

**Chicago Open 2013: No Subtext, Just Tacos.
Finals 2**

Written by Matt Bollinger, Libo Zeng, Sriram Pendyala, Dennis Loo, Sinan Ulusoy, and Kevin Koai, with invaluable contributions by Matt Jackson

**1. In a Mughal miniature, Jahangir uses one of these objects as a throne while scorning James I of England for a Sufi mystic. One of these items lies unobtrusively on a table in between four Venetian painters playing as a string quartet in Veronese's *Marriage at Cana*. In the bottom right corner of *A Dance to the Music of Time*, a putto is holding one of these items. In another painting, one of these objects is on the back of a muscular, bald (*) winged man who extends his right arm to draw back an ultramarine curtain. One of these objects is held up by a haggard creature wearing a crown interwoven with snakes in Albrecht Durer's *Knight, Death, and the Devil*, while another of these things appears to the left of the bell and magic square in *Melencolia I*. For 10 points, name this mainstay of *vanitas* paintings, which identifies Time in Bronzino's *Allegory of Venus and Cupid*.
ANSWER: an hourglass**

**2. Slug testing of these objects is very quick and inexpensive, but only tests a small area of one and may be best used in poorly transmissive conditions. The Hantush-Thomas method can often be used to calculate characteristics of these objects when their values of K_h and K_v differ; that difference defines the anisotropic type which is often found in the fractured rock variety of these objects. A Ghyben-Herzberg lens occurs when these objects are on islands, and an equation named for those two men is used to calculate the level of(*) intrusion into one of these objects. Perched ones are usually small, while confined ones often border a clay or unfractured granite layer and phreatic ones have the water table as their upper surface. The saturated type occurs when their hydraulic head is greater than atmospheric pressure. For 10 points, name these layers of saturated rock through which water can easily move.
ANSWER: aquifers**

**3. In a novella by this author, a coral merchant named Nissen Piczenik comes back from his first trip to the sea to find that he is losing business to a man selling celluloid beads. This author of *The Leviathan* created a character who has an affair with Frau Slama, who then dies in childbirth, and receives a packet of his letters to her on a visit to her widower. The protagonist of a novel by this writer leaves his crippled and mentally deficient son Menuchim behind in Europe to go to New York. That character, Mendel Singer, suffers the wrath of God before being reunited with his family. *The (*) Emperor's Tomb* is a sequel to this author's most famous novel, in which a lowly infantryman is promoted for taking a bullet for Franz Joseph during the Battle of Solferino; that novel uses three generations of the Trotta family to mirror the decline of the Austro-Hungarian monarchy. For 10 points, name this Austrian-Jewish author of *The Radetzky March* who shares his last name with the American author of *Goodbye, Columbus*.
ANSWER: Moses Joseph Roth**

**4. A queen of this kingdom commissioned a round, 27-layer granite tower with a square top and a window a few meters off the ground for observing stars. Another of this kingdom's treasures is said to give the infant cry "Emille!" when struck, because a baby was melted into the bronze for a huge bell. This kingdom's ceremonial crowns had three branch-shaped prongs and two tall prongs shaped like deer antlers, all made of gold leaf. Religious treasures from this kingdom include the Sokkuram shrine. This kingdom included the hereditary "head rank 6" caste in its (*) "bone rank" system, and used highly-educated elite knights whose name means "flower boys." Before dispossessing a class of nobles called *jingol* and facing a northern foe called Balhae, this kingdom annexed the last remaining city-states of the iron-trading Gaya confederacy. It expanded greatly using its elite Hwarangdo military centuries after Hyokkose founded it. For 10 points, name this Asian kingdom which lasted until 935 AD and ended the Three Kingdoms era by conquering neighboring Baekje and Goguryeo.
ANSWER: Silla Kingdom [or Shilla; accept Unified Silla; prompt on "Korea"]**

5. In a reaction synthesizing these compounds, a ketoxime reacts with an electron-deficient alkyne to generate a compound that can undergo a [3,3]-sigmatropic rearrangement. That is the Trofimov synthesis. The reaction of two equivalents of an aldehyde and a hydrazine can form one of these compounds with substituents at the 3 and 4-positions, that is the Piloty-Robinson synthesis. The most well-known synthesis of these compounds requires one to react a primary amine with a 1,4-diketone; this is the Paal-Knorr synthesis. Although they are not pyridines, the Hantzsch synthesis of these compounds is a common way to produce them. These compounds have an unusually low basicity due to the nitrogen lone pair donation into the conjugated ring to maintain aromaticity. Name these compounds, which have a resonance energy intermediate between thiophenes and furans, characterized by a five-membered nitrogen-containing heterocycle.

