

**Bulldog High School Academic Tournament XXII (2013): *Praxis?* We Talkin' Bout *Praxis*, Man**  
**By Yale Student Academic Competitions**  
**Edited by Matt Jackson and Ashvin Srivatsa, with Kevin Koai and Spencer Weinreich**  
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**Round Six Tossups**

1. Workers in this state pioneered the moving picket line to avoid loitering laws during the 1912 Bread and Roses strike in Lawrence. Its businessmen pioneered a system where a bell rang at 4:40 AM to wake young girls in company-owned dorms for work in mills such as Lowell. A murder in this state's town of Braintree prompted the trial of anarchist Italian immigrants Sacco and Vanzetti. Its capital was the site of a 1919 police strike, and much earlier on poor debtor farmers in this state took up arms in 1787. For 10 points, name this home of Calvin Coolidge and site of Shays' rebellion, where a recent no-strike guarantee sped up the "Big Dig" in Boston.

ANSWER: Commonwealth of Massachusetts <MJ>

2. One of this author's protagonists has his ear struck by a "flapper" in a society where no buildings have any right angles in them. This author mocked John Partridge's almanacs by predicting Partridge's own death under the pseudonym of Isaac Bickerstaff. This author also suggests that skin would make excellent gloves and in an essay about reducing the number of papists in Ireland by eating their babies. For 10 points, identify this satirist who penned *A Modest Proposal*, who wrote of a man who visits the giants of Brobdignag after being tied down by the tiny people of Lilliput in *Gulliver's Travels*.

ANSWER: Jonathan Swift <GL>

3. The output of this structure is directly related to "VO<sub>2</sub> max" and may be used to help identify the root cause of ischemia in a patient. Shunts in this structure, such as the foramen ovale, may lead to pathological flow of matter through it. The QRS complex is produced by the action of the SA node within this organ. That node generates a pacemaker potential, which can be measured with an EKG, using which abnormalities like tachycardia may be detected. Blood flows through the tricuspid valve in this organ before entering the pulmonary circuit via the right ventricle. For 10 points, name this organ that is connected to the aorta and pumps blood.

ANSWER: heart <AS>

4. The Crescentii clan ended one instance of this title for four decades after Berengar's death. The Ghibellines supported the power of this office in their fight against the Guelphs, and it was assumed by seven years after a victory at Lechfeld against the Magyars by the son of Henry the Fowler. The Treaty of Pressburg invalidated this office after the battle of Austerlitz in 1806, and it was selected by seven electors after the 1356 Golden Bull. This line included Saxonians such as Otto the Great and many Habsburgs. For 10 points, name this often-nominal sovereign who ruled medieval Germans in the name of an earlier defunct empire.

ANSWER: Holy Roman Emperor [or Imperator Romanus Sacer; or Rex romanorum; or "King of the Romans"] <MJ>

5. The "actual incidence" of these things can be observed independent of their intended, or "statutory," incidence. Robert Barro revived the idea that a change in them does not affect consumer behavior, called Ricardian equivalence. A rectangle representing this quantity has height defined by upward shift of the supply curve on a quantity-price diagram, left of a triangular area showing deadweight loss. Negative externalities are ended by the Pigouvian type of this quantity, which can be ad valorem or "value-added." A parabolic diagram about their optimal rate is the Laffer curve. For 10 points, name these payments which can be "progressive" and raise government revenue.

ANSWER: taxes [or tax revenue; or tax rates] <MJ>

6. Figures in this work include “the eternal Footman,” and a speaker who claims “I am Lazarus, come from the dead, back to tell you all.” Its narrator asks whether he has “the strength to force the moment to its crisis,” and plans to wear his “trousers rolled.” The speaker of this poem imagines being “a pair of ragged claws,” and its six-line epigraph is Italian from Dante’s *Inferno*. This work describes “yellow fog that rubs its back upon the window-panes” and ends with an image of drowning amid “mermaids singing, each to each.” It features a room where “women come and go, talking of Michelangelo” and begins “Let us go then, you and I.” For 10 points, name this T. S. Eliot poem.

