

Cane Ridge Revival

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Packet 13

TOSSUPS

1. **This man went into hiding at Gilan following the death of his father at the hands of the Shirvanshahs, and he published poetry under the pen name Khata'i. At Qunduz, this man reunited Khanzada Begum with her younger brother. This leader ordered the destruction of the tomb of Abu Hanifa during his conquest of Iraq, and Div Soltan served as regent for this man's son following his death. This son of Sheikh Haydar led a group of seven tribes, the most powerful of which was the Shamlu, to victory over the Aq Qoyunlu Confederacy. This ruler's successor signed the Treaty of (*) Amasya, and this ruler lost his capital of Tabriz to the forces of Selim the Grim following the Battle of Chaldiran, the first defeat for his red-turban wearing Shi'a warriors, known as the Qizilbash. For 10 points, name this founder of the Safavid dynasty.**

ANSWER: Shah Isma'il I [or Esma'il I Safavi; or Abū l-Muzaffar bin Haydar as-Safavi]

2. **An equimolar mixture of this molecule and borane in THF can reduce ketones to secondary alcohols by forming oxazaborolidine *in situ*. In DMF, this molecule reacts with an enolate to form an intermediate that attacks only the *re*-face of an electrophilic aldehyde, while in a selectively-*syn* reaction, a PMP-protected imine reacts with an enamine formed from this molecule to create a beta-amino-carbonyl. This common asymmetric organocatalyst allows ligands to bind to (*) SH3 domains and forms bonds that exhibit *cis-trans* isomerism. Zinc acts as a competitive inhibitor of this molecule's iron-dependent gamma-hydroxylation, which also requires an ascorbate cofactor. The CBS catalyst is derived from this molecule, which, along with its hydroxy-derivative and glycine, stabilizes the triple helix. For 10 points, name this amino acid that turns yellow in the ninhydrin test due to its pyrrolidine side chain, abundant in collagen.**

ANSWER: R- or S- or D- or L-proline [accept Pro or P; accept pyrrolidine-2-carboxylic acid; accept CBS catalyst or Corey-Bakshi-Shibata catalyst or (R)-2-methyl-CBS-oxazaborolidine before "oxazaborolidine"]

3. **Robert Adams made a moral argument against the existence of these entities, as they make us powerless to do anything that would improve a situation. Another thinker attacked "ersatzist" theories of them in a book that distanced itself from the view of these as maximally consistent sets of propositions. These things are related to one another through accessibility relations, and a set of them with a set of accessibility relations forms a (*) frame. Counterpart theory holds objects can only exist in one of these; that theory was developed by David Lewis in his book "on the plurality" of these entities. Saul Kripke criticized treating these as "distant planets" we view dimly through a telescope and introduced the phrase "rigid designator" to define objects which are the same in all of these entities the objects inhabit. For 10 points, name these places in modal logic which do not necessarily exist.**

ANSWER: possible worlds

4. **In one of this author's short stories, the protagonist is visited by the ghost of a former parishioner of his, who offers him a cup of her tears mixed with water from a fountain. In another story by this author, a butterfly alights upon the title character's head after a scuffle knocks a vase off a table. One of his works ends with a farmer and his children creating a pile of stones after the ghost of Mary Goffe was unable to prevent the crazed Richard (*) Digby from dying alone in a cave. In another story by him, a Jew from Nuremberg carries a show-box purported to display the Unpardonable Sin that the title former lime-kiln worker set out twenty years before to find. This author of "The Man of Adamant" wrote a story in which three men fight to dance with Widow Wycherly after drinking an elixir that makes them younger. For 10 points, name this author of "Ethan Brand" who included "Dr. Heidegger's Experiment" in his *Twice-Told Tales*.**

ANSWER: Nathaniel Hawthorne

5. During the late 1970's, rival editions of this piece were produced by Fiske and Inwood for Eulenberg and by Nectoux and Zimmerman for Peters. Five years after its premiere, this piece's composer added parts for bassoon and brass, to what had previously been an orchestration for strings, organ, and timpani. The third movement of this work opens with rippling E-flat arpeggios for harp and violas, while a melody is passed between the women and men, and a solo (*) violin plays a melody in the high register. Its penultimate movement opens with a baritone soloist singing a D-minor setting of the "Libera Me". Its choice and arrangement of texts was mirrored in a work of the same genre by Maurice Duruflé. This work omits the traditional "Sequenza", interpolates a "Pie Jesu" for solo soprano, and concludes with an "In Paradisum". For 10 points, name this Mass for the Dead written by a certain late-19th century French composer.

