

## Chicago Open 2014: A Redoubtable Coupling of Editors

### Finals 2

Edited by Austin Brownlow, Andrew Hart, Ike Jose, Gautam & Gaurav Kandlikar, and Jacob Reed

### Tossups

1. After this treaty, an anti-occupation rebellion that chafed against the imposition of an excise tax on salt in a region transferred in this treaty was known as the revolt of the “Little Angels of the Earth.” The murky border delineations in this treaty’s Article 42 led to the Convention of Perpignan, the Line of d’Ornano, and the Treaty of Elizonda until the borders were conclusively drawn in the Treaty of Bayonne. The French abandoned the “five sons of Carcassonne” in this treaty, whose place of signing remains a condominium between its two signatories. Luis de Haro was one signatory of this treaty, which granted Roussillon and Artois to France 11 years after the end of the Thirty Years’ War. Louis XIV married Maria Theresa after the signing of this treaty, which was concluded on Pheasant Island in the Bidasoa River following the capitulating party’s defeat in the Battle of the Dunes. For 10 points, identify this treaty that ended the Franco-Spanish War of 1659, named for the mountain range between the countries.  
ANSWER: Treaty of the Pyrenees [or Tratado de los Pirineos; or Traité des Pyrénées; or Tractat dels Pirineus]
2. This work was originally called a “dialectical fairy scene” because its author imagined telling the story of Sleeping Beauty, who awakens from human progress to venture forth into destiny. Its section “Conspiracies” discusses policemen who facilitate conspiratorial milieus. This book’s discussion of boredom introduces its author’s idea of eternal return, which states that new culture is permeated with old culture. One of its parts attempts to find the dreams that went into the design of museums, kiosks, and train stations that the author sees. This fragmentary work is written as a series of “convolutes,” the second of which that discusses fashion; another of its convolutes discusses “modes of lighting” that illuminate the title objects. The idea for this work was first mentioned in a letter its author wrote to Gershom Scholem. This book, which documents post-Haussmann renovations, calls the flâneur the modern urban spectator. For 10 points, name this massive unfinished book about the architecture of Paris by Walter Benjamin.  
ANSWER: *The Arcades Project* [or *Passagenwerk*]
3. During the intermission in one of this author’s plays, the actor playing the apartment superintendent is supposed to accost various theatregoers in the aisles and restrooms by handing them leaflets that justify his actions. That play by this author concerns a group of family members who suddenly move into a bachelor’s apartment and mentally torture the bachelor until they put him into a cage and he dies of grief. In one of this author’s one-act plays, a man purchases the title character from two punk rockers, who learn that they have just sold themselves to the devil. That play by this author is, along with *The Cliff of Time* and *Suitcase*, one of his three plays about the stages of human life. This author of *Friends* wrote a book that begins with its main character purchasing clockbugs from a con man. That book by this author concerns a man named Mole, who builds the title object to survive an impending nuclear holocaust. For 10 points, name this author of *The Man Who Turned into a Stick* and *The Ark Sakura*.  
ANSWER: Kobo Abe [accept names in reverse order]

4. One theory that attempts to resolve this quandary proposes two shape parameters named beta plus and beta minus that control expansion and contraction, but that theory was ultimately rejected because its topological entropy was higher than observed. That theory that solves this dilemma is very similar to the evolving Belinsky-Khalatnikov-Lifshitz singularity. This issue was formally introduced in a paper by Charles Misner, who suggested that a “Mixmaster” solution of the field equations would imply a chaotic Hubble sphere and resolve this this quandary. One method of resolving this conundrum is to have an exponentially increasing scale factor so that two particles on the opposite ends of the namesake structure could have been in causal contact with each other long ago. For 10 points, name this problem that asks why the universe is so isotropic with respect to temperature, and which can be resolved using the theory of cosmic inflation.

ANSWER: **horizon** problem

5. The second one of these objects has ash smeared on it and features the line “without are dogs and murderers” from the Book of Revelation on one side, and the word “deposed,” which is misspelled with two “p’s,” on the other. The first one of these items is initially owned by a blind fellow who is killed by trampling horses after the narrator guides him to a boarder who has only paid one week worth of his rent. A villain chastises people loyal to George Merry for impiety when they make one of these items from the pages of Dick Johnson’s Bible. One of these items induces a stroke in a man who is freeloading off of the Admiral Benbow Inn, which is run by the narrator’s family. A map indicating Captain Flint’s cache saves a man from the punishment incurred from one of these items, thereby preventing a mutiny against John Silver. For 10 points, name these items that function as a pirate curse in *Treasure Island*, named for their color.