ANSWER: “The Love Song of J. Alfred Prufrock” <SJW>

7. The amount of this substance in a given deposit is quantified by STOIP. Benthic foraminiferan fossils can be used to date deposits of this substance. Kerogen is a precursor to it. In general, it is found within some kind of trap, often structural, like an anticline or a salt dome. When this substance is low in sulfur, it is described as “sweet”. Refining it typically involves cracking. One technique for extracting this substance from low-porosity rocks is to induce a fracture using a proppant and then deploy a horizontal wellbore to extract it. That technique is hydrofracking. Bitumen is a type of it that can be extracted from namesake sands. For 10 points, name this liquid fossil fuel.

ANSWER: petroleum [or crude oil; generously accept natural gas] <AS>

8. The most prominent Minoan goddess held these creatures in both hands. Alongside a baby, seeing one of these creatures made Herse, Pandrosos, and Aglauros go mad after Athena gave Erichthonius to them in a basket. Before death, Cadmus becomes one of these creatures, and another killed of the newlywed Eurydice after she tripped. Athens’s king Cecrops has the lower half of these creatures, and Tiresias switched genders upon hitting a pair of them. As an infant, Heracles strangles two with his baby hands, and two others surround the *caduceus* staff borne by Hermes. The Chimera’s tail is one of, for 10 points, what creatures which make up the Gorgon Medusa’s hair?

ANSWER: snakes [or serpents; do not accept “dragons” since these are all unambiguously common snakes] <MJ>

9. The density of this quantity is equal to the time derivative of the D-field. A device that produces a constant amount of this quantity is represented by a diamond with an arrow within it. This quantity is the subject of the skin effect, in which it is preferentially distributed towards the surface of an object due to self-inductance. This quantity, which is measured in an SI base unit, is the subject of Kirchhoff’s node rule, which is an alternate statement of charge conservation. The power dissipated by a wire is proportional to the square of the “direct” type of this quantity. For 10 points, name this quantity that is related to resistance and voltage by Ohm’s law and is measured in amperes.

ANSWER: electric current <AS>

10. The opening theme of this earlier composition is quoted in all four movements of Charles Ives’s *Concord Sonata*. This work’s second movement is a set of double variations that alternates between A-flat major and C major. The theme of the scherzo recurs before the recapitulation of the finale, which ends with 29 measures of C major, the parallel major of this work’s main key. It premiered in the same concert as its composer’s next piece in the same genre. That other piece features a “Scene at the Brook” movement and is nicknamed “Pastoral.” For 10 points, name this piece known for its short-short-short-long “Fate” motif, a symphony in C minor by Ludwig van Beethoven.

ANSWER: Ludwig van Beethoven’s Symphony no. 5 in C minor, Op. 67 [Beethoven not needed after mentioned] <KK>

11. One text in this set argues that the parting of two men “for a season” might serve to join them forever as brothers; that one was written on behalf of Onesimus, an escaped slave. The first of these texts ends chapter 1 by describing sinful sexual acts, then says “you...have no excuse” to judge others in chapter 2, and is often cited by

*sola fide* advocates. They include “Philemon,” and a later one, which includes the phrases “we see through a glass darkly” and “Love is patient, love is kind,” went to churchgoing Corinthians. The first of the thirteen was addressed to the Romans. For 10 points, name these letters compiled in the New Testament, written by an apostle from Tarsus. ANSWER: epistles of the Apostle Paul [or Pauline epistles; or letters from the Apostle Paul; prompt “books of the New Testament;” accept any answer involving letters/epistles from Saint Paul or letters/epistles from Paul of Tarsus] <MJ>

12. This author of a historical play about Julian the Apostate created a woman who was promised at age twelve that she’d have a “kingdom.” This author of *Emperor and Galilean* created Aunt Jule and her professor nephew, who returns from his honeymoon at the start of another play. After burning a manuscript, one of this man’s title characters gives Eilert a pistol, for which she is blackmailed by Judge Brack. This author of *The Master Builder* created the syphilitic Dr. Rank and the academic Tesman; he ended one play with a door slam as Torvald is abandoned by Nora Helmer. For 10 points, name this Norwegian playwright of *Hedda Gabler* and *The Doll’s House*.

