

Editors: Eric Mukherjee, Rob Carson, Chris Chiego, Patrick Liao, Saajid Moyeen, Ike Jose, Eddie Kim  
 Writers: JinAh Kim, Jaimie Carlson, Sarita Jamil, Max Smiley, Ben Cushing, Carol Wang, David Ferguson

### Tossups

1. In a novel by this author, Charlie Slatter eventually takes over the central farm after sending Tony Marston to manage it. A passage in Eliot's "The Waste Land" that describes events "in this decayed hole among the mountains" titles a novel by this author in which Mary Turner is murdered by her servant Moses. The emissary Johor appears in a series by this author that includes the novels *The Sirian Experiments* and *Shikasta*. This author of *The (\*) Grass is Singing* created a character who writes the novel *Frontiers of War* about her experiences in Rhodesia. In another work by this author, a conventional narrative titled "The Free Woman" is interspersed with segments from Anna Wulf's yellow, red, blue, and black journals. For 10 points, name this author of the *Canopus in Argos* series and *The Golden Notebook*.

ANSWER: Doris Lessing [or Doris May Lessing; or Doris May Taylor]

2. Upon ascending the throne, this ruler ordered his father's premier military general to be killed as punishment for murdering two other generals during peacetime. This ruler's son stated that though his father treated civilians harshly, *he* would treat them even more harshly, a statement that instigated the schism between Judah and the remaining tribes of Israel. In a bout of depression, this man wrote, "Everything is meaningless! There is nothing (\*) new under the sun." During the Sermon on the Mount, Jesus admonished his disciples not to worry, stating that not even this person in all his splendor was not dressed as beautifully as a lily of the field. In a famous case, this man ordered a baby to be cut in two to determine the identity of the baby's mother. For 10 points, name this third king of Israel, the son of David, who asked for wisdom from God and wrote the book of Proverbs.

ANSWER: King Solomon

3. In one battle here, the midsummer solstice caused the "Dakshinayan (dakh-SHIN-nay-un) morning" when the second phase attackers had their horses blinded by sunlight. After one battle here, a king was informed that 27 gold coins had been lost and two pearls had been dissolved. Madhavrao (mahd-HUV-rao) the First came to power for ten years after one battle at this site. One combatant in a battle here had his eye pierced by an arrow, and then was dishonorably beheaded by the child king's guardian, Bairam (\*) Khan. Ahmad Shah Durrani won a key victory over the Maratha Confederacy here. Hemu faced off against and lost the one battle at this site against the recently coronated Akbar. Despite its one thousand war elephants, the Lodi Dynasty was defeated by Babur here, ending the Delhi Sultanate. For 10 points, name this site of three battles in 1526, 1556, and 1761, in the Indian state of Haryana.

ANSWER: Panipat

4. In 2014, Lukas Stanek published a manuscript by Henry Lefebvre (luh-FEB) that proposed approaching this topic with a theory of "jouissance" (JEW-ee-suhnce) or "happiness." It's not computer science, but the term "design pattern" was first introduced in a book on this discipline by Christopher Alexander. The book *S,M,L,XL* documents this activity as practiced by the O.M.A. The anecdote about (\*) Archimedes shouting "Eureka" after he stepped into a bath is described in an ancient Roman treatise on this topic. "Sacrifice" and "Memory" are two of the "Seven Lamps" of this topic according to John Ruskin. The so-called "Orders" of this discipline include the Dorian, Corinthian and Composite types. For 10 points, name this activity practiced by Rem Koolhaas, Vitruvius, and Frank Lloyd Wright.

ANSWER: architecture

5. Robert de Clari claimed that the prostitutes used by the army participating in a battle of this campaign were sent away following a major offensive in order to focus attention on the siege of a harbor wall. This campaign was partly instigated by a document that appointed Sofferdo and Capuano as special assistants and by the preaching of Fulk of Neuilly (nwee). In a gambit to pay off debts, this campaign targeted a city in Dalmatia in an attack in which the father of Simon (\*) V de Montfort took part. It was called for by the bull *Post Miserabile* (MISS-uh-rah-BEE-lay). The nearly blind Enrico Dandolo began this crusade setting sail from Venice, though Theobald III, Count of Champagne, had originally been set to lead it. Due to this crusade, called by Innocent III, three emperors named Alexius existed in the same year. For 10 points, identify this crusade, when armies from Western Europe and Venice captured Constantinople from the Byzantines.