ANSWER: **black spots** from *Treasure Island*

6. A Dan Berman article on *FiveThirtyEight* analyzing this country’s 1953 election noted how a party that was outspent four-to-one and lost the popular vote by nearly eight points won a parliamentary majority because of laws allowing electoral district sizes to differ by up to 15% from the average. “Bitter enders” in this country fomented the Five Shillings Revolt at the start of World War I. This country, which received the largest League of Nations Type C mandate, was once convulsed by a constitutional crisis when the ruling party attempted to amend a “qualified franchise” law in a province that covered two-thirds of its area. This country was dominated by the United Party until it was defeated in 1948 by the National Party, which was led by Daniel Francois Malan and ruled through this country’s transition from royal dominion to republic in 1961. For 10 points, name this British dominion whose parliament Harold Macmillan addressed in his Winds of Change speech.

ANSWER: Union of **South Africa** [or Unie van **Suid-Afrika**; do not accept “Republic of South Africa” or “South African Republic” or “Transvaal Republic” or “Orange Free State”]

7. This book makes repeated references to an essay about a funeral in Pickens County, Georgia, attended by one Henry Grady. One chapter in this work cites an example of a multi-billion dollar contract given to the Textron corporation by Reza Shah II to illustrate how development cannot be bought. This work includes an extended critique of the inability of contemporary macroeconomics to come to terms with stagflation. It highlights the KMT’s success in implementing the Land to the Tiller program to catalyze the growth of the first tier entities, and uses military production and the Tennessee Valley Authority as examples of “transactions of decline.” It cites Shinohata in Japan and Bardou in France to explain how the first tier entities provide markets, jobs, transplants, technology, and capital to generate the second tier phenomenon. For 10 points, what book, whose title references a work of Adam Smith, explains how places like Los Angeles and Tokyo contribute to prosperity, and was written by Jane Jacobs?

ANSWER: **Cities and the Wealth of Nations**

8. A painting on marble by Jacques Stella titled after this man depicts him next to a flock of sheep while a levitating building can be seen off in the distance. Rembrandt painted this man as old and bedridden in a scene in which he places his hand over his grandson's head. One artwork named for this man depicts two women who hold a basket of bread and a jug of water over their heads while other mysterious figures ascend a spiral staircase. Decades before that treatment by William Blake, this man was shown sleeping with his head on his hand as golden, crepuscular rays constitute his title "Dream" in a painting by Jusepe de Ribera. A tree diagonally bisects a canvas with a background whose bottom left depicts a group of Breton nuns at Pont-Aven and whose upper right depicts this man as he is grasped by a figure with golden wings. For 10 points, name this artistic subject who is shown wrestling with an angel in Paul Gauguin's *Vision after the Sermon*.

ANSWER: **Jacob**

9. Bourke Cockran likened the Democratic stance on this act to the Scottish Highlanders' premature charge at the Battle of Culloden, to which William Jennings Bryan replied that the "David pebbles of truth" would be more effective than the "Goliath javelins of error." The Committee of the Whole overturned Tom L. Johnson's amendment to this act affecting wool and woollens. This act led to a Melville Fuller opinion resting on the principle that direct measures must be apportioned. This act's passage was depicted in a Harper's Weekly cartoon depicting a "humiliating spectacle" in which its second namesake wields a bull whip while riding the chariot of the Sugar Trust that is leading an enchained Grover Cleveland. Sections 27 through 37 of this act, which imposed a 2% tax on sums over \$4,000, were declared unconstitutional in *Pollock v. Farmers' Loan & Trust*. For 10 points, name this 1894 act that imposed the first peacetime income tax in American history and supplanted the McKinley Tariff.

ANSWER: **Wilson-Gorman** Tariff Act [accept names in reverse order; accept **Revenue Act of 1894** or **Tariff Act of 1894** before "1894" and prompt thereafter; prompt on "Revenue Act" or "Tariff Act"]

10. The narrator of this novel is surprised to learn that secret biological weapons that would make entire regions uninhabitable were being developed at Shingle Street. In this novel, the narrator meets farmer Alec Garrard, who would rather build a model of Jerusalem than tend his farmland. This novel includes a two-page picture of Rembrandt's *The Anatomy Lesson* to argue that a certain person may have attended Aris Kindt's public dissection. In another section, the narrator of this novel ponders on the "Black Book" and sexuality of Roger Casement. This book's final chapter discusses a certain author's Musaeum Clausum and provides a natural history of the silkworm. This novel, which contains a digression in which the unnamed narrator reflects on the skull of Thomas Browne, is essentially a travelogue through East Anglia. Photographs of Norfolk are included in, for 10 points, what novel by W.G. Sebald that takes its title from a planet?