ANSWER: Henrik Johan Ibsen <SJW>

13. At Flora Macdonald’s request, this thing was done by Bonny Prince Charlie on the Isle of Skye after the failed ‘45 uprising. Man Ray’s *Rose Selavy* photographs show Marcel Duchamp doing this. A man reflexively reaches for a sword while doing this thing as an alarm rings at Lycomedes’s court; that man was Achilles. The character of Ganymede appears in the Forest of Arden due to an instance of this planned by Rosalind in *As You Like it*. After a shipwreck in Illyria, Viola does this in order to serve Duke Orsino in *Twelfth Night*. For 10 points, name this self-presentation choice central to the Chinese legend of Hua Mulan and to drag shows.

ANSWER: crossdressing [or dressing in drag; or transvestitism; accept any answer involving dressing as another gender; accept dressing as a woman until “Ganymede” is read; prompt on “disguise” or “taking a new identity”; prompt answers involving acting like another gender] <MJ>

14. This element appears at the center of a compound that is used as a standard in NMR; that compound has four methyl groups attached to this element. Large, ultra-pure ingots of this element are industrially produced using boules in the Czochralski process, which sees this element melted in a crucible and suitably doped before being drawn into a wafer. Diatoms integrate this element into their cell walls. It appears in minerals like pyroxene, mica, and quartz, and it is the second-most-abundant element in the crust. Astrobiologists take an interest in this material as an alternate to carbon in extraterrestrial life. For 10 points, name this semiconducting metalloid with symbol Si. ANSWER: silicon [accept Si until it is read; do not accept “silica”] <AS>

15. This noun is the last word of an album whose back cover features the words “...or do they?” “Da Ya Think I’m Sexy” appears on that album by Rod Stewart, whose title associates blondes with this concept. The band of this name sings “My seat’s been taken by some sunglasses, / Asking ‘bout a scar” and is fronted by Nate Ruess. Another singer, who invokes this concept four times in a row after singing “Partyin’, partyin’, yeah!” but before “looking forward to the weekend,” is Rebecca Black in “Friday.” For 10 points, name this three-letter word that names the band that released “Some Nights” and a song that urges “Let’s set the world on fire,” “We Are Young.”

ANSWER: fun [accept fun.; accept funn] <KK>

16. One couple in this painting is surrounded by about two dozen floating, golden-hearted white roses. The rightmost third of this painting has a background of gold-tipped trees in an orange grove. In this painting, a pinkish silk cloak with flower embroidery is carried leftward by a Hora, a goddess of the seasons, and Chloris holds onto the winged Zephyrus as he blows a rightward breeze. The title figure covers a breast with one hand and holds her red hair in front of her legs with the other. For 10 points, name this painting of a Greek goddess emerging atop a seashell, by Sandro Botticelli.

ANSWER: *The Birth of Venus* [or *Nascita di Venere*] <MJ>

17. This character indignantly ends a story about goats crossing a river when he is interrupted during a count of the individual goats. His wife Teresa is sometimes called “Mari Gutierrez,” and he meets up with Ricote after fleeing from Barataria. This character is wrapped in a bedsheet and tossed upwards at an inn which he frequently returns to. This frequent user of garbled proverbs is promised governorship of an *insula*, or island, by his master, for whom he gets information on Dulcinea by riding a dapple-grey donkey. For 10 points, name this fat peasant who acts as a squire to Don Quixote.