ANSWER: Fourth Crusade

6. This philosopher was criticized by G.E. Moore for setting an equivalence between "is desired" and "is worthy of desire." This philosopher argued that all necessity is verbal and not metaphysical, which led to a theory of names attacked by Frege (FRAY-guh) in *Sense and Reference*; Saul Kripke rejected this man's theory of general terms but

resurrected his theory of proper names; his theory of names can be found in a work that presents five methods of (\*) induction. This man identified offense, paternalism, and moralism as restrictions of liberty in a short work that introduces the "harm principle," and attempts to show the equivalence between the title philosophy and justice in the last chapters of a treatise championing the "greatest happiness principle." For 10 points, name this English philosopher who wrote *Utilitarianism*.

ANSWER: John Stuart Mill

7. Autocorrelation in these values can be dealt with by the Durbin-Watson statistic. The vector of these values is equal to the product of the quantity identity matrix minus hat matrix all times the response vector. If a plot of these things appears U-shaped, adding a square of a variable to the model may help. These values are divided by an estimate of the standard deviation to find their "studentized" variety. The fact that n of these only have n minus one degrees of freedom leads to Bessel's correction for finding the (\*) population standard deviation. The best linear unbiased estimator is a test statistic that consists of the sum of the square of these values, according to the Gauss-Markov theorem. They can represent estimates of the unobservable error. For 10 points, name these values that appear in a regression analysis, which are the distances between the best-fit curve and the data points.

ANSWER: residuals [do NOT accept "errors" or "deviations"]

8. One of this author's poems describes a person who "plays at chess with the bones of the world" and "nurses chocolate fantasies" while ignoring "gray child faces crying in the streets." Another of this author's poems mentions an object which "fit nowhere" on a bookshelf and is "fired in sanguine clay." This author of "The Lady and the Earthenware Head" stated "Thirty years now I have labored to dredge the silt from your throat. I am none the wiser" in a poem about a "pithy and historical" (\*) statue. Another of her speakers compares herself to "the arrow, / the dew that flies, / suicidal" into the "red eye, the cauldron of morning." She described a woman with "skin as bright as a Nazi lampshade" who claims "Dying is an art, like everything else" and "I eat men like air". For 10 points, name this poet of "The Colossus," "Ariel," and "Lady Lazarus," who claimed "every woman adores a Fascist" in "Daddy."

ANSWER: Sylvia Plath

9. The rate of change of a parameter governing this force appears in the denominator of the Sverdrup (suh-VARE-drupp) transport. That parameter governing this force is the difference between the absolute and relative vorticity in the barotropic vorticity equation. Regional variation in this force leads to the beta effect. A consequence of this force's vertical component is the increased perception of gravity at the equator, called the (\*) Eötvös (YOT-vosh) effect. When this force is balanced against the pressure gradient, geostrophic phenomena occur. The determination of whether this effect is important within a system is denoted by the Rossby number. Its magnitude of acceleration can be calculated by taking the cross product of negative 2 times capital omega and v. For 10 points, identify this "fictitious" force that results from the deflection of objects when reference frames undergo rotational motion.

ANSWER: Coriolis effect [or Coriolis force]

10. This woman has a dream in which her lover is replaced by Iollan the Fair and is decapitated. While journeying home, this woman is tormented by a vision of a cloud of blood appearing over a palace. Late in life, this person is forced to spend a year with the warrior that she detests most. This figure's guardian, Leabharcham (LAU-er-cum), interprets the appearance of a raven to indicate that this figure's lover is a child of Usnech (USH-nuk). A (\*) fidchell piece damaged the eye of Gelbann, a warrior who was sent to spy on this figure. Cathbad was present at the birth of this woman, and made a prophecy about her. This woman's lover, Noisiu (NEE-sheh), was killed by the soldiers of King Conchobar; afterwards, she kills herself by jumping from a chariot, thus partly instigating the Cattle Raid of Cooley. For 10 points, name this woman whose beauty caused much sorrow for Ireland.