ANSWER: *The **Rings of Saturn***

11. A large public work by this man resembling a tree was designed to integrate with the beehive-inspired building called De Bijenkorf in Rotterdam. Later works by this man incorporate twine woven around structures to effect a curved appearance, a technique he called “stringing.” A chemist friend of this man named John Sisson introduced him to perspex, which he used in many later works with a Spheric theme. He edited an art review with Leslie Martin and Ben Nicholson titled *Circle*, and he co-wrote a manifesto that affirmed depth as “the pictorial and plastic form of space” and the line as “a direction of static forces.” This man incorporated 1,500 jets of water into the design for a fountain that sits at the grounds of the St. Thomas Hospital in London. He emphasized the dissociation of mass from space in a principle he called stereometry, and sculpted *Constructed Head No. 2* the kinetic *Revolving Torsion: Fountain*. With his brother Antoine, he laid down the tenets of a movement associated with Rodchenko and Tatlin. For 10 points, name this co-author of the *Realistic Manifesto*, a founding member of Constructivism.  
ANSWER: Naum **Gabo** [or Naum **Pevsner**]
12. Rare defective variants of this protein include the Siiyama variant and the Mmalton variant, both of which cause polymerization of this protein because the reactive loop from one molecule is inserted into the beta-sheet of another molecule. The polymerization of this protein manifests as PAS-positive inclusion bodies in hepatocytes, and the deficiency of this protein may include cirrhosis as a symptom. The reactive loop of this protein has a methionine residue at its P1-prime site that is presented as a bait to its target and forms a covalent bond with the substrate to produce an inactive complex. Laurell and Eriksson first described the deficiency of this protein, whose primary activity is to inhibit elastases that break down connective tissue in the lungs. Its deficiency can cause many lung diseases such as emphysema or COPD. This serpin is the most abundant protease inhibitor circulating in the serum. For 10 points, name this protein that inhibits a namesake serine protease.  
ANSWER: **alpha-1-anti-trypsin** [“alpha-one -anti-trypsin”; accept **A-1-AT**, **AAT** or **A-1-PI** [“A-one-P-eye”] or **alpha-1-proteinase inhibitor**; prompt on partial answers like “anti-trypsin”]
13. There is only one objectively real way to interpret this function according to the GHJW theorem, which states that any two ensemble preparations of this function can be related by a unitary transformation. A linear, completely positive map from the set of these functions onto itself is a quantum operation. Deriving this function’s Kraus representation in the limit of infinitesimal time produces a master equation that includes a summation of quantum jumps. This function is the Weyl transform of the Wigner quasi-probability distribution. This function’s values correspond to Bloch vectors in Hilbert space, and its components are called populations or coherences based on whether they lie on or off the diagonal. The von Neumann entropy is equal to the negative trace of the product of this function with its logarithm, and the expectation value of an operator is equal to the trace of the operator’s product with this function. For 10 points, name this function that describes a quantum system with mixed states.  
ANSWER: **density matrix** [or **density operator**]

14. A controversy over this man's religious thought prompted a pamphlet on David Hume's use of a word for "belief." That word, "glaube," was roundly derided in an 18th-century controversy about this man's thought sparked by a conversation about him between Gotthold Lessing and Friedrich Heinrich Jacobi, the latter of whom maintained that this man was a materialist. In his own time, he was castigated for pointing out that the Bible is "imperfect, corrupt, erroneous, and inconsistent with itself," and fragmentary. In this man's major text on religion, he claimed that the persistence of Jews as a race was mainly due to their fastidiousness in requiring circumcision, and that the Torah should not be followed because it was only fit to serve as the state constitution of ancient Israel. This man's central religious belief was of "Deus sive Natura," signifying his belief that nature and God consisted of one and the same substance. For 10 points, name this author of the *Tractatus Theologico-Politicus*.

ANSWER: Baruch **Spinoza** [or Benedict(us) de **Spinoza**; or Benedito or Bento de **Espinosa**]

15. One composer from this country used texts like "wake up woman rise up woman," "today is mine," and the Neruda line "venid a ver la sangre por las calles" in a large choral work. That composer from this country used a text beginning "give me a few words for a woman" in a piece for solo voice. Another composer from this country wrote a piece for four percussionists and four orchestras called *Quadrivium*, and was memorialized in Pierre Boulez's *Rituel*. One composer from this country wrote a one-act opera with roles for four "employees" after Saint-Exupéry's *Vol de Nuit*, as well as a one-act opera with two "choral intermezzos," which ends with the title *Prisoner* saying "Freedom?" Another composer from this country based his series of *Chemins* and his *Corale* for violin and orchestra on his extremely difficult *Sequenzas*, and used the vowels of "O Martin Luther King" and quotations from *The Unnamable* in his *Sinfonia*. For 10 points, name this home country of Bruno Maderno, Luigi Dallapiccola, and Luciano Berio.

