers in a 1919 riot in this place, whose "runners" were organized by Henry Fielding as the first official police force in London.

ANSWER: **Bow Street**

[10] Winston Churchill took command of the London police during the 1911 Siege of Sidney Street, in which two members of Peter the Painter's gang consisting of this unexpected ethnicity were shot dead.

ANSWER: **Latvians** [or **Latviesi**; or **letlizi**]

5. Fetal lung immaturity is assessed in a test measuring the ratio of lecithin to this compound in amniotic fluid. For 10 points each:

[10] Name this lipid consisting of ceramide and phosphocholine, which is abundant in the material surrounding axons.

ANSWER: **sphingomyelin**

[10] Sphingomyelin accumulates in these organelles in Niemann-Pick disease, which is a "storage disease" of this type. These organelles are packed with hydrolytic enzymes that can break material down, and operate at a low pH.

ANSWER: **lysosomes**

[10] In the most common lysosomal storage disorder, Gaucher's disease, this enzyme is absent or nonfunctional, causing the sphingomyelin-derived substance that it breaks down to accumulate. Elvelo, a recombinant version of this enzyme used to treat Gaucher's disease, was the first plant-made pharmaceutical to earn FDA approval.

ANSWER: **glucocerebrosidase**

6. The first celebration of this holiday was held in 1207 near Mosul, and organized by Muzafar ad-Din Gokburi, brother-in-law to Saladin. For 10 points each:

[10] Identify this carnival-esque holiday observed on either the 12th or 17th of Rabi al-Awwal, commemorating the birth of Muhammad.

ANSWER: Mawlid an-Nabi [or Eid al-Mawlid an-Nabawi; or Eid Milad-un-Nabi; or Eid-e-Meeladun Nabi; or el Muled en-Nabawi; or Gamou; or Mawlud; or Mawlid an-Nabi; or Milad an-Nabi; or Maulidur-Rasul; or Maulid Nabi; or Maulud Nabi; or Maulidi; or Mawlud-e Sharif; or Mawlid en-Nabaoui Echarif; or Mevlid-i Serif; or Mevlud; or Mevlid; or Mevlydi; or Milad-e Payambar-e Akram; or Mulud; or Mahanabi Jayanti; or Yawm an-Nabi; if anyone proclaims a new Muslim country and calls it something different, yell at them for me]

[10] Ahmadiyya and Wahhabi communities do not practice Mawlid, because they consider it this sort of practice. Wahhabism itself was formed as a reaction against practices with this quality, for which you can give either the Arabic term or the equivalent English innuendo.

ANSWER: bid'ah [or innovation; accept synonyms, such as novelty or new; accept word forms of those words]

[10] Mawlid celebration was popularized by this mystical movement in Islam, which emphasizes a personal relationship with Allah. The Mevlevi order of this movement practices whirling.

ANSWER: Sufism [or tasawwuf]

7. Identify the following related to the physics of loops of wire, for 10 points each.

[10] If you have two wire loops and you pass a current through one, the magnetic flux through the other equals this constant times the current. As the name suggests, its value is the same if you reverse the roles of the two wires.

ANSWER: mutual inductance

[10] A tightly wound helix of wire will form this simple inductor. The magnetic field in the middle of this tube-shaped device is nearly uniform, while the field outside it is nearly zero.

ANSWER: solenoid

[10] Inductors appear in these simple two-component circuits. Because both components can store energy, the energy sloshes back forth at the system's resonant frequency.

ANSWER: LC circuits

8. This poet included a five-line stanza consisting of nothing but dots in his poem "The Cistern," and intermittently adopted the persona of Stratis the Sailor. For 10 points each:

[10] Name this author of the popular poem "Denial," who got his start translating T.S. Eliot into his native language, before publishing poetry of his own in collections such as *Turning Point* and *Mythistorema*.

ANSWER: Giorgios Seferis [or George Seferis; or Giorgios Seferiades]

[10] Giorgios Seferis and Odysseus Elytis were the two Literature Nobel laureates who wrote in this language, used in poems such as "Waiting For the Barbarians" and "Ithaca" by Constantin Cavafy.