ANSWER: Deirdre

11. This man ensured that his son would marry Margaret, Maid of Norway, by the Treaty of Birgham. This man passed an unpopular tax on wool called the maltolt during his reign. His attempt to collect one-half of clerical subsidies through a grant was initially permitted by Robert Winchesley (WIN-chess-lee), though later outlawed by the papal bull *Clericis Laicos* (KLER-i-sis LAI-kos). This man's forces, led by Hugh de Cressingham, were defeated in a battle in which their forces could only cross the namesake (\*) structure in twos, leading to a bottleneck in which Andrew De Moray's army could cut off reinforcements. This king, who as a prince fought alongside Gilbert de Clare, won the Battle of Evesham to end the Second Barons' War, and later personally led the victorious forces at the Battle of Falkirk. For 10 points, name this English king who opposed William Wallace, known as the "Hammer of the Scots."

ANSWER: Edward I [or Edward Longshanks; or Edward, Hammer of the Scots and Edward Malleus Scotorum before "Hammer" is read; prompt on "Edward"]

12. A pulsing free-electron laser and lipidic mesophases are used in the “serial femtosecond” version of this technique. Inokuma et al developed a system using sponges to avoid one time-consuming step in this technique. Data for entries in the P-D-B are obtained using either cryo-E-M, N-M-R, or this technique. In this technique, the R-free and R values are used to test the fit of the model, which relies on solving the (\*) phase problem. The difference between the incoming and outgoing wave-vectors in this technique is related to the three Miller indices by the Laue equations. This technique was used by Perutz and Kendrew to solve the structure of myoglobin and by Rosalind Franklin to find the structure of DNA. For 10 points, name this method of determining atomic structure using the pattern created by a scattered beam of a certain kind of high-radiation energy.

ANSWER: X-ray crystallography [or X-ray diffraction; prompt on partial answers]

13. William White wrote about the memorial inscriptions composed by this man, whose writings in Latin include “Hendecasyllables,” (hun-DECK-uh-SILL-uh-bulls) a translation of Dryden’s “Britain.” This author mocked nursery rhymes with a poem about a “huge and wild” grizzly bear who “has devoured the infant child.” This poet laments that “of my threescore years and ten / twenty will not come again” and decides to look at “things in bloom” because “fifty springs are little room” in (\*) “Loveliest of Trees, the Cherry Now”. In one of this man’s poems, the speaker is given advice like “the heart out of the bosom / was never given in vain” and “give crowns and pounds and guineas / but not your heart away.” Another of his poems claims that “early though the laurel grows / It withers quicker than the rose.” For 10 points, name this Englishman whose poems “When I Was One-and-Twenty” and “To an Athlete Dying Young” can be found in *A Shropshire Lad*.

ANSWER: A.E. Housman [or Alfred Edward Housman]

14. In this book, a character ties a string to her toe so her lover can pull it, while another character is forced to eat aloe as an ordeal after his pig is stolen. Another of its characters tells his niece not to look at herself in the mirror if she doesn’t want to see ugly people. This book features a pair of characters who die by rubbing sage against their teeth and another who buries her lover’s head in a (\*) pot of basil. In one of this work’s stories, a man lies to a friar on his deathbed and is thus revered as a saint; Gualtieri convinces his wife that he has killed their children just to test her patience. This work includes stories about Ciappelletto (CHEE-uh-PUH-let-oh) and “the patient Griselda” and features such narrators as Fiammetta, Pampinea, and Dioneo. For 10 points, name this collection in which nobles tell stories to pass time while escaping the Black Death, written by Giovanni Boccaccio.