ANSWER: Sancho Panza [or Sancho Panza] <MJ>

18. One fugitive in this country used the alias Ricardo Klement and was captured with a bouquet in hand heading to his 50th anniversary. The Justicialists are a Third Way party in this country which launched the diplomatic Rainbow Tour. The “shirtless,” or *descamisados*, supported a leader of this country whose second wife ran a vice presidential campaign before dying of uterine cancer. Dictator Jorge Videla began the Dirty War in this country, which sheltered “banality of evil” exemplar Adolf Eichmann and other Nazis. For 10 points, name this South American country once run by Juan and Evita Perón, which fought Britain for the Falkland Islands to its east.

ANSWER: República Argentina [or Argentine Republic] <MJ>

19. The AFISMA mission was authorized to intervene in this country. The reconquest of Kidal occurred in this country, which was entered by an expeditionary force led by Thierry Burkhard as part of Operation Serval. The MNLA-controlled Republic of Azawad was declared in this country, in an area where a collection of priceless pre-colonial manuscripts was torched. Amadou Toumani Touré once led this country, to which Francois Hollande deployed two thousand troops in January 2013. For 10 points, name this African country where Islamist rebels inspired a 2012 coup and occupied cities such as Timbuktu.

ANSWER: Republic of Mali [or Republique du Mali; or Mali ka Fasojamana] <BH/MJ>

20. Athens produced a type of these things known as “owls” with material found at Laurium, which competed with a rival type in Aegina called the “turtle”. The earliest examples of this technology were found under the temple of Artemis at Ephesus, and Roman types include the *sestertius*. These objects were first used in Lydia, and were placed in the mouth of a dead Greek man before burial. These subjects of numismatic history included the *obol* and the standard unit, the *drachma*. For 10 points, name these valuable objects whose obverses often depicted rulers or gods, which Greeks used for payment.

ANSWER: coins [prompt “money” or “currency”] <MJ>

### [STOP HERE]

[You have reached the end of the round. Do not continue reading unless the game is tied or a tossup was thrown out earlier in the round.]

21. One of this man’s poems argues that “the world has still / Much good, but still less good than ill,” and discusses a feast serving “poisoned meat and poisoned drink.” That poem by this man complains to a drunkard about his bad poetry and notes that “Mithridates, he died old.” This poet got the advice “Give pounds and crowns and guineas, / But not your heart away” when he was one-and-twenty. This author of “Terence, this is stupid stuff” also described a boy who “won [his] town the race” but cannot do so anymore. For 10 points, name this Brit whose collection *A Shropshire Lad* contains “To an Athlete, Dying Young.”

ANSWER: Alfred Edward Housman <MJ>

Bonuses

1. Answer these questions about the wide Missouri – that is, the Missouri river, for 10 points each.

[10] The Missouri bends southward in this state, where it helps form Lake Sakakawea and Lake Oahe and flows by the city of Bismarck. The Badlands are in this state's west.

ANSWER: State of **North Dakota**

[10] Further south, this braided river runs through Nebraska and becomes a tributary of the Missouri a few minutes south of Omaha.

ANSWER: **Platte** River

[10] This headwater of the Missouri, in Montana, is the starting point for measuring the longest river system in North America, which runs from it to the Missouri to the segment of the Mississippi south of St. Louis.

ANSWER: **Red Rock** River <MJ>

2. Societies of these people included free peasant laborers called churls and adapted an elite warrior class called *huscarls* from Viking raiders, who they had to pay in danegeld. For 10 points each:

[10] Name these Germanic people who joined the Jutes in settling lower Britain between the rule of the Romans and the conquest of the Normans.

ANSWER: Anglo-**Saxons** [or the **Angles** and Saxons; prompt "English" or "England"]

[10] This "great" king defeated Guthrum's Vikings at Eddington and limited Viking influence to an area called the Danelaw. He unified the Anglo-Saxons as king of Wessex.