ANSWER: Modern Greek [or Neo-Hellenic; or Romaic; or Roman]

[10] Critics often link Seferis's metaphysical poetry to that of this Frenchman, who claimed that "A vivid and a clear-cut pain / Is better than a drowsy torment" in his sonnet "The Bee," which appears in the collection *Charms*, just like his masterpiece "The Graveyard by the Sea."

ANSWER: Paul Valery [or Ambroise-Paul-Toussaint-Jules Valery]

9. Two paintings with this title and the artist's canvas *The Toothpuller* feature his motif of a tablecloth spread out over carpet. For 10 points each:

[10] Name these paintings, of which there are Brera and London versions. In the latter version, a disciple throws his arms out in shock as Christ blesses and breaks some bread.

ANSWER: *The Supper at Emmaus*

[10] This Italian Baroque artist painted *The Calling of St. Matthew* and *The Supper at Emmaus*.

ANSWER: Caravaggio [or Michelangelo Merisi da Caravaggio; or Michelangelo Amerighi da Caravaggio]

[10] The two disciples in *The Supper at Emmaus* are presumed to be Cleophas and this man, who in paintings by van der Weyden and El Greco *paints the Virgin*. This man is often considered the first Christian icon painter.

ANSWER: Luke the Evangelist [or Saint Luke]

10. The lyrics to the "Fire God Symphony" were scribbled on one of these objects, another of which added "democracy" to the list of Four Modernizations. For 10 points each:

[10] Name these objects common in China, upon which political messages are written in very large handwriting.

ANSWER: big-character posters [or big-character reports; or dazibao; or ta-tzu-pao; prompt on posters]

[10] The masses suffering under the Communist yoke appropriated the usage of big-character posters to air their grievances during the Democracy Wall movement, which took place in this Chinese city, also home to the 1989 Tiananmen Square protests.

ANSWER: **Beijing** [or **Peking**]

[10] This document by Mao Zedong, published in 1966 in *People's Daily* and humorously subtitled "My Big-Character Poster," targeted Liu Shaoqi, Deng Xiaoping, and other attendees of the 11th Plenary Session who tried to slow the momentum of the Cultural Revolution.

ANSWER: **Bombard the Headquarters** -- *My Big Character Poster* [or **Pao da si ling bu** -- *wo di zhang dai zi bao*]

11. In the version of the legend of Fenja and Menja found in this book, the girls grind the mill Grotti for King Frodi so hard that they bring the sea-king Mysing into existence, and he kills Frodi. For 10 points each:

[10] Name this second book of the *Prose Edda*, a lengthy dialogue between Aegir and Bragi sandwiched between the *Gylfaginning* and the *Hattatal*.

ANSWER: **Skaldskarpamal**

[10] The *Prose Edda* and the *Heimskringla* were written by this Icelandic lawspeaker-poet, who posited that the Norse gods were descendents of the Trojans.

ANSWER: **Snorri** Sturluson [or Snorri **Sturluson**]

[10] The *Skaldskarpamal* and several other texts tell the story of these two men, who are locked in eternal combat until Ragnarok. One of them inflicts mortal wounds with the sword Dainsleif on the other for abducting his daughter Hildir, who resurrects the two of them after each day of battle.

ANSWER: **Hogni** and **Hedinn** [accept in either order]

12. Floral fragmentation patterns caused by mortar shells striking concrete during this battle were colored with red resins to produce its namesake "roses." For 10 points each:

[10] Identify this protracted siege during the Bosnian War, which was finally lifted in 1996 by the Dayton Accords, but not before 225 children were killed crossing Sniper Alley. It was the longest siege of a capital city in modern history.

ANSWER: Siege of **Sarajevo**

[10] In 2003, the ICTY convicted General Stanislav Galic of carrying out the first of these two mortar attacks against civilian targets in a marketplace during the siege of Sarajevo. The NATO air strike that brought about the Dayton Accords was carried out in response to the second of them.

ANSWER: **Markale** massacres

[10] The Siege of Sarajevo began with a blockade ordered by this evil Serbian man, whose Army of Republika Srpska killed more than 8000 Bosniaks in the Srebrenica Massacre. The capture and surrender of this man to the Hague was a precondition for Serbian being considered a candidate for EU membership.

ANSWER: Ratko **Mladic**

13. This algorithm repeatedly selects the unvisited node with the shortest tentative distance and relaxes all of the edges connected to it. For 10 points each:

[10] Identify this algorithm named for a Dutch computer scientist. It is the asymptotically fastest known algorithm to compute the shortest path between a given starting node and all possible destination nodes.