ANSWER: The Decameron

15. The namesake town of this battle was overlooked by Lowndes Hill, from which troops under Tobias Stansbury withdrew before the battle, and was known as a popular dueling ground. During this battle, Stansbury’s troops were controversially ordered out of an orchard and onto a hill separate from William Winder’s main defensive line. Commodore Joshua Barney’s naval battalion and a detachment of marines put up the stiffest resistance at this battle, as the (\*) British forced a crossing of the Eastern Branch and used Congreve Rockets to scatter militia. The retreat from this battle has been called its namesake “races,” and president James Madison fled the White House after watching this battle. For 10 points, identify this 1814 battle which preceded the burning of Washington, D.C.

ANSWER: Battle of Bladensburg

16. A movement of this piece ends by reprising the previous movement’s closing G minor four-voice fugue at the point marked “Quam olim da capo.” This piece’s second movement borrows from George Frideric Handel’s Dettingen Anthem. Its *Lux aeterna* (“lucks” AY-turn-uh) movement begins by playing the first two sections of its first movement in reverse order, and ends with the same double fugue as the one in this piece’s second movement (\*) Kyrie (KEE-ree-ay). Richard Maunder and Robert Levin have theorized that this piece intended to include an “Amen fugue.” An Offertorium and a Sanctus are the fourth and fifth of this piece’s eight main sections. Its Confutatis (cohn-foo-TAH-tiss) movement is followed by eight bars of the Lacrimosa, at which point this piece originally broke off before being completed by Franz Süssmayr. For 10 points, name this mass for the dead by an Austrian child prodigy.

ANSWER: Mozart’s requiem [or Wolfgang Amadeus Mozart’s Requiem Mass in D minor; prompt on partial answer]

17. One player of this position for the Baltimore Black Sox was nicknamed “Boojum” after the sound of a baseball hitting the outfield wall. Another player of this position led the American League in home runs for four straight years beginning in 1911, and was thus nicknamed (\*) “Home Run.” Another player of this position, the third overall pick in 2006, became the 2008 American League Rookie of the Year and led his team to the pennant. One player of this infield position holds the record for most home runs in a career while only playing for one team, with 548. The person playing this position is the first to touch the ball off the bat on a play scored “5-3,” and is typically the closest infielder to the batter, leading to this position being nicknamed the “hot corner.” For 10 points, name this position formerly played by George Brett and Mike Schmidt.

ANSWER: **Third** base [accept “five” before “5-3”; do not accept “three”]

18. In one text, the stop consonants of this language are organized into a five by five square that preserves sound distinction whether recited vertically or horizontally. Comparison interrogatives in it use overlong vowels, a phenomenon called *pluti*. Its instrumental case can be used not only as the agent of an action, but also to mean “without” or “enough of” with the words *vina* and *alam*. Like ancient Greek, this language also had a loss of aspiration in the first of two (\*) consecutive aspirated consonants, called Grassmann’s law. Panini noted phonological processes at morpheme boundaries in this language called sandhi, and compiled over 3000 rules for its grammar. This language was first written in Brahmanic script and later in the Devanagari (deh-vuh-NAH-gah-ree) script. For 10 points, name this Indo-Aryan language which heavily influenced modern Hindi, Urdu, Gujarati, and Bengali.

ANSWER: **Sanskrit**

19. One assay for this process attaches fluoro-genic substrates to peptides containing the D-E-V-D motif. One pathway activating this process is enhanced by the activity of BAT3, which increases the lifetime of A-I-F. Evidence of this process includes increased fractions of sub-G(1) phase cells and Annexin-V (“5”) binding of externalized phosphatidyl-serine (fos-fuh-TIDE-ill-SEE-reen) on flow cytometry. Some lymphocytes produce a (\*) Fas ligand which induces this process, which is inhibited by B-c-l-2. A-p-a-f-1 is bound and activated in this process when mitochondria release cytochrome c. This process results in ordered cleavage of DNA and blebbing of the cell membrane. For 10 points, name this process known as programmed cell death.

ANSWER: **apoptosis**

20. The background of one painting in this series shows a golden clock with images of a fish, cat, and mouse surrounding it. In one entry, a small girl plays with a figurine of Actaeon (ak-TEE-on) while a man in red plays a flute, while another shows a bottle of laudanum (LAWD-un-un) underneath a pink shoe. In its first entry, one man points at his family tree while his son looks at the mirror. Another part of this work shows a painting of a woman with a squirrel and a man absconding through a window on the left behind a woman begging for forgiveness to a (\*) wounded man. One image in this series depicts a viscount demanding a refund for mercury pills, which were to treat his syphilis. Paintings in this series include “The Tete a Tete” and “The Lady’s Death” as well as one about the “settlement” of the title thing by Earl Squanderfield. For 10 points, name this series of paintings by William Hogarth about the problems of modern matrimony.