ANSWER: pyrroles

6. Humphrey Searle based the structure of his twelve-tone Piano Sonata on this earlier composition, and Searle also orchestrated this piece for Frederick Ashton's ballet *Marguerite and Armand*. A fermata on a dominant ninth chord in E minor leads unexpectedly into this work's F-sharp major *Andante sostenuto* section. W. S. Newman coined the term "double-function form" to describe this piece's structure. The composer anticipated some of this work's themes in his *Grand Concert-Solo*, which would later become the two-piano piece (*) *Concerto pathétique*. This work begins with quiet staccato octaves on G in the left hand, followed by a slow descending G Phrygian scale. It was dedicated to Robert Schumann in return for Schumann's dedication of his *Fantasia in C* to this piece's composer, and it was premiered by the composer's son-in-law Hans von Bülow. For 10 points, name this massive single-movement composition for piano solo by the composer of the *Transcendental Etudes*.

ANSWER: Piano Sonata in B minor by Franz Liszt

7. In Islam, Muhammad claimed that this man's wife Asiya will enter Jannah first among women, joining Mary, Khadijah, and Fatima among the four most pious women of history. Puah and Shiphrah defied this man by working "upon the stools." In Judaic midrash, this man has a daughter named Bithiah. The theft of an item belonging to this man led to a test under his roof involving a bar of gold and a burning-hot (*) coal picked up by a baby. This man is warned of the "finger of God," and New Testament descriptions of "hearts" being "hardened" derive from this Old Testament figure's narrative. This man presided over Goshen before the father of Gershom confronted him. For 10 points, name this ruler who dealt with a frog outbreak during the Ten Plagues.

ANSWER: the Pharaoh of Exodus [grudgingly accept Seti I; Rameses II or Ozymandias, even though that theory is super-spurious]

8. This city invented, and still produces, a unique cinnamon, clove, and nutmeg-spiced liqueur called *tentura*, and its outskirts contain a winery founded by Bavarian migrant Gustav Clauss, which produces fortified *madovrafní* wine. This city's central square is named after King George I of its country. In 2004, this city's suburb of Rio was linked to Antirrio by a white cable-stay bridge, the world's longest. This city's St. Andrews church claims to house the bones of Saint (*) Andrew himself, who was martyred here. This former textile-production center is the largest city and capital of the Achaia region. For 10 points, name this Peloponnesian city whose population follows Thessaloniki as the third-largest in Greece, whose namesake gulf to its west contains buried shipwrecks from the 1571 battle of Lepanto.

ANSWER: Patras [or Patra]

9. One man of this surname worked with Henry Salt and Giambattista Belzoni to move a statue dubbed the "Young Memnon" from the Ramesseum in Egypt to his adoptive country Britain, and traipsed about the Middle East using the pseudonym "Sheik Ibrahim." A later scholar of this surname sent letters agreeing with the thesis of *The Birth of Tragedy* to Friedrich Nietzsche. That thinker of this name included a penultimate section on "Society and Festivals" in a two-work magnum opus that described the dissolution of the "ban on personality" with increased "municipal freedom" in its section "The Development of the (*) Individual." The aforementioned traveler who stumbled across a Nabatean-built Treasury carved into sandstone shares this surname with a professor who wrote of "The State as a Work of Art" in the 14th through 16th centuries. For 10 points, give this family name shared by the discoverer of Petra in Jordan and the Swiss historian who wrote *The Civilization of the Renaissance in Italy*.

ANSWER: **Burckhardt** [accept Johann Lewis **Burckhardt**, Jean-Louis **Burckhardt**, John Lewis **Burckhardt** [all names for that one dude] or Jakob **Burckhardt** throughout]

10. In a lyrical interlude in this film, a couple dances in the dark to a record of a piano and cello, which abruptly cuts to the loud rock music of a scene in a dance club. At the end of this film, the credits run silently over the final image of an empty staircase. In this film, a gathering breaks up after a man suddenly murmurs, “I think we’re making fools of ourselves,” after incessantly singing improvised blues songs. In a later scene, that man observes that “nobody has the time to be vulnerable to each other” and parodies his playboy persona by mimicking a robot after resuscitating his married lover from a sleeping pill overdose. This film was shot over a period of six months in the (*) director’s house with a group of his friends working as the unpaid crew. In this film, the aging businessman Dickie asks his wife for a divorce before spending a night with the prostitute Jeannie, who was played by the director’s wife, Gena Rowlands. For 10 points, name this landmark 1968 film directed, like *Shadows* and *A Woman Under the Influence*, by John Cassavetes.