ANSWER: **Dijkstra**'s algorithm

[10] You'll have to use the somewhat slower Bellman-Ford algorithm if your graph has any of these features, which are incompatible with Dijkstra's algorithm. If there exists a cycle of these features, then a shortest path may not exist between two nodes.

ANSWER: **negative edge** weights

[10] Fredman and Tarjan proved that Dijkstra's algorithm implemented on a Fibonacci heap has this runtime. Give your answer in terms of the number of edges, E, and the number of vertices, V.

ANSWER: big-O of **E plus V log V**

14. This author employed nine stanzas of nine lines each in his ode "Baseball," envisioned a wedding between Walt Whitman and Emily Dickinson in "The Impossible Marriage," and coined the term "mortal paradox" in a poem addressing "My son, my executioner." For 10 points each:

[10] Name this first poetry editor of *The Paris Review*, whose collections *The Painted Bird* and *Without* were heavily colored by the death of his wife Jane Kenyon.

ANSWER: Donald **Hall** [or Donald Andrew **Hall**, Jr.]

[10] Donald Hall studied under Yvor Winters at this university, whose creative writing program was established by Wallace Stegner. Vikram Seth's experiences as a Ph.D. student at this university informed a novel that he wrote in Onegin stanzas.

ANSWER: Stanford University

[10] Hall advised a character created by this author to "Stop lusting over / the Swimsuit Issue while you drink Bud all day." The dictum "A poem should not mean, but be" comes from Archibald MacLeish's "Ars Poetica," which in turn takes its title from this Latin author's treatise of the same name.

ANSWER: Horace [or Quintus Horatius Flaccus]

15. MODERATOR NOTE: Don't read anything under than the underlined portion of the first part if missed. Eugen Fink published a sequel of sorts to this book, the last part of which tackles the quandary of solipsism by developing a theory of intersubjectivity rooted in empathy. For 10 points each:

[10] Name this 1931 book, which introduces the concepts of lifeworld, epoche, and eidetic reduction, and is modeled after a 17th-century text that makes the wax and evil demon arguments.

ANSWER: Cartesian Meditations: *An Introduction to Phenomenology* [or Meditations cartésiennes: *Introduction a la phenomenologie*]

[10] Husserl intended his *Cartesian Meditations* to be an "introduction" to this philosophical discipline that he founded, focused on studying things purely as they are consciously experienced, and bracketing out all external scientific explanations for them.

ANSWER: phenomenology [accept word forms]

[10] This leader of the "Munich phenomenologists" broke with Husserl by advocating a phenomenological approach relying on Buddhist-like suspension of vital energy. He is better-known for delivering the "Man's Place in the Cosmos" lecture and for positing five tiers of values in his book *Formalism in Ethics and Non-Formal Ethics of Values*.

ANSWER: Max Scheler [or Max Ferdinand Scheler]

16. This author took fantasy sports down a much-needed peg in his second novel, in which J. Henry Waugh loses his sense of reality as he oversees the fifty-sixth season of a baseball league where all outcomes are settled by a throw of the dice. For 10 points each:

[10] Name this author, who wrote about Nixon's ass being emblazoned with the words "I AM A SCAMP" in lipstick and sodomized by Uncle Sam, in his farcical fictionalization of the Rosenberg execution, titled *The Public Burning*.

ANSWER: Robert Coover [or Robert Lowell Coover]

[10] This apocalyptic cult battles biker gangs and state troopers on the Day of Redemption in a 2014 novel by Coover, and coalesces around the lone survivor of a West Condon coal mining disaster in a 1966 book.

ANSWER: Brunists [accept Giovanni Bruno, the namesake ringleader]

[10] Particularly with weird stories and novels like "The Babysitter" and *Spanking the Maid*, Coover put himself firmly in the canon of American authors in this tradition, characterized by self-reference, logic-defying plots, and fabulation. Famous writers of this kind of fiction include John Barth and David Foster Wallace.

ANSWER: postmodernism [accept word forms]

17. The last movement of this piece consists of a set of ten variations, with clarinets and violins going first, then cymbals joining in, followed by the flute. For 10 points each:

[10] Name this composition, written to celebrate the 100th anniversary of the opera *Don Giovanni*, whose third movement orchestrates Liszt's piano arrangement of the *Ave verum corpus*.