ANSWER: **Alfred** the Great

[10] This Anglo-Saxon kingdom bordered Wessex. Its rulers included Penda, who defeated Northumbria, and Offa, who built a dyke between it and Wales to its west.

ANSWER: **Mercia** <MJ>

3. In his native land, this man is best known for his short stories, which include "Ward No. 6," about a asylum doctor who himself goes insane, and "Lady with a Lapdog." For 10 points each:

[10] Name this Russian writer who created Olga, Masha, and Irina Prozorova in his play *Three Sisters*, and depicted the sale of the title property in *The Cherry Orchard*.

ANSWER: Anton Pavlovich **Chekhov**

[10] Chekhov also wrote this play, whose title character serves as steward to Professor Serebryakov. At the end of this play, Sonya, the niece of the title character, insists, "We shall rest."

ANSWER: **Uncle Vanya** [or **Dyadya Vanya**]

[10] Chekhov resigned from the Academy of Sciences when this author of *Mother* and *The Lower Depths* was blocked by the Tsar from becoming an "Academician of Literature."

ANSWER: Maxim **Gorky** [or Alexei Maximovich **Peshkov**] <SJW>

4. Name these modern architects who did work at American universities, for 10 points each.

[10] This architect was sued by MIT after his Stata Center started leaking. His designs for the Walt Disney Concert Hall and Guggenheim-Bilbao feature his signature silvery curves on their roofs.

ANSWER: Frank **Gehry**

[10] This European designer of the Tulip chair planned the Ezra Stiles and Morse Colleges at Yale, where his Ingalls Rink is called "the Whale." He designed shell structures for the Dulles and JFK airport terminals.

ANSWER: Eero **Saarin** [do not accept "Eliel Saarinen"]

[10] Estonian architect Louis Kahn designed one of these public buildings on Yale's campus with tessellated triangles decorating its ceilings. A non-college one in DC has an concrete East Building.

ANSWER: **art gallery**/ies [or **art museums**] <MJ>

5. The boundary between the Permian and the Triassic is defined by a "great" event of this type. For 10 points each:

[10] Name these events in which biodiversity sharply declines. They may be caused by anoxic oceans, flood basalts, and clathrate releases, among other things.

ANSWER: mass **extinction** event [or obvious equivalents; prompt on “dying”]

[10] Localized extinctions may occur as a result of the introduction of a species to a foreign environment; that species would then be described by this term. In the United States, the kudzu vine is described by this term.

ANSWER: **invasive** species [prompt on “exotic species”]

[10] An ecosystem’s ability to resist invasive species is related to this property, which incorporates both species richness and relative abundance. A common index of this property is named for Shannon and equivalent to entropy.

ANSWER: **diversity** <AS>

6. This poet included poems dedicated to the sea, to wine, to a book, and to Valparaiso in his “Elemental Odes.” For 10 points each:

[10] Name this poet, who dealt with the history of Latin America in poems like “The United Fruit Company” and a fifteen-part compendium.

ANSWER: Pablo **Neruda** [or Neftalí Ricardo **Reyes** Basoalto]

[10] The second part of Neruda’s fifteen-part *Canto General* is named for “The Heights of” this place, an Inca city in modern-day Peru.

ANSWER: **Machu Picchu**

[10] As a young man, Neruda published this collection, which includes “Tonight I can write the saddest lines” and “It is the hour of departure.”

ANSWER: ***Twenty Love Poems and a Song of Despair*** [or ***Veinte poemas de amor y una canción desesperada***] <SJW>

7. For 10 points each, answer these questions about the expansion of the American housing market.

[10] This Civil War-era act allowed most 21-year-old white men to claim 160 acres of territory for their families by living on it for five years.

ANSWER: **Homestead** Act of 1862

[10] This 1944 law provided zero-down-payment, low-interest mortgages and student loans to a class of men returning to American soil.