ANSWER: **Faces**

11. One protein central to this experiment is a ferrichrome transporter coded for by the *fhuA* gene. One hypothesis being tested by this experiment proposed a Fano Factor of unity with low variance and the results following a Poisson distribution. The FALCOR calculator was developed to analyze the results of this experiment, while Haldane’s method assumes synchronous cell growth. The Ma-Sandri-Sarkar maximum likelihood estimator is the most accurate way to interpret its results, and is superior to a method using Yule processes named for Lea and (*) Coulson. Cairns’ modification of this experiment used lactase-deficient *E coli*, and this experiment built upon one investigating antibiotic resistance to penicillin performed by Lederberg. This experiment disproved the “acquired immunity” hypothesis, which claimed that mutations would only exist in response to an environmental stressor. For 10 points, name this 1943 fluctuation experiment exposing *E coli* to the T1-bacteriophage which showed that selection is not the cause of mutations, named for two scientists.

ANSWER: **Luria-Delbruck** experiment [accept **fluctuation** test before mentioned]

12. A league pushing for this legislation brought about the resignation of Spencer Walpole by rioting in Hyde Park. This bill was opposed by a group named for the Biblical location where David gathered “everybody that was discontented,” the Adullamites. Thomas Hodgkinson added an amendment to this bill that eliminated compound ratepaying. A speech in favor of this legislation by John Bright may have originated the term “beating a dead horse.” John Stuart (*) Mill unsuccessfully tried to amend this bill to benefit women. This bill was passed under Lord Derby’s Conservative government, and was actually more radical than a previous Liberal attempt due to the connivance of its drafter, Benjamin Disraeli. For 10 points, name this 1867 act that doubled the electorate of England and Wales, passed after a similar act in 1832.

ANSWER: the **Second Reform Act** [or the **Reform Act of 1867** before it is read; or the **1867 Reform Act** before it is read; prompt on **Reform Act**; do not accept or prompt on the “Great Reform Act”]

13. Before leaving this city, a man asks “My soul - does it linger on your sleeve?” to a woman whom he’d taken to the nearby Isle of Orange Trees. An aristocratic widower in this city writes with jealousy about the mallards in his garden pond. In this city, a bell tolls after an old woman called Benn tells a noble visitor of his illegitimate parentage. A pun on this place’s name with an original-language word meaning “dreary” or “gloomy” is often exploited in literature about it. A girl who attempted suicide in this city’s namesake river is later exorcised at a distant monastery after two months of a mostly-silent trance. A nobleman’s boat arrives in this city in a section of a larger work called (*) “Tasseled Knots.” This city is the home of the Eighth Prince and his two daughters. Two frequent visitors to this place are prince Niou and his friend Kaoru, who engage in a love triangle with its resident Ukifune that is never resolved. For 10 points, name this city, the setting of ten namesake chapters that follow after the blank page titled “Vanished Into the Clouds” indicates Prince Genji’s death.

ANSWER: **Uji** [the other word is “ushi”]

14. This man used the phrase “calm extensive benevolence” to describe the highest good of an individual. A 1976 book on this man’s philosophy by Peter Kivy uses the example of Mr. A seeing X and Mr. B seeing Y to

comment on his theory that “uniformity amidst variety” is aesthetically pleasing. This successor of Gershom Carmichael in a professorial chair launched the use of the term “approbation” to describe the feeling produced in a subject that apprehends moral goodness. This author’s *Reflections Upon Laughter* tried to refute the self-interest theories of Jean (*) Mandeville, and his *Inquiry into the Original of Our Ideas of Beauty and Virtue* pre-empted Bentham by coining the phrase “greatest happiness for the greatest numbers.” For 10 points, name this man who argued for an “aesthetic sense” in his *Inquiry Concerning Beauty, Order, Harmony, Design*, a moral sense theorist of the Scottish Enlightenment who inspired the sympathy-based theories of his student Adam Smith.

ANSWER: Francis Hutcheson

15. [Note to moderator: please say “I’m sorry, minus five” in a calm voice if a team negs.]