ANSWER: **Italy** [or **Italian** Republic; or Repubblica **Italiana**]

16. One band that played at this venue had previously become unwittingly popular because of an article on them about what it was like to open for Queen, leading to huge sales for the album *In Color*. Performances at this venue were released as a 1979 double LP in the same year as another artist's gospel album *Slow Train Coming*. Before the first-ever concert at this venue, which was protested by right-wingers, the lead singer signed out of the hotel under the alias of photographer Robert Whittaker and walked around without security. In 1966, the Beatles played the first concert at this venue, which was played in 1978 by a band that released the live songs "Clock Strikes Ten" and a cover of "Ain't That a Shame" from the performance. The 12,000 screaming fans at this venue nearly drown a band from Rockford, Illinois singing "didn't I, didn't I, didn't I see you crying?" in a recording of "I Want You To Want Me" made in 1978. For 10 points, what concert venue that titles live albums by Bob Dylan and Cheap Trick was constructed for the judo competition at the 1964 Tokyo Olympics?

ANSWER: Nippon **Budokan** [accept **Bob Dylan at Budokan** or **Cheap Trick at Budokan** or **Live at Budokan** or equivalents]

17. An event arranged by this ruler in which beverages were judged to be “celebrated” or “excommunicated” was reported in Henry d’Andeli’s poem “Battle of the Wines.” One anecdote states that this man, angered that his rival was standing in the shade, ordered an elm tree to be chopped down at a traditional place of diplomacy near Gisors. This man’s new wife screamed “Mala Francia! Roma! Roma!” during a council convened in Compiègne that drew up a false family tree to grant this man a divorce. This man seized the lands of his childhood friend, Renaud I of Boulogne, who vowed to fight against this man in the Treaty of Lambeth. This husband of Ingeborg of Denmark, who presided over the start of the Albigensian Crusade, conquered the Angevin lands of Normandy and Brittany from Holy Roman Emperor Otto IV and the English king at the Battle of Bouvines. For 10 points, name this first monarch to take the title King of France, a Capetian rival of King John of England who ruled from 1180 to 1223.

ANSWER: **Philip Augustus** [or **Philip II** of France; or **Philippe Auguste**; or **Philippe II**; prompt on “Philip(pe)”]

18. The philosopher Nicolaus of Damascus called these figures the *baskanaoi* to emphasize one of their weapons. In one adventure, a trio of these figures guide two chariots over the ocean to assist with Dionysus’s invasion of India. Pindar records that, after these figures died, their legacy was carried on by the *Heliades*, and Zeus eventually rained down gold on them as a reward for their piety. One of their weapons was a mixture of water from the river Styx that they poured over other beings. They had the power to summon hail and rain, and they created the first sickle and Poseidon’s trident. Like the dactyls, these figures were held to be the first to start the practice of metallurgy. These figures were often described as having evil eyes, hands that look like fish fins, and dog heads. These original inhabitants of the island of Rhodes were slain by Zeus because of their misuse of magical powers. For 10 points, name these malevolent sorcerers from Greek myth.

ANSWER: **telchines**

19. Babin and Whitaker introduced chiraphite as ligand for enantioselective versions of this reaction. The biggest industrial application of this reaction uses a highly water-soluble sulfonated triphenylphosphine salt that complexes with rhodium. Vinyl-arenes undergo this reaction followed by an oxidation in the industrial synthesis of NSAIDS like ibuprofen. It has two separate CO elimination steps: one that occurs with the reductive elimination of the desired product, and another that occurs in its last step to allow an alkene to coordinate with the HRh(CO) complex. Like the Wacker process, it is a prominent example of homogenous catalysis. The accepted mechanism for this reaction was elucidated by David Breslow and Richard Heck. It was discovered by Otto Roelen when experimenting with products from the Fischer-Tropsch process, and it uses an alkene, carbon monoxide, and hydrogen as reagents. For 10 points, name this reaction that results in the net addition of a CHO group across an alkene to form an aldehyde.

ANSWER: **hydroformylation** [accept word forms; accept **oxo** reaction or **oxo** synthesis; prompt on “carbonylation”]

20. According to critic and biographer Marie Boroff, the author of this poem would never read it out loud because of its cruel subject matter. One character in this poem holds a certain object “half in appeal, but half as if to keep the life from spilling.” This poem is set at a place where there are “five mountain ranges one behind the other under the sunset” and during a time when “nothing happened: [the] day was all but done.” One of this poem’s characters “lay and puffed his lips out with his breath.” This poem, which takes its title from the “tomorrow and tomorrow and tomorrow” speech, ends by describing a group of family members who, “since they were not the one dead, turned to their affairs.” It opens by describing a certain object that “snarled and rattled, in the yard” before a doctor comes and attempts to etherize a youth. For 10 points, name this poem about a boy’s arm being chopped off by a chainsaw, a work of Robert Frost that takes its title from *Macbeth*.