ANSWER: **G.I. Bill** of Rights [or  **Servicemen's Readjustment Act** of 1944]

[10] In 1947, this pioneering suburb opened in Nassau County, Long Island. Its six thousand identical Cape Cod-style houses were for whites only, and popularized the ideal of suburban homeownership.

ANSWER: **Levittown**, NY <MJ>

8. Supporting characters on this show include the werewolf guitarist Oz, played by Seth Green, and Alyson Hannigan’s character Willow, who becomes a witch during her time at Sunnydale High School. For 10 points each:

[10] Name this completed TV show by Joss Whedon. On this show, a “Hellmouth” attracts Angel and Spike to southern California, where the title blonde teen fights with a wooden stake.

ANSWER: ***Buffy the Vampire Slayer***

[10] Marvel hired Joss Whedon to direct this comics-based 2012 film, whose namesake superhero team includes Iron Man, Captain America, and the Hulk.

ANSWER: *Marvel’s The **Avengers*** [or *Marvel **Avengers** Assemble*]

[10] This “Big Bad” of *Buffy*’s fourth season is a *Frankenstein*-esque human-demon-robot-hybrid-thing created by Dr. Walsh of the Initiative for a government project.

ANSWER: **Adam** <MJ>

9. Inhabitants of this city include the famous-yet-talentless poet “Chum” Frink, and Paul Reisling, who shoots his wife Zilla. For 10 points each:

[10] Name this fictional town called “the Zip City,” a paragon of Midwestern “boosterism.” In *Arrowsmith*, another novel by the creator of this city, it is mentioned as being in the equally fictional state of “Winnemac.”

ANSWER: **Zenith**, Winnemac

[10] Zenith is the setting of this novel, in which a real estate salesman has an affair with Tanis Judique and fails to buck the social pressures of American capitalism.

ANSWER: **Babbitt**

[10] This man, the first American to win the Nobel Prize in Literature, penned *Babbitt*. This author also portrayed Carol Kennicott’s frustration with the small town-life of Gopher Prairie in *Main Street*.

ANSWER: Sinclair **Lewis** <SJW>

10. Answer these questions about Mongol invasions, for 10 points each.

[10] The Mongols first swept outwards under this great leader whose grandsons included Kublai. He unified the Mongol tribes in the early 1200s CE.

ANSWER: **Genghis** Khan [or **Chinggis** Khan; or **Chengiz** Khan; or **Chengji Sihan**; or **Yuan Taizu**; or **Temujin**]

[10] Under Hulagu Khan, the Mongols sacked this capital of the Islamic Abbasid caliphate, where Harun al-Rashid had built the House of Wisdom.

ANSWER: **Baghdad**

[10] This non-Khan Mongol general served Genghis Khan and Genghis’s successor Ogedei. He led the first invasions into Europe, defeating Hungary at Mohi in 1241, though succession struggles forced him to turn back.

ANSWER: **Subotai** [or **Sübeedei**; or **Sübügätäi**; or **Tsubodai**] <MJ>

11. It takes its title from a song by the fictional Judy Bridgewater, and at the end of this novel, Kathy H. dreams of finding Tommy again in Norfolk, her “lost corner” of England. For 10 points each:

[10] Identify this 2004 novel narrated by a “carer” who prepares fellow clones for organ donation. In this Kazuo Ishiguro work, Kathy recounts episodes from her childhood at Hailsham with Tommy and Ruth.

ANSWER: **Never Let Me Go**

[10] This other author also used sci-fi elements in a novel about a bioengineer who creates a race of herbivores before killing most other humans with a pandemic. This author of *Oryx and Crake* also wrote *The Handmaid’s Tale*

ANSWER: Margaret **Atwood**

[10] Hypnopaedia helps maintain a caste system of Alphas through Epsilons in this dystopian Aldous Huxley novel, which depicts John the Savage’s disenchantment with soma usage and promiscuity.