This phrase inspires the command “Skippy, valium, level 3,” which is given to an off-camera worker. One target of this phrase works on the side as a wedding and funeral singer, and is twice referred to after putting a finger to her lips as a “killer librarian.” Dialogue about a “gag item” precedes the first use of this phrase, whose main user said his thumb was in the way during a *Playgirl* photo shoot. It follows the phrase “rowing the Atlantic” and talk about the “last perfect pitched game” of the Chicago Cubs. David and a gap-toothed black woman named Valerie first hear this phrase from Penn and (*) Teller. Later in the episode in which this phrase appears, it inspires the line “Stone cold, girl...stone cold” from Whoopi Goldberg. An agreement with the phrase “smoke and fog” ends the use of this phrase, resulting in Tom Bergeron jumping for joy at a 1,000-dollar, 5-square win. For 10 points, name this two-word phrase exclaimed ten times by Gilbert Gottfried to incompetent *Hollywood Squares* contestants.

ANSWER: Gilbert Gottfried saying “YOU FOOL!” on *Hollywood Squares*

16. Paul Johnson suggested that some participants in this program were actually hiding out in Cuba. A burned-out Ford Fairlane used by participants in this program was found near the edge of the Bogue Chitto Swamp, where the FBI discovered eight corpses. This program was the brainchild of Bob Parris Moses. This program resulted in the creation of the MFDP, whose vice-chair was Fannie Lou Hamer, and which tried to bring a rival delegation to the DNC. In 2005, Edgar Ray (*) Killen was convicted of manslaughter for his actions against this program. James Chaney, Michael Schwerner, and Andrew Goodman were working on this campaign when they were murdered by the White Knights. For 10 points, name this 1964 campaign organized by SNCC and CORE to register black voters in Mississippi.

ANSWER: Freedom Summer [or the Mississippi Summer project]

17. This author drew on the Amphitryon myth for a novel narrated by Hermes, who has to get Adam Godley out of bed so that Zeus can sleep with Godley’s wife Helen. This author of *The Infinities* rose to fame on the strength of a tetralogy of scientifically-themed novels, including *Doctor Copernicus* and *Newton’s Letter*. In one novel by this author, the amoral mathematician Freddy Montgomery comes to regret murdering a serving woman in the act of stealing a Dutch painting to pay off his debts. This author created the web-toed Myles (*) Grace, who examines the narrator of one of his novels fooling around with Myles’ twin sister Chloe. In the best-known novel by this author of *The Book of Evidence*, art historian Max Morden responds to his wife’s death by heading to his old friends’ rental home, The Cedars, which is next to the title body of water. For 10 points, name this contemporary Irish novelist who wrote *The Sea*.

ANSWER: William John Banville [or Benjamin Black]

18. In a solid under the influence of an electric field, the production of this type of current in addition to the charge current causes the Peltier effect. Perelman introduced one form of this quantity that was both coercive and critical for Ricci flow. A strong magnetic field suppression of thermopower is an indication of a large contribution to this quantity due to spins. Another form of this quantity is based off power law generating statistics and uses a parameter q that quantifies how much this quantity departs from (*) extensivity. This quantity is one of the natural variables of both enthalpy and internal energy. The sum of the product of the eigenvalues of the density matrix with the log of those eigenvalues gives another form of this quantity. For 10 points, name this quantity whose most basic form is equal to Boltzmann’s constant times the log of the number of microstates.

ANSWER: entropy [prompt on “S”]

19. In the best-known account of this being, its environs include hanging severed heads described with the word “tabo”, a rare ablative form meaning “with decay.” Potitius observed the downfall of this figure, which inspired the Pinarian family to set up additional rituals. An early account describes the army of Tarchon helping to vanquish this figure. This being lives under a vulture-infested pointy rock made of flint, and was betrayed by a sister with a feminine version of his name in Etruscan accounts. His namesake steps led to the Forum Boarium. This half-human uses a tactic first seen in Homer’s *Hymn to* (*) *Hermes* when he walks his victims backwards into a cave whose door is blocked by a boulder. Evander tells of this creature’s defeat by the Ara Maxima, and recounts his spewing of fire and spoke in Book VIII of a written epic. For 10 points, name this giant son of Vulcan whose attempts to jack the cattle of Geryon lead Hercules to slay him in the *Aeneid*.

ANSWER: Cacus [or Kakos]

20. This poem parenthetically calls the universe “a procession, with measured and beautiful motion” before aggressively asking, “do you know so much yourself, that you call the slave or dull-face ignorant?” This poem’s speaker asserts that “to be with those I like is enough” and tells an anecdote about an old farmer who goes fishing with his five sons and his grandchildren. In another section of this poem, the speaker cries out that “books, art, religion” are “now consumed” in the midst of “limitless limpid jets of love, hot and enormous.” The third poem in the (*) “Children of Adam” sequence, it dismisses a “sloven” who “does not know half his business” in its 7th section, framed as an effort to assist an auctioneer at a slave auction. The conclusion of this poem gives a list of things that are “of the Soul,” which include “Strong shoulders, manly beard scapula, hind-shoulders, and the ample side-round of the chest.” For 10 points, name this Walt Whitman poem praising the human form.