ANSWER: Mozartiana [or Orchestral Suite No. 4, *Op. 61*]

[10] This composition by the same man uses a string melody over the oboes to represent the "love theme" of the two title characters, represented by the English horn and flute, whose suicides are portrayed with cymbal clashes.

ANSWER: Romeo and Juliet [or TH 42; or CW 39]

[10] This composer of *Mozartiana* and *Romeo and Juliet* used cannon fire in his *1812 Overture*.

ANSWER: Pyotr Ilyich Tchaikovsky

18. This song, which was included on the album *Distant Light*, describes the title person as a singer who "had it all." For 10 points each:

[10] Name this 1972 single. The speaker, an FBI agent working on a speakeasy sting, encounters the title person, who is "Just a 5-9, beautiful, tall."

ANSWER: "**Long Cool Woman** in a Black Dress"

[10] "Long Cool Woman" was performed by this English rock band. Allan Clarke founded this group with Graham Nash, who left to form a supergroup with David Crosby and Stephen Stills.

ANSWER: The **Hollies**

[10] Nash originally wrote this upbeat song for the Hollies, but they turned it down, so he performed it with CSN instead. It mentions sights such as "American ladies five foot tall" seen from the title train that departs "Casablanca going south."

ANSWER: "**Marrakesh Express**"

19. There are stibine-mediated and telluride-mediated examples of the "living" form of this process. For 10 points each:

[10] Name this type of chain-growth process in which the initiator is subjected to thermal decomposition, photolysis, or other stimuli resulting in homolytic bond cleavage.

ANSWER: free **radical polymerization** [prompt on partial answer]

[10] This technique may also be used to generate free radicals for radical polymerization. It is commonly used to disrupt cell membranes and to expedite dissolution in an NMR tube in lieu of manual stirring.

ANSWER: **sonication** [or **ultrasonication**; or applying **ultrasonic** frequencies; or **ultrasound**]

[10] As with all polymerization processes, this is the last step of free radical polymerization. following initiation and propagation. Curiously, this process does not happen in "living" polymerizations, which consequently go on forever.

ANSWER: **termination** [accept word forms]

20. Congregational chaplain Horace James was appointed to oversee this place, many of whose residents fled en masse after Andrew Johnson's Amnesty Proclamation voided their property rights. For 10 points each:

[10] Name this crowded location on Roanoke Island, the brainchild of General John G. Foster, inhabited by former slaves who were classified as "contraband."

ANSWER: **Freedmen's Colony** [or **Freedman's Colony**]

[10] The colony was founded after this 1863 executive order freeing slaves in areas of rebellion.

ANSWER: **Emancipation Proclamation**

[10] The practice of treating escaped slaves as contraband and not returning them to the Confederacy was established by Benjamin Butler by a declaration named for this place on Old Point Comfort in southeastern Virginia. This place was the launching point for George McClellan's Peninsular Campaign.

ANSWER: **Fort Monroe**

TB. Charles and Ubaldo defeat a dragon and a lion atop a mountain, navigate a maze, and arrive at an enchanted garden at the center of this woman's palace, where they show her lover his reflection in a shield to convince him to come home. For 10 points each:

[10] Name this Circe-sque character in a 1581 poem, who converts to Christianity instead of committing suicide after her lover, Rinaldo, abandons her.

ANSWER: **Armida**

[10] Rinaldo and Armida fall in love, and Tancred kills his lover Clorinda, in an epic poem by Torquato Tasso fictionalizing the capture of this important city in the Holy Land during the First Crusade.

ANSWER: **Jerusalem** [or **Gerusalemme**; accept **Jerusalem Delivered**; accept *La* **Gerusalemme liberata**]

[10] Rinaldo was named after Renaud de Montaubon, a medieval French hero who first appeared in this *chanson de geste*, in which he foolishly kills a man over a brawl in a chess game at Charlemagne's court, and travels from place to place with his three brothers on the magical size-adjusting horse Bayard.

ANSWER: *The* **Four Sons of Aymon** [or *Les* **Quatre fils Aymon**; or *De* **Vier Heemskinderen**; or *Die* **Vier Haimonskinder**]