ANSWER: **Marriage a-la-Mode**

## Bonuses

1. This policy required a 50 word dictation test, which was used in an attempt to exclude Czechoslovakian author Egon Kisch from entering the country by the Joseph Lyons government. For 10 points each:

[10] Name this policy which explicitly favored immigration from English-speaking countries. It was first implemented through the Immigration Restriction Act of 1901 under the Prime Ministership of Edmund Barton.

ANSWER: **White Australia** Policy

[10] The White Australia policy was implemented due to competition between white gold miners and this ethnic group. Members of this ethnic group include sniper Billy Sing and current Leader of the Opposition in the Senate, Penny Wong.

ANSWER: **Chinese**-Australians

[10] Under this man’s government, Japanese war brides and students were allowed to settle in Australia. This longest-serving prime minister of Australia also extolled the middle class in the “Forgotten People” speech.

ANSWER: Robert **Menzies**

2. Richard Jenkins compared this author’s early works to Monty Python sketches. For 10 points each:

[10] Name this author of *Love and Freindship* and *The Beautiful Cassandra*. She is perhaps better known for creating heroines like Fanny Price, Emma Woodhouse, and Elizabeth Bennet.

ANSWER: Jane **Austen**

[10] This Austen heroine represents the first title characteristic of *Sense and Sensibility*. She tries to warn her sister Marianne against the affections of John Willoughby; she later winds up with Edward Ferrars.

ANSWER: **Elinor** Dashwood [or **Elinor Dashwood**; prompt on “Dashwood”]

[10] Austen likely took the title of *Pride and Prejudice* from this woman’s novel *Cecilia*. This author of the novels *Evelina* and *The Wanderer* also wrote plays like *The Witlings*.

ANSWER: Frances **Burney** [also accept Fanny **Burney** or Frances **d’Arblay**]

3. This process can occur between groups of organisms due to sudden changes like polyploidy. For 10 points each:

[10] Name this process which prevents future successful mating between two previously related groups of organisms. It has allopatric and sympatric forms.

ANSWER: **speciation** [accept descriptive equivalents like “forming new species” but **species** must be mentioned]

[10] Cytochrome c and hemoglobin are both used to perform this analysis based on the neutral theory of molecular evolution. This analysis relates the number of mutations to the time of divergence of two species.

ANSWER: **molecular clock** [or **gene clock** or **evolutionary clock**]

[10] This evolutionary hypothesis both justifies observed constant extinction rates using coevolution and explains the advantage of sexual reproduction in facilitating responses to selection pressures.

ANSWER: **Red Queen** hypothesis

4. Answer some questions about indifference curves, for 10 points each:

[10] Each point on an indifference curve represents a set of goods that have an equal amount of *this* for the customer. The law of diminishing marginal *this* suggests that each additional unit of a good imparts less of this.

ANSWER: **utility**

[10] These types of goods have L-shaped indifference curves, meaning that the marginal rate of substitution is either infinite or zero.

ANSWER: **perfect complements** [do NOT prompt on partial answer]

[10] This utility function is of form  $U(x, y) = x^a y^{1-a}$ . It shares a name with a production function that takes the product of factor inputs raised to the power of their elasticities.

ANSWER: **Cobb-Douglas**

5. A philosopher from this country delivered the “Oration on the Dignity of Man.” For 10 points each:

[10] Name this country home to Marsilio Ficino (**mar-SEE-lee-oh fuh-CHEE-noh**) and Pico della Mirandola. Mirandola’s *900 Theses* was declared heretical by Pope Innocent VIII.

ANSWER: the Republic of **Italy**

[10] This Italian philosopher and Communist was once imprisoned by Mussolini. This author of the *Prison Notebooks* believed that the proletariat could only overthrow the state by first overcoming the sources of hegemonic power in civil society.