ANSWER: “I Sing the Body Electric”

Extra:

In 1677, Philip Hartmann published the first book on this substance and described fishing for this substance by scooping up masses of floating seaweed. Later methods of collecting it near Gdansk involved using long prongs or forks to dislodge it from the seafloor, though its buoyancy allows it to be collected directly from the Baltic Sea. It is placed into two main classes, succinites and retinites. Though greenish and violet-tinted specimens exist, a particularly rare and valuable variety is mined from blue glauconite clay in the hills of the Dominican Republic and is believed to date from the Miocene or Oligocene.(*) The largest open-cut mine producing it is located in Kaliningrad Oblast, near a museum with over 6,000 pieces of it. The word “electricity” was derived from the Greek name for this substance, which produces a piney smoke when burned. For 10 points, name this usually yellow or honey-colored “gem of Lithuania”, fossilized tree resin which sometimes contains entrapped plant matter or insects.

ANSWER: Amber

....oh dear. –MJ

1. They can be defined as an abelian group M with a ring homomorphism from R to the endomorphism ring of M . For 10 points each:

[10] Name these mathematical objects in which the additive abelian group M is acted upon by R such that the map is associative and distributive.

ANSWER: R-Modules

[10] When the underlying ring is a field, M instead becomes one of these objects. Complete normed ones are known as Banach spaces, while one that also has a bilinear product is an algebra over a field.

ANSWER: Vector spaces

[10] The structure theorem for finitely generated modules over one of these objects states that if R is one of these and M is a finitely generated R -module, then M is isomorphic to the direct sum of finitely many cyclic modules. These objects are Dedekind domains that are also unique factorization domains.

ANSWER: Principal Ideal Domains (accept PIDs)

2. This form is exemplified by *A Change of Heart* and *Passing Time*, both by Michel Butor. For 10 points each:

[10] Name this literary form developed in 1950's France that is characterized by confusion of genre and a lack of metaphorical narrative description. It was pioneered by the author of *In the Labyrinth* and *Jealousy*.

ANSWER: the nouveau roman [or the new novel]

[10] This author of *For a New Novel* helped develop the form in works like *Jealousy* and *The Erasers*. He wrote the script for *Last Year in Marienbad*.

ANSWER: Alain Robbe-Grillet

[10] Another pioneer of the *nouveau roman* was this Jewish woman, the author of *Golden Fruits*, *The Planetarium*, and *Childhood* who barely escaped execution by the Nazis during the German occupation.

ANSWER: Nathalie Sarraute

3. This family rose out of the gentry class after inheriting Caister Castle from Sir John Fastolf under questionable circumstances. For 10 points each:

[10] Name this medieval English family from Norfolk. Their correspondence is the largest collection of letters surviving from 15th-century England and sheds light on the life of the gentry at that time.

ANSWER: the Paston family [or the Paston letters]

[10] One of the Paston letters records what may be this epidemic, a mysterious disease that broke out six times in England in the 15th and 16th centuries. It killed Arthur, Prince of Wales.

ANSWER: the English sweating sickness [or the English sweat]

[10] The death of Arthur, Prince of Wales made this woman a widow. She claimed she had never slept with Arthur and married Arthur's brother.

ANSWER: Catherine of Aragon [or Catalina de Aragon; or Catarina de Aragon]

4. It was the age of low-budget music videos and bands fronted by former hairdressers. Name the following New Wave songs from descriptions of their videos for 10 points each:

[10] There were so many mirrors on its set that the reflection of the camera can be seen in this A Flock of Seagulls video. Strangely dressed women walked zombie-like towards a tinfoil-draped camera while Mike Score sang that despite doing this "all night and day/I couldn't get away."

ANSWER: I Ran (So Far Away)

[10] Inspired by a 1984 movie, this song's video featured Johann Hölzel dressed in a tuxedo while walking through a crowd from the court of Joseph II, then dressed as the title character while being carried through a biker bar.

ANSWER: Rock Me Amadeus (Johann Hölzel is Falco's real name)

[10] This song by Real Life shares its name with a hit by the Scorpions. As David Sterry sings "Do you believe in heaven above/do you believe in love," a beauty-and-the-beast pursuit plays out in this medievally-themed video.