ANSWER: “**Out, Out—**”

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### Finals 2

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### Bonuses

1. This technique is used to play unusual chords in Bach's fifth cello suite. For 10 points each:  
[10] Name this technique, employed in an extreme fashion in Heinrich Biber's "Resurrection" sonata.  
ANSWER: scordatura [accept cross tuning] [the extreme fashion is physically crossing the strings]  
[10] Biber's sonatas were written for this instrument. J.S. Bach wrote three sonatas and three partitas for this instrument solo, including an enormous chaconne at the end of the D-minor partita.  
ANSWER: violino [or Geige]  
[10] Biber's set of *Rosary Sonatas* ends with one of these pieces for solo violin. A J.S. Bach organ work pairs one of them in C-minor with a fugue on its main theme.  
ANSWER: passacaglias [or passacaille]
2. These people, who included the medieval traveler Eldad ha-Dani, ruled the Kingdom of Semien. For 10 points each:  
[10] Name these people, whose queen Yodit is traditionally considered the conqueror of the Kingdom of Axum.  
ANSWER: Beta Israel [accept, but do not reveal, Ethiopian Jews or equivalents]  
[10] The Beta Israel are an ancient Jewish community from this modern-day country. It was the supposed location of a mythical Christian kingdom ruled by Prester John, and one of its churches claims to hold the Ark of the Covenant.  
ANSWER: [Federal Democratic Republic of] Ethiopia [or Itvoppya]  
[10] This golden-voiced friend of Muhammad was born into slavery as the son of Ethiopian princess captured during the Abyssinian attempt to destroy the Kaaba during the Year of the Elephant. He was later freed and became the first muezzin.  
ANSWER: Bilal ibn Rabah [or Bilal al-Habashi; or Bilal ibn Riyah; prompt on "ibn Rabah" or "al-Habashi" or "ibn Riyah"]
3. If this conjecture is correct, then it's bad news for people like Sarah Connor and Marty McFly. For 10 points each:  
[10] Name this principle, which states that it is impossible for a time travel event to result in a causality violation.  
ANSWER: Novikov self-consistency principle or conjecture [prompt on partial answer]  
[10] When the spacetime interval for two events is positive, they have this kind of separation and therefore cannot have a causal relationship.  
ANSWER: space-like separation  
[10] This kind of spacetime diagram has a finite diamond shape resulting from the choice of a conformal factor such that its corners represent spacelike and timelike infinities. They are used to study the causal structure of black holes.  
ANSWER: Penrose-Carter diagrams [or Carter-Penrose diagrams]



4. For 10 points each, name these Eastern European writers who wrote about characters who become soldiers in the Russian army, and then leave, but end up re-joining anyway because of mistaken identity involving Germans.
- [10] That happens to poor Sergeant Grischa, who is eventually captured by Germans in this writer's *The Case of Sergeant Grischa*, the first volume of his hexology *The Great War of White Men*. His brother Stefan wrote *The Royal Game*.  
ANSWER: **Arnold Zweig** [Prompt on "(A.) Zweig"]
- [10] This writer's Private Ivan Chonkin deserts the army when he gets confused, but after becoming a peasant, the NKVD confuses him for a German spy, leading him to arrest the NKVD officers and earn comical praise from General Drynov.  
ANSWER: Vladimir [Nikolayevich] **Voinovich**
- [10] The real-life figure of Otto Irbe, who joins the Red Army, then leaves and becomes a German legionnaire before the Russians capture him and mistakenly send him to the gulags is one of numerous people who inspired this writer's *The Gulag Archipelago*.  
ANSWER: Alexander [Iseyevich] **Solzhenitsyn**
5. Beaujolais and Cote du Rhone are examples of these classifications, whose U.S. analogue is the "American Viticultural Area." For 10 points each:
- [10] Name these classifications that certify that a wine labeled with a specific region is indeed made in that part of the country. You can give the French, Spanish, Italian or Portuguese name, or their English translation.  
ANSWER: **designation of origin** [or **appellation du origine controlee**; **appellation of origin**; or **denominacio de origen** calificada; or; or **denominacao de origen controlada**; or **denominazione de origine controllata**; accept **AOC** or **DO** or **DOC**]
- [10] Designations of Origin like Carinena and Calatayud are located in this autonomous region whose capital is at Zaragoza. Ferdinand united this region with Castile by marrying Isabella.  
ANSWER: **Aragon**
- [10] Many wines from the popular Spanish growing area of Rioja are made with this varietal whose name suggests it matures much earlier than other black grapes. It is frequently blended with Garnachas.  
ANSWER: **Tempranillo** [accept **ojo de libre** or **tinto fino** or **cencibel**]
6. This plant is a natural host to the Asian stinkbug, and it belongs to the genus *Pueraria*. For 10 points each:
- [10] Give the common name for this invasive vine, which is a major threat to biodiversity in southeastern U.S., where some cities have deployed armies of goats to combat its spread.  
ANSWER: **kudzu**
- [10] Common name accepted. Kudzu belongs to this plant family, which, along with the asters and the orchids, is one of the largest plant families. Other invasive members of this family include crown vetch and chinese bushclover.  
ANSWER: **legumes** [or **Leguminosae**; or **Fabaceae**; accept **Papilionaceae**]
- [10] Another highly invasive legume is the *pigra* species of this genus, whose species tend to have puffy pink flowers. This genus' species *pudica* is called the "touch-me-not plant" because its leaves rapidly fold up when disturbed.  
ANSWER: **Mimosa** [accept **Mimosa pigra** or **Mimosa pudica**]