ANSWER: **Brave New World** <GL>

12. Answer some questions about sound, for 10 points each.

[10] This number is the ratio of an object’s speed to the local speed of sound.

ANSWER: **Mach** number

[10] Sound is carried by this type of wave, which is the only kind that can be transmitted through a fluid. The p-waves produced by an earthquake are also of this type.

ANSWER: **longitudinal** waves [or **compressional** waves]

[10] Unlike transverse waves, longitudinal waves cannot have this property, which measures the orientation of a wave.

ANSWER: **polarization** .<AS>

13. A recurring theme in this work recalls a curse originally uttered by Monterone, and the villain describes his womanizing in the aria “Questa o quella.” For 10 points each:

[10] Name this opera in which the title jester’s daughter Gilda is seduced by the Duke of Mantua, who sings about the fickleness of women in “La donna è mobile.”

ANSWER: **Rigoletto**

[10] *Rigoletto* was by this Italian composer of *Nabucco*, *La traviata*, and *Il trovatore*.

ANSWER: Giuseppe **Verdi**

[10] Verdi's final opera was this comedy centering on a Shakespeare character. It features the young lovers Nannetta and Fenton and ends with a fugue on the words "all the world is a joke."

ANSWER: **Falstaff** <KK>

14. If two events have this property, then their joint probability is the product of the individual probabilities. For 10 points each:

[10] Name this property. Events have this property if the occurrence of one event does not affect the probability of the other event occurring.

ANSWER: statistical **independence** [or word forms]

[10] This law describes a relationship between the probability of events conditioned on one another and the prior probabilities of those events. Its namer also lends his name to an interpretation of statistics opposed to frequentism.

ANSWER: **Bayes**'s law [or **Bayes**'s theorem; accept **Bayesian** statistics or **Bayesian** probability]

[10] Suppose that event X occurs with probability one-half, and event Y occurs with probability one-third. If X and Y are independent, what is the probability of event X *and* event Y occurring?

ANSWER: **one-sixth** [or **0.16 repeating**; or numerical equivalents; accept **1-to-5 odds**] <JG>

15. This work contains the soprano aria "I know that my redeemer liveth," and it closes with the chorus "Worthy is the lamb." For 10 points each:

[10] Name this work for orchestra and chorus by George Frideric Handel now often performed during Christmas season, best known for the "Hallelujah" chorus that closes Part II.

ANSWER: **Messiah**

[10] *Messiah* is an example of this genre popularized in England by Handel. Like operas, these works feature characters and arias, but unlike operas they are typically unstaged and religious in subject matter.

ANSWER: **oratorio**

[10] This well-known nineteenth-century oratorio by Felix Mendelssohn is often performed in both German and English. The title prophet sings "As God the Lord of Israel liveth" before the overture.

ANSWER: **Elijah** [or **Elias**] <KK>

16. Many hymns in this language are devoted to Agni, a god who accepts sacrifices by fire. For 10 points each:

[10] Name this language of classical India, which was used to write the Rig Veda and three other Vedas. Many Hindus still use this language, rather than Hindi, while making offerings.

ANSWER: **Sanskrit** language [or **Sanskrita**]

[10] The *Rig Veda* contains hymns to this Indic storm god, who slew the serpent Vritra while riding his many-headed white elephant Airavata. He is Arjuna's father.

ANSWER: **Indra**

[10] This other, closely-related language of the Prakrit family was used to write down the *Tipitaka*, or "Three Baskets," of Buddhist scripture.

ANSWER: **Pali** language <MJ>

17. In the 17th century, this country was a Calvinist republic controlled by the *stadtholder*. For 10 points each:

[10] Name this European country whose seven United Provinces broke from Spanish Catholic rule under William of Orange. Its colonial East India company preceded Britain's.