ANSWER: Send Me An Angel

5. This hero escaped a treacherously-set grassfire after his magic sword started spontaneously mowing the burning grass down. For 10 points each:

[10] Name this hero who turns into a white bird after his death. His downfall comes after he misidentifies a mountain god in boar form as a messenger of that mountain god and is slain by a hailstorm on Mount Ibuki.

ANSWER Prince Yamato-Takeru

[10] Yamato-Takeru's magic sword was this "grass-cutting sword" discovered by Susano'o in Orochi's corpse. It is part of the Imperial Regalia of Japan. It's Japanese. Japan.

ANSWER: **Kusanagi** [or **Ame-no-Murakumo-no-Tsurugi**]

[10] In a moderately similar incident, Susano'o set a field on fire in an attempt to kill this future son-in-law of his, who was trying to marry Suseri-hime. He was the ruler of Izumo prior to Ninigi.

ANSWER: **Okuninushi**

6. This author wrote about Ulysses S. Grant's death in *A Few Stout Individuals* and described two archaeologists who vacation in Sicily in *Four Baboons Adoring the Sun*. For 10 points each:

[10] Name this American playwright of *Gardenia* and *The House of Blue Leaves*, who wrote another play about a black man named Paul who tricks Ouisa and Flan Kittredge into thinking he's the son of Sidney Poitier.

ANSWER: John **Guare**

[10] This aforementioned John Guare play is about how Paul's cons serve as an indirect link between otherwise unrelated couples in New York.

ANSWER: **Six Degrees of Separation**

[10] In *Six Degrees of Separation*, Paul is writing his thesis on this novel whose characters include the prostitute Sunny and her pimp Maurice.

ANSWER: *The* **Catcher in the Rye**

7. Chief Little Crow led his people in this war, though he warned them, "You will die like rabbits when the hungry wolves eat them in the Hard Moon." For 10 points each:

[10] Name this 1862 war that ended with the largest mass-execution in American history when 38 American Indians were hanged in Mankato.

ANSWER: the **Dakota War**

[10] John Chivington and the "Bloodless Third" paraded around with the genitalia of dead Cheyenne Indians after committing this 1864 massacre of Black Kettle's band in Colorado.

ANSWER: **Sand Creek Massacre**

[10] The First Sioux War began after this 1854 "massacre" of 29 soldiers by the Brule Lakotas in retaliation for the death of Chief Conquering Bear in a dispute over a dead cow.

ANSWER: **Grattan** Massacre [or the **Grattan** Fight]

8. Werner Herzog's explored the life and music of this composer in his film *Death for Five Voices*, and Stravinsky orchestrated several of his works in a ballet honoring his 400th birthday. For 10 points each:

[10] Name this Renaissance composer known for writing intensely dissonant and chromatic pieces like "Moro, lasso," the opening of which Charles Burney considered "extremely shocking and disgusting."

ANSWER: Carlo **Gesualdo**

[10] Most of Gesualdo's best-known pieces, including "Moro, lasso," are in this form. Prominent composers of these through-composed polyphonic settings of Italian vernacular poetry included Jacques Arcadelt and Claudio Monteverdi.

ANSWER: **madrigal**

[10] This madrigal by Monteverdi was attacked by Giovanni Artusi for its use of dissonance. The text, which comes from Giovanni Battista Guarini's *Il pastor fido*, complains that the title shepherdess is "fiercer and more elusive" than the asp.

ANSWER: "**Cruda Amarilli**"

9. This character holds a piece of bread and butter while supervising the hanging of a marquee by four workmen, and is horrified when a delivery man from Godber's bakery tells of a man who fell off his horse. For 10 points each:

[10] Name this sister of Jose, a girl who is often complimented on her black hat trimmed with gold daisies and a long velvet ribbon. She delivers a basket of food to the Scott residence.

ANSWER: **Laura** Sheridan [or Laura **Sheridan**; do not accept "Mrs. Sheridan," who is Laura's mother, or "Laurie", who is Laura's brother]

[10] This New Zealand short story author wrote about Laura Sheridan's concern for the recently-deceased Mr. Scott in "The Garden Party".

ANSWER: Katherine **Mansfield** Beauchamp [or Katherine **Beauchamp**; or Katherine **Murry**; or Lili **Heron**]

[10] In Mansfield's "The Garden Party," this group of people is described as "too like frogs for words" by Kitty Maitland, due to their green coats. Laura begs her father to give these people drinks.

ANSWER: the **band** of musicians at the garden party

10. Answer the following questions about pericyclic reactions. FTPE:

[10] The Diels-Alder reaction is a 4+2 [read: four plus two] type of this type of pericyclic reaction, which involves the reaction of two components to generate a ring.