ANSWER: Antonio **Gramsci**

[10] Gramsci wrote extensively on this group of people. He claimed that the “organic” type of these people help articulate the needs and feelings of the working-class masses, as opposed to the “traditional” type.

ANSWER: **intellectuals** [or **intelligentsia**]

6. For 10 points each, answer some questions about organic heteroatomic compounds.

[10] This class of three-membered cyclic ethers is notable for its extreme reactivity compared to most other ethers, which can be attributed to high quantities of ring strain resulting from its 60 degree bond angles.

ANSWER: **epoxides** [accept **oxiranes**]

[10] One method of forming epoxides, the Prilezhaev (**pril-ZHAY-hev**) synthesis, follows a butterfly mechanism and reacts alkenes in the presence of this type of organic compound.

ANSWER: **peroxyacid** [accept **peracid**; do not accept **carboxylic acid**; prompt on **acid** or **peroxide** or **mCPBA**]

[10] Jacobsen epoxidation adds an epoxide across a double bond in the presence of a catalyst containing this transition metal. This metal is also found in the oxygen-evolving complex of photosystem II along with calcium.

ANSWER: **manganese** [or **Mn**]

7. Answer the following about the early proliferation of printed Christian reading material, for 10 points each.

[10] This printer from Mainz created a 42-line version of the Bible using his newly-invented printing press. Marshall McLuhan wrote a book about his “Galaxy” detailing how his printing press completely changed culture.

ANSWER: Johannes **Gutenberg**

[10] It’s not Gutenberg’s 42-line Bible, but this book’s ink is similar to that of Gutenberg’s according to cyclotron analysis. This book uses D-K type, which is inferior to the type used in the Gutenberg Bible.

ANSWER: **36-line Bible** [or **Bamberg Bible**]

[10] This man, who disputed in Leipzig with Martin Luther, also produced his own translation in German. He also disputed with Andreas Karlstadt at that same incident.

ANSWER: Johann Maier von **Eck**

8. Spindletop, the site of the largest oil gusher in Texas, sat atop a formation made of this substance that trapped the oil. For 10 points each:

[10] Identify this commodity often used to make gunpowder and which was part of a trade across the Sahara Desert. Namesake "domes" of this substance are scattered along the American Gulf Coast and include Avery Island.

ANSWER: salt

[10] Salt domes are used as storage reservoirs for this national defense facility located in salt domes in Texas and Louisiana. After Katrina, it was tapped to help stabilize gasoline prices.

ANSWER: Strategic Petroleum Reserve or SPR [prompt on partial answer]

[10] The national US reserve for this commodity is located in Cliffside, Texas amid the center of its production. That reserve for this substance was completed in 1934 to prepare for airship warfare, yet remains open today.

ANSWER: helium

9. An RC circuit acts as this sort of device when the resistor is in series with an electrical load and the capacitor is in parallel with the load. For 10 points each:

[10] Name this setup, in which the cutoff frequency is 1 over two pi RC. One of these is used for anti-aliasing before using an analog-to-digital converter.

ANSWER: low-pass filter [or high-cut filter; or treble-cut filter; prompt on "filter"]

[10] A second-order low-pass filter often contains an RLC circuit; the "L" stands for one of these components, whose namesake parameter is measured in Henrys. They are typically coils that store energy in magnetic fields.

ANSWER: inductor

[10] The energy stored in an inductor is proportional to this power of the current.

ANSWER: 2 or squared

10. This character acts in a play as Prince Hal after being inspired to write by Mrs. Leonard, and he grows up in Altamont, a fictionalized version of Asheville, North Carolina. For 10 points each:

[10] Name this man, the protagonist of *Look Homeward, Angel* and *Of Time and the River*. He falls in love with Laura James, goes to Harvard, and travels with Frances Starwick.

ANSWER: Eugene Gant [accept either underlined portion]

[10] This absurdly prolix author of *Look Homeward, Angel* and *You Can't Go Home Again* based much of Eugene Gant on himself.