7. The Court of Directors of this organization implemented a policy that required principalities like Satara to obtain special dispensation from this organization for adopting an heir. For 10 points each:  
[10] Name this organization that vigorously pursued the Doctrine of Lapse. The Regulating Act of 1773 was a weak attempt to overhaul this organization, and continued to grant it monopoly over trade with a certain subcontinent.  
ANSWER: **British East India Company** [accept **Honourable East India Company**; prompt on partial answer]  
[10] This man was the Governor-General of India when the rule of India was transferred from the East India Company to the Crown. He was nicknamed “Clemency” because he showed restraint in prosecuting the rebels in the 1857 Sepoy Rebellion.  
ANSWER: Charles **Canning** [1st Earl Canning]  
[10] This woman, the subject of a 520-episode docudrama on Zee TV, was a widow of Gangadhar Rao who particularly hated the Doctrine of Lapse. She rounded up an army to reclaim her annexed kingdom during the 1857 Rebellion and led a big fight, but was defeated by the Central India Force led by Hugh Rose.  
ANSWER: **Lakshmibai** [accept **Rani of Jhansi** or **Queen of Jhansi** or **Lakshmi of Jhansi** or **Manikarnika**]
8. This artist probably used a photograph of the socialist leader Alexander Herzen as the basis for the Jesus figure in one of his paintings. For 10 points each:  
[10] Name this member of the *Peredvizhniki* who painted a particularly haggard-looking Christ in *What is Truth?* Nikolai Yaroshenko’s portrait of this artist shows him as an old bearded man, seated with his arms folded on a desk.  
ANSWER: Nikolai [Nikolaevich] **Ge**  
[10] In Ge’s version of this scene, Judas’s dark shadow starkly contrasts with the softly candle-lit background, in which the rest of the disciples contemplate what Jesus has just said. Tintoretto painted this scene on a diagonal axis.  
ANSWER: *The* **Last Supper**  
[10] This businessman was a major patron of all *Peredvizhniki* artists. This collector’s namesake gallery now holds Kasimir Malevich’s *Black Square* and is the site of Moscow’s Fallen Monuments Park.  
ANSWER: Pavel [Mikhailovich] **Tretyakov**
9. This chapter, which follows “Where I lived, and what I lived for,” quotes George Chapman’s *Caesar and Pompey* to praise the livelihood of a farmer, and ends by reproducing Thomas Carew’s “The Pretensions of Poverty.” For 10 points each:  
[10] Name this first chapter of a larger work in which the author relates his desire to live alone in the woods. It includes a list of prices used in building a house, which sum to about \$28.  
ANSWER: **“Economy”**  
[10] The “Economy” chapter appears in this book, which describes how the author built a cabin and appreciated nature next to the title pond.  
ANSWER: **Walden**  
[10] This book by Annie Dillard is structured similarly to *Walden* and follows the narrator’s attempts at living nearby the title stream in the Blue Ridge Mountains.  
ANSWER: **Pilgrim at Tinker Creek**