ANSWER: cycloaddition

[10] This reaction is often described as a 2+2+1 [read: two plus two plus one] cycloaddition between an alkyne, alkene, and carbon monoxide to generate a cyclopentenone, and is generally catalyzed by cobalt or molybdenum carbonyl compounds.

ANSWER: Pauson-Khand reaction

[10] This gas is generally used to protect conjugated 1,3-dienes in a cheletropic pericyclic reaction. The kinetics of this cheletropic reaction was studied by Suarez and Sordo in 1995, and the rate law was found to be second order in the gas but first order in the diene.

ANSWER: sulfur dioxide (ACCEPT: SO₂)

11. This poem conjures up images of “balls and masks begun at midnight, burning ever to mid-day,” but brings up the warning that “dust and ashes, dead and done with, Venice spent what Venice earned.” For 10 points each:

[10] Name this poem whose speaker feels “chilly and grown old” after “lesser thirds” and “sixths diminished” bring up thoughts of 18th-century Venice.

ANSWER: “A Toccata of Galuppi’s”

[10] “A Toccata of Galuppi’s” is one of the many poems by this author of “Abt Vogler” and “Rabbi ben Ezra.”

ANSWER: Robert Browning

[10] This Browning poem, also set in Italy, laments the sensation of “Infinite passion, and the pain of finite hearts that yearn.” The speaker of this poem wishes he could “see with” his lover’s eyes and “drink [his] fill at [her] soul’s springs,” but cannot.

ANSWER: “Two in the Campagna”

12. Answer these questions about the freed black slave Jean-Baptiste Belley, for 10 points each.

[10] Belley represented this French colony in the National Convention during the 1794 debate over abolishing slavery. The Bois Caiman incident rocked this sugar- and coffee-producing colony also home to Henri Christophe.

ANSWER: Saint-Domingue [generously accept Haiti]

[10] Belley lost his Convention seat as this mulatto leader was gathering troops in Haiti’s south in 1797. This man and his younger partner Alexandre Petion then lost the War of the Knives to Toussaint L’Ouverture.

ANSWER: André Rigaud

[10] This huge world history book has Girodet’s painting of Jean-Baptiste Belley on its cover. Its author, C. A. Bayly, argues that the world was deeply globalized as early as 1780, using the Haitian Revolution’s ripple effects across Europe and the Americas as one example.

ANSWER: *The Birth of the Modern World 1780-1914: Global Connections and Comparisons*

13. This was developed by Feynman. For 10 points each:

[10] Name this formulation of quantum mechanics that generalizes the action principle of classical mechanics.

ANSWER: path integral formulation

[10] One of the more interesting twists on the path integral formulation of quantum mechanics is the fractional quantum mechanics of Laskin. In this modification, the Brownian paths are replaced with these paths in which there are fewer long jumps as opposed to short jumps, leading to long tails.

ANSWER: Levy flights

[10] One of the more useful things about the path integral formulation is its ability to derive insight into this quantity, which is a path integral over periodic orbits of period of 1 divided temperature. The Helmholtz Free Energy is proportional to the logarithm of this quantity.

ANSWER: partition function

14. The character of Boris Lermontov from Powell and Pressburger's *The Red Shoes* was based on this man, and he commissioned *La Boutique fantasque* from Ottorino Respighi and Léonide Massine. For 10 points each:

[10] Name this ballet impresario who employed Anna Pavlova, Mikhail Fokine, and Vaslav Nijinsky in his company, the Ballets Russes.

ANSWER: Sergei **Diaghilev**

[10] In 1917 Diaghilev put on this ballet, a collaboration between Erik Satie, Jean Cocteau, and Pablo Picasso. It features three impresarios futilely attempting to get people to enter their theaters, and its title refers to the side acts that end up being the focus of attention.

ANSWER: **Parade**

[10] Another Ballets Russes production was *Le dieu bleu*, with music by this Venezuelan-born composer and lover of Marcel Proust, best known for songs like “Si mes vers avaient des ailes” and “L'heure exquise.”

ANSWER: Reynaldo **Hahn**

15. It is treated by inserting a catheter into the heart and firing radiofrequency waves at the defective tissue, for 10 points each:

[10] Name this conduction disorder in which an accessory pathway called the Bundle of Kent transmits electrical impulses faster than usual, leading to pre-excitation of the ventricles and reentrant tachycardia.