ANSWER: Thomas Wolfe

[10] *Look Homeward, Angel* and *Of Time and the River* were prevented from being hundreds of pages longer than they eventually were due to the noble efforts of this Charles Scribner's Sons editor. He also discovered young talents like F. Scott Fitzgerald, Ernest Hemingway, James Jones, and Alan Paton.

ANSWER: Maxwell Perkins [or Max Perkins; or William Maxwell Evarts Perkins]

11. This work of art was originally named "Twenty-Five Women Who Were Eaten Alive." For 10 points each:

[10] Name this work of art, a triangular table with place settings for 39 famous women from history, decorated with china plates and embroidered runners with vagina imagery.

ANSWER: *The* Dinner Party

[10] The Dinner Party was created by this feminist artist of *Womanhouse* and *Powerplay*, whose media include needlework and welding.

ANSWER: Judy Chicago

[10] The Dinner Party features a setting for Artemisia Gentileschi, who painted this biblical woman beheading Holofernes in a work that may have been an allegory for her rape.

ANSWER: Judith

12. For 10 points each, answer some things about object-oriented programming:

[10] This feature of object-oriented programming allows classes to implement their superclasses. In the "multiple" type of this feature, more than one base class can be specified for a derived class.

ANSWER: inheritance

[10] In the context of formal logic, inheritance implements this type of relationship, also called the subsumptive relationship. For example, a "derived class" violet would have this relationship to a "base class" flower.

ANSWER: is-a relationship [since "a violet is a flower"]

[10] In contrast to dynamic dispatching, which is used in polymorphism, this type of dispatch uses the same declared type of object each time. This type of code analysis analyzes code without actually running it.

ANSWER static

13. This man was attacked and killed by a mob while he and his brother Hyrum were in jail in Carthage, Illinois. For 10 points each:

[10] Name this man who discovered a pair of golden plates on Cumorah Hill after being directed to go there by a vision of the angel Moroni. He is the founder of the LDS church.

ANSWER: Joseph **Smith**, Jr.

[10] Joseph Smith translated the plates while looking into a hat and using this pair of seer stones.

ANSWER: **Urim** and **Thummim**

[10] After receiving a vision, Joseph Smith espoused the idea that heaven was divided into three levels: the highest Celestial Kingdom, the middle Terrestrial Kingdom, and this level, the lowest of the three.

ANSWER: **Telestial** Kingdom

14. This composer's *Klavierstück XI* (**KLAH-vee-air SHTOOCK "eleven"**) calls for any permutation of nineteen distinct musical phrases to be played until one of the phrases has been played for the third time. For 10 points each:

[10] Name this composer whose tone cluster-heavy *Kontakte* (**kohn-TAHK-tuh**) exists as both an entirely electronic version and as one for electronic sounds plus piano and percussion.

ANSWER: Karlheinz **Stockhausen**

[10] Clusters also dominate in this composer's *Threnody for the Victims of Hiroshima*, which begins with all fifty-two strings playing fortissimo at the very top of their register.

ANSWER: Krzysztof **Penderecki** (**kuh-SHISH-toff pen-duh-RET-skee**) [or Krzysztof Eugeniusz **Penderecki**]

[10] Penderecki hails from this European nation home to Henryk Górecki (**HEN-rick goo-RET-skee**) and the mazurka dance.

ANSWER: **Poland** [or **Polska**; or **Republic of Poland**; or Rzeczpospolita **Polska**]

15. One of this author's short stories ends by asking if "a whole moment of happiness" "is...too little for the whole of a man's life". For 10 points each:

[10] Name this Russian author better known for his longer fiction, including the proto-existentialist novella *Notes from the Underground* and his novels *The Idiot* and *Crime and Punishment*.

ANSWER: Fyodor **Dostoevsky** [or Fyodor Mikhailovich **Dostoyevsky**]

[10] This is the aforementioned Dostoyevsky story, in which the narrator develops an unrequited love for a girl named Nastenka who wants to escape her strict grandmother, but is dismayed when her actual lover returns.