10. In Sylvia Townsend Warner's *Kingdoms of Elfin*, this place is Queen Melior's elfin court, where a pair of eunuchs engage in a fight to the death after sorcerer destroys the cocks used in a cockfight. For 10 points each:
- [10] Name this mythical forest that is supposedly the home of the tomb of Merlin. In a Chretien de Troyes story, Yvain pours spring water onto a giant slab and a thunderstorm terrorizes this place.  
ANSWER: **Broceliande**
- [10] Broceliande is a forest in this region of France, whose own mythology includes a story about the devil unleashing torrents of water to flood the mythical city of Ys.  
ANSWER: **Brittany** [or **Bretagne**; or **Breizh**]
- [10] These shape-shifting water-sprites of Breton folklore are thought to be the spirits of druids who opposed Christianity. They can be snuffed out if you ask them to name the days of the week, "for they will try to change the subject."  
ANSWER: **korrigan** [or **korandon**, **ozigan**, **nozigan** or **torrigan** if you believe Wikipedia]
11. This equation can be derived by balancing out the buoyant forces and frictional forces on a particle against the centripetal force. For 10 points each:
- [10] Identify this equation whose namesake unit is equivalent to 100 femto-seconds. It gives the sedimentation coefficient in terms of the velocity and the field strength and is named for a Swedish chemist.  
ANSWER: **Svedberg** equation
- [10] This equation, derived by a student of Svedberg, gives the temporal change in concentration as a function of time and the radius. It is a PDE that is derived by incorporating Svedberg's results into Fick's second law  
ANSWER: **Lamm** equation
- [10] This theory, whose namesakes obtained an iterative solution to the Lamm equation, attempts to predict sedimentation velocity gradients and reaction boundary profiles in the limit of infinite time and a diffusion-free environment.  
ANSWER: **Gilbert-Jenkins** theory [accept names in reverse order]
12. Answer the following about classical Greek and Roman historians who attempted to write what came to be known as "universal histories." For 10 points each:
- [10] The Greek has traditionally been considered classical antiquity's first universal historian. His son Demophilus added a 30th volume to his *Historiai*.  
ANSWER: **Ephorus**
- [10] This 2nd-century BCE Greek historian from Achaea lauded Ephorus as the first universal historian. He wrote *The Histories*, a 40-volume work on the rise of Rome with five surviving books, including extensive commentaries on the Roman constitution.  
ANSWER: **Polybius**
- [10] This 1st-century BCE Roman historian and geographer from Greek Pontus praised and extensively cited from Ephorus's universal history in his *Geographica*, a 17-volume encyclopedia.  
ANSWER: **Strabo**

13. Benjamin Buchloh criticized this man's work as being grounded in the idea that "politics could become a matter of aesthetics," in an essay subtitled "Twilight of the Idols." For 10 points each:  
[10] Name this pioneer of "social sculpture" who preached that creativity is not unique to artists, and is best known for the phrase "everybody is an artist." He was a long-time member of the Fluxus group.  
ANSWER: Joseph **Beuys**  
[10] The manifesto for the Fluxus movement was written by this Lithuanian-American artist. His *Diagram of the Historical Development of Fluxus* is a painstakingly detailed timeline of the origins of the movement.  
ANSWER: George **Maciunas** [or Jurgis **Maciuans**]  
[10] Maciunas was considered the "father" of this Lower Manhattan neighborhood, where he established a communal space filled with Fluxhouses. This neighborhood is well known for its cast-iron architecture, and is not to be confused with a London neighborhood of the same name.  
ANSWER: **SoHo** [or **South of Houston** street]
14. Mao told this man that "with you in charge of business, I can relax" during the last days of his rule. For 10 points each:  
[10] Name this successor to Mao who tried to continue Mao's legacy with the "Two Whatevers" doctrine. He had the Gang of Four arrested soon after Mao's death, but in 1980 made way for Deng Xiaoping to take over control of the CCP.  
ANSWER: **Hua** Guofeng [accept **Su** Zhu or **Hua Kuo-feng**]  
[10] During Hua's premiership, Deng promoted the "seek truth from facts campaign," which backfired when critics of the Communist party used this structure in the Xicheng district to post large posters telling of their suffering during the Cultural Revolution.  
ANSWER: **Democracy Wall** [or **Xidan** Wall; or **xi dan min zhu qiang**]  
[10] Mao chose Hua as his successor over this man, who rose to the number-three position of the CCP during the Cultural Revolution. This radical, the youngest member of the Gang of Four, caused chaos in the 1960s when he changed Shanghai traffic laws so that red, a more revolutionary color, meant "go."  
ANSWER: **Wang** Hongwen [or **Wang Hung-wen**]
15. This thinker argued that "God is no captious sophister" in *A Learned Discourse of Justification*. For 10 points each:  
[10] Name this author whose book *Of the Laws of Ecclesiastical Polity* argues that bishops and other men who serve in the Church of England are fallible, and thus that scripture should be the basis of laws.  
ANSWER: Richard **Hooker**  
[10] *Of the Laws of Ecclesiastical Polity* influenced and was heavily quoted by this other English philosopher's *Second Treatise of Government*.  
ANSWER: John **Locke**  
[10] This philosopher, who lived a generation after Hooker, believed that men were capable of crafting perfect laws. His magnum opus uses the example of Olphaus Megaletor creating the perfect governmental laws and is titled *The Commonwealth of Oceana*.  
ANSWER: James **Harrington**