ANSWER: **Wolff-Parkinson-White syndrome** [accept things like “pattern” or “disease”]

[10] This is the specific part of the conduction system that gets bypassed in Wolff-Parkinson-White syndrome. It transmits its impulses to the Bundle of His and is defective in a condition that exhibits Wenckebach periodicity.

ANSWER: **Antioventricular node**

[10] Though most patients have normal recordings, the classic pattern for Wolff-Parkinson-White seen on an electrocardiogram consists of a shortened PR interval as well as this unique finding, in which the ascending part of the QRS complex is slurred.

ANSWER: **delta wave**

16. Two airplanes appear in the sky above a bunch of colored disks in a painting this man dedicated to an aviator, *Homage to Bleriot*. For 10 points each:

[10] Name this 20th-century French artist of a series depicting the Eiffel Tower, who founded a movement alongside his wife Sonia Terk.

ANSWER: Robert **Delaunay**

[10] Delaunay helped found this school of Cubist art, whose name was coined by Guillaume Apollinaire in reference to a mythological musician.

ANSWER: **Orphism** [or **Orphic Cubism**]

[10] Another offshoot of Cubism was developed by this Russian woman, whose paintings *Aeroplane over Train* and *The Cyclist* exemplify her style of “Cubo-Futurism.”

ANSWER: Natalia Sergeevna **Goncharova**

17. In the conclusion to this book, titled “The Conflicts of Modernity,” its author suggests that beneath the general agreement on moral imperatives in modern culture is profound disagreement on their underlying moral sources. For 10 points each:

[10] Name this philosophical and historical study of the “making of the modern identity,” which argues that modern philosophy has ignored the relationship between the title concept and ideas of human good.

ANSWER: **Sources of the Self: The Making of the Modern Identity**

[10] *Sources of the Self* was written by this living Canadian philosopher who has advanced a communitarian critique of liberalism in such works as *Multiculturalism: Examining the Politics of Recognition*.

ANSWER: Charles **Taylor**

[10] In his *The Ethics of Authenticity*, Taylor names the “three malaises” of modernity as the rise of individualism, the primacy of instrumental reason, and the danger of the “soft despotism” first coined and theorized in this book by Alexis de Tocqueville.

ANSWER: **Democracy in America**

18. This man’s surviving work includes Constantius II’s tour of the Eternal City, which he didn’t see at any point before or afterwards. For 10 points each:

[10] Name this Roman historian, whose account venerates the military accomplishments of fellow pagan Julian the Apostate. His account ends abruptly as Fritigern and Saphrax are advancing their armies.

ANSWER: **Ammianus** Marcellinus

[10] Ammianus died two decades before this military act carried out by Alaric’s Visigoths.

ANSWER: **sack of Rome**

[10] This other Roman historian argued that God sent the sack of Rome to chastise Rome's *Christian* population for being insufficiently big or Christian, and that it wasn't *that* bad, in his *History against the Pagans*. We have more manuscript copies of this historian than any other.

ANSWER: Paulus Orosius

19. Answer the following about Hindu festivals, for 10 points each.

[10] Hiranyakashipu's failure to have his nephew Prahalad killed is one of the myths behind this Hindu "Festival of Colors," whose participants throw occasionally asbestos-based colored powders at each other.

ANSWER: Holi [or Phagwa; or Dolajatra; or Basantotsav]

[10] The largest religious gathering in the world occurs at this city, where Hindus make a pilgrimage every 12 years for the Kumbh Mela festival.

ANSWER: Allahabad [or Prayag]

[10] The Durga Puja of Bengal is a regional variant of this ten-day, nine night Hindu festival celebrated five times a year in honor of the nine manifestations of Durga.

ANSWER: Navratri [prompt on "The Nine Nights"]

20. Answer these questions about the habitat of the colorful poison dart frog, for 10 points each.

[10] This nation's rainforest is home to the most deadly dart frog, the yellow *Phyllobates terribilis*. Its large cities include Medellín and the port of Barranquilla.

ANSWER: Colombia

[10] A river of this name in Colombia is home to small habitats where poison dart frogs carry tadpoles on their backs. This name also graces an archipelago which includes Orcas Island, east of Haro Strait and north of the strait of Juan de Fuca.

ANSWER: San Juan River [or Río San Juan; or San Juan Islands; or San Juan, Puerto Rico]

[10] This tribe of northwest Colombia and southeast Panama is the last indigenous group to use frog poison for its blowgun darts, rather than switching to a plant such as curare. They grow plantains in Panama's Darién region.

ANSWER: Emberá Chocó people [or Emberá-Wounaan; or Chocó; or Wuanana]