ANSWER: "**White Nights**" [or "**Belve nochi**"]

[10] In this Dostoyevsky novel, Stepan Verkhovensky is dismayed to find his son Pyotr turning into a nihilistic would-be revolutionary who idolizes the amoral Nikolai Stavrogin.

ANSWER: **Demons** [or **Besy**; or **Devils**; or *The Possessed*]

16. For 10 points each, name these animals from Norse mythology:

[10] This animal is owned by Odin, and was conceived in an attempt to prevent a builder from receiving the sun, the moon, and the goddess Freyja in exchange for building a wall within three seasons.

ANSWER: **Sleipnir**

[10] Odin's two ravens are named for thought and this other faculty, which in Greek myth is personified by the mother of the Muses, Mnemosyne (**nuh-MAH-sin-ee**).

ANSWER: **memory**

[10] The Midgard Serpent was born from the union of Loki and this giantess, whose name means "one who brings grief." She is usually identified with the giantess in Ironwood who gave birth to Fenrir.

ANSWER: **Angrboda** (**anger-bode-uh**)

17. Two of this man's sons were brought to trial, though the second was acquitted because of the jury's concern for this man in his old age. For 10 points each:

[10] Name this Roman statesman who returned from his farming life once to defeat the Aequi (**EYE-kwee**) and again to put down the Spurius Maelius (**SPUR-ee-us MY-lee-us**) conspiracy.

ANSWER: Lucius Quinctius **Cincinnatus**

[10] Cincinnatus was widely hailed for giving up this position of absolute power immediately after he accomplished his tasks. This position is granted by the Senate for six month terms.

ANSWER: **dictator**

[10] This other early Roman hero has a statue depicting her as an eque on the Via Sacra. She is memorialized for guiding escaping Roman hostages from the Etruscans.

ANSWER: **Cloelia**

18. Answer the following about certain revelations shortly before US Presidential elections, for 10 points each.

[10] William Safire claimed that fellow Nixon aide William Casey coined this month-related term in the belief that Lyndon Johnson would engineer peace in Vietnam to boost Hubert Humphrey just in time for the 1968 election.

ANSWER: **October Surprise**

[10] Another October surprise involved William Casey's alleged meetings with emissaries from this country to delay the resolution of a crisis in this country that ended on Inauguration Day in 1980.

ANSWER: **Iran**

[10] David Corn from this liberal magazine, which was previously edited by filmmaker Michael Moore, was responsible for 2012's October Surprise, though he actually released the video of Mitt Romney's "47%" gaffe in September.

ANSWER: **Mother Jones**

19. Answer the following about the most odious form of poetry, the ode, for 10 points each:

[10] This ancient Greek lyric poet is the namesake of an English form popularized by Abraham Cowley. He himself is best remembered for his collections of "victory odes" celebrating athletic accomplishments.

ANSWER: **Pindar** [or **Pindarus**]

[10] Pindar was among the poets who inspired the very popular odes of this Roman author, who coined the phrases "in medias res" and "ut pictura poesis" in his instructional essay *Ars Poetica*.

ANSWER: **Horace** [or Quintus **Horatius** Flaccus]

[10] Unlike later Horatian odes, Pindaric odes were intended to be sung to musical accompaniment and as such are divided into three parts: an opening, a mirroring response sung by the chorus, and a closing section with a different meter. All or nothing, name at least two of the three sections.

ANSWER: **strophe**, **antistrophe**, and/or **epode** [need at least TWO parts to get all 10 points, no partial credit]

20. One title character in this opera sings "When I am laid in Earth" while dying. For 10 points each:

[10] Name this English opera about a Trojan hero and queen of Carthage.

ANSWER: **Dido and Aeneas**

[10] This English composer of Dido and Aeneas also wrote the odes "Hail! Bright Cecilia" and "Come, Ye Sons of Art" as well as the semi-operas *The Fairy Queen* and *The Indian Queen*.

ANSWER: Henry **Purcell**

[10] Besides its basis in Virgil's *Aeneid* and influence from Cavalli's *Didone*, Dido and Aeneas was heavily influenced by this Baroque composer's *Venus and Adonis*. He also composed the song collection *Amphion Anglicus*.

ANSWER: John **Blow**