16. In one poem, this character shalt “wander like a breeze by lakes and sandy shore, beneath the crags of ancient mountain, and beneath the clouds, which image in their bul both lakes and shores.” For 10 points each:  
[10] Name this “cradled infant” who slumbers peacefully while the speaker ponders “abstruser meanings” in solitude.  
ANSWER: **Hartley Coleridge** [accept Samuel **Coleridge’s child** or any obvious equivalents; prompt on “Coleridge”]  
[10] This two-word phrase is what the frost performs, unhelpt by any wind, at the beginning of “Frost at Midnight.”  
ANSWER: [the frost performs its] **secret ministry**  
[10] In another section of “Frost at Midnight” Coleridge describes these things as “the poor man’s only music” that stirred within him a “wild pleasure, falling on mine ear most like articulate sounds of things to come.”  
ANSWER: **bells**
17. In statistics, power refers to the ability of a model not to commit this error. For 10 points each:  
[10] Name this error, which can be committed by anyone, even YOU, who fails to reject a null hypothesis when it is false.  
ANSWER: **type II** error [or error of the **second** kind]  
[10] Modern hypothesis testing is largely based on the work of two British statisticians, whose theory boils down to choosing the test that maximizes power while subjecting an arbitrary upper bound, aka a P-value, on the probability of committing a type 1 error. Name either scientist.  
ANSWER: Egon **Pearson** or Jerzy **Neyman** [accept **Neyman-Pearson** theory; do not accept or prompt on “Karl Pearson”]  
[10] When comparing multiple hypotheses, you may use this technique in which you maintain a familial significance cutoff, but divide the cutoff by the number of hypotheses when testing each hypothesis. This technique, named for an Italian, minimizes the probability of erroneous significant effects.  
ANSWER: **Bonferroni** correction
18. Early theories that attempted to study whether these phenomena were driven by rational behavior were inspired by the excess volatility observations of Shiller, Le Roy, and Porter in the early 1980s. For 10 points each:  
[10] Name these phenomena. Modern statistical tests to confirm or deny the existence of them check for whether time-series such as price-dividend ratios become non-stationary. Historical examples of these phenomena include the “Dot-Com” one that “popped” in at the turn of the millennium.  
ANSWER: **bubble** [accept **economic bubble** or asset **price bubble**]  
[10] According to this hypothesis, economies exaggerate the namesake behavior by pursuing debt-fueled investment in good times; the unfolding of Ponzi schemes and other frictions push things in the other direction. It was developed by Hyman Minsky.  
ANSWER: **financial instability** hypothesis  
[10] The liquidity crisis that resulted from the collapse of “Shadow Banks” is often cited as the “Minsky moment” of the 2007-08 financial crisis. The term “Shadow Banks” was coined by this now-Chief Economist of PIMCO, who wrote a lengthy research note in May 2009 outlining the financial crisis from a Minskian perspective.  
ANSWER: Paul **McCulley**

19. In this novel, True Belle is estranged from her children May and Rose, which is why she nurtures her relationship with Golden Gray. For 10 points each:  
[10] Name this book by Toni Morrison in which Joe Trace murders Dorcas before resuming his marriage with Violet Trace.  
ANSWER: Jazz  
[10] A fusion between fact and fiction comprises this writer's seven "legendary jazz biographies," *But Beautiful*. He wrote a biography of John Berger titled *Ways of Telling*.  
ANSWER: Geoff Dyer  
[10] This writer compared his style of writing to Thelonius Monk hitting the piano in his essay *Jazz Messenger*. Lots of his novels begin with characters listening to classical music, like a taxi driver playing Leos Janacek's *Sinfonietta* at the beginning of his *IQ84*.  
ANSWER: Haruki Murakami [accept names in reverse order]
20. The first expedition along this region's coast was commissioned by Pedro de Alvarado, who hoped to chart the mythical "Strait of Anián." For 10 points each:  
[10] Name this region, whose coast Juan Rodriguez Cabrillo explored for Spain in 16th century. Antonio Maria Osio wrote a history of this region, and Gaspar de Portola was sent by Carlos III to expel Jesuits from it.  
ANSWER: Alta California [prompt on "California"; do not accept "Baja California"]  
[10] This man led the first overland expeditions from modern day Arizona into Alta California, successfully crossing the Colorado river. His party eventually built the Presidio of San Francisco.  
ANSWER: Juan Bautista de Anza [Bezerra Nieto]  
[10] This Franciscan friar, who went on the Portola expedition, founded many of the early missions of California, and established his headquarters at the Carmel Mission near Monterrey.  
ANSWER: Father Junípero Serra [or Miguel Jose Serra; accept Fra Juniper Serra]