ANSWER: the **Netherlands** [or **Holland**; or **Nederland**; or **Dutch Republic**]

[10] The Netherlands broke from this Iberian Habsburg king during the Eighty Years' War. He was the wife of England's "Bloody" Mary until her death, and he sent the Armada.

ANSWER: **Philip II** of Spain [or **Felipe II**]



[10] A wave of this act called the *Beeldenstorm* raised tensions between the Dutch and Spanish. In the Byzantine east one example of this religiously-motivated act took down part of the Chalke gate at Leo III's request.

ANSWER: **iconoclasm** [accept any answer which indicates the destruction of icons, religious images, or religious art] <MJ>

18. These things can be broadly divided into structural and spatial, or "stereo" varieties. For 10 points each:

[10] Give this term that describes compounds that have the same molecular formulas but different structural formulas.

ANSWER: **isomers**

[10] Cis-trans notation and E-Z notation describe isomers that contain this type of linkage, about which rotation is impossible. In organic chemistry, alkenes are defined by having at least one of these.

ANSWER: **double bonds**

[10] When you're trying to perform one of these syntheses, reactions that produce the right kind of stereoisomer are important. In these syntheses, a complex molecule is built up from smaller pieces without using biological processes.

ANSWER: **total** synthesis <AS>

19. This philosopher described a madman with a lantern in his *The Gay Science*, and believed that the post-Christian world of his day was still stuck with "slave morality." For 10 points each:

[10] Name this mustached German philosopher whose ideas include the unrestricted, superhuman *übermensch*. He declared that "God is dead" before going insane.

ANSWER: Friedrich Wilhelm **Nietzsche**

[10] This title prophet of a Nietzsche work, named for a real-world prophet, comes down from the mountains to discuss "eternal recurrence" and hail the age of the *übermensch*.

ANSWER: **Zarathustra** [do not accept "Zoroaster"] [from Thus Spake Zarathustra]

[10] *Name or description acceptable*. After Nietzsche went mad, this anti-Semitic caretaker edited and controlled his work. This member of a failed Aryan colony in Paraguay compiled rough notes into *The Will to Power* and promoted Nietzsche to early Nazis.

ANSWER: Nietzsche's **sister** [or **Elisabeth Förster-Nietzsche**; or Elisabeth **Förster**] <MJ>

20. Answer these questions about the mythology of New Zealand's Maori people, for 10 points each.

[10] The Maori believe in a goddess of this type named Rangi, who married the sky god Papa. In this role, Rangi is analogous to the Egyptian god Geb and the Greek Gaea.

ANSWER: **earth** goddess [or Mother **Earth**; accept answers such as **ground**]

[10] This Polynesian trickster god pulled New Zealand up from the sea using a jawbone as a fishhook. This figure, who once lassoed the sun to slow it down, is also venerated by Hawaiians.

ANSWER: **Maui**

[10] Paikea rode these creatures across the sea to become the first person on North Island. In many Native American myths, this creature opposes the Thunderbird, and Sinbad the Sailor got screwed over by one on his first voyage.

ANSWER: **whales** [more specifically humpback **whales**; prompt "fish" or "giant fish" even though whales are mammals] <MJ>

21. The syllogism and De Morgan's laws are methods used in this field. For 10 points each:

[10] Name this field that sits at the boundary between philosophy and mathematics, and whose most famous thinkers include Gottlob Frege and George Boole, the latter of who lends his name to a branch of this field.

ANSWER: **logic**

[10] This 20th-century logician proved that any sufficiently-powerful logical system is incapable of proving all theorems that are true in the system. His incompleteness theorems undermined much of Frege's work.

ANSWER: Kurt Gödel [pronounced “gur-dull”, but accept any reasonable pronunciation]

[10] Gödel’s theorems do not apply to this type of logic, which includes quantifiers over variables but not predicates or functions. Zermelo-Fraenkel set theory employs this type of logic.

ANSWER: first-order logic [accept first-order predicate calculus] <DS>