ANSWER: Gabriel Fauré's Requiem in D minor, Op. 48

6. In 2010, Sperling et al used microRNA screens and this technique to discover the "spicule gap" in demosponges. When applied to plants, this technique is often "relaxed." Martin and Palumbi argued that this technique generates heterogeneous data because of the relatively rapid production of reactive oxygen species in homeotherms. Regions with very high K sub s values are too saturated to allow the accurate use of this technique, which produces data that can be analyzed by (*) BEAST and classically employs cytochrome c or hemoglobin. This "sloppy" technique relies on the same assumptions as UPGMA and cannot be used when the null hypothesis is rejected in Tajima's relative rate test. This technique requires calibration from the fossil record. For 10 points, name this technique based on Kimura's neutral theory, used to estimate divergence times and provide a timescale to phylogenetic trees.

ANSWER: molecular clocks [accept descriptive answers like dating divergence times before mentioned; accept ML/SRDT clocks; prompt on partial answer; prompt on answers like "making phylogenetic trees" or "rooting"; prompt on answers involving "fossils" before mentioned; prompt on "genomics" or any answers related to gene sequencing]

7. Frank Gannett wrote "I would be glad to do my part in trying to get control of [this business] and make it a forceful spokesman for the party" in response to Herbert Hoover's entreaty to prevent this business from falling into the hands of William Randolph Hearst, then a Roosevelt backer. It was ultimately purchased by the former Chairman of the Federal Reserve, Eugene Meyer, who explicitly aimed to counter Roosevelt's inflationary monetary policies. The publisher of this newspaper suggested that Bobby Kennedy tried to sabotage the negotiations that put Lyndon Johnson on JFK's presidential ticket, for which that man acted as go-between, and that man's wife (*) succeeded him as publisher after his suicide. Ben Bradlee edited a series of investigative articles in this paper that led to Nixon's resignation. For 10 points, name this newspaper published by Katherine Graham in which Bernstein and Woodward covered Watergate.

ANSWER: The Washington Post

8. The narrator of this novel imagines a young man who becomes an entomologist because he learns that female scorpions devour their mates; that narrator then compares the time he repeatedly told a judge, "It was at night" to one character reading an administrative history book and learning that his mother has a noble maiden name. While drinking tea in a garret overlooking a cemetery, one character in this novel decides to leave a lover called the 'Quite-Quite' for one called (*) Mimosa II. Alberto coils snakes around the arm of this novel's poison-gathering protagonist, who was once called Lou Culafoy. The protagonist has affairs with the Greco-Roman wrestler Marchetti, the soldier Archangel Gabriel and the pimp Darling in this novel, which Jean-Paul Sartre called an "epic of masturbation." For 10 points, name this novel about the canonized transvestite prostitute Divine, written from prison by Jean Genet.

ANSWER: Our Lady of the Flowers [or Notre Dame des Fleurs]

9. Nagarjuna's "Letter to a friend" claims that those who repeatedly hear of this concept will develop the character of a diamond. This concept is represented by the statues in the Wang Saen Suk garden of one Thai *wat*. Variations of this concept are described after a man is cross-examined by a king who chastises him for ignoring a divine messenger covered in excrement in the *Devaduta Sutra*. The Bon festival celebrates Maudgalyayana giving offerings in order to deliver his (*) mother from this concept, which for those who perform *anantarika-kamma* is exemplified by Avīci. The bodhisattva Ksitigarbha vowed not to become a Buddha until the emptying of all manifestations of this concept, which describes the temporary destination of beings who possess negative karma. For 10 points, name these realms that include the eight cold and hot Narakas, places of suffering in Buddhist cosmology.

ANSWER: Buddhist hell realms [or Narakas before mentioned; accept Avīci before mentioned; accept underworlds or purgatory; accept Divu; accept patala; prompt on "death" or "afterlife"; prompt on "suffering" or "retribution" or "dukkha"; prompt on "judgment" or related answers; prompt on "purification" or related answers; prompt on "negative karma" or "bad karma" or related answers; prompt on "*preta*" or "hungry ghosts"; prompt on "worlds" or "realms" or other generic answers about places]

10. This thinker used the example of the white sap of the mudyi tree simultaneously representing milk and the mother-child bond to illustrate the polysemy of symbols, whose meaning he divided into operational, positional and exegetical levels. This man posited that in addition to the "indicative mood" of society's normative framework, there are also "subjunctive" regions of cultural experience that exist outside that framework. His work was inspired by the field work on the Ndembu tribe of Zambia he conducted together with his wife Edith. This thinker, who posited the concept of (*) "anti-structure," borrowed a term from Arnold van Gennep to describe the state of ambiguity produced when operating within the transitional threshold between the separation and reincorporation states of a ritual. For 10 points, name this anthropologist, author of *The Forest of Symbols*, and popularizer of the concept of "liminality."

ANSWER: Victor (Witter) Turner

11. Small orange figures dot both shores of a work by him depicting the fording of a large river. A servant stands bare-backed, having taken off his yellow jacket to cover his master, in a work by him showing men struggling uphill in the rain on the left, while a man with yellow umbrella is blown downhill on the right. An eagle's head and forewings dominate the top of a work by him depicting a 100,000-acre snow-covered plain. Waterfalls cascade on the left of a work by him that shows two blue islands flanking the title aquatic phenomena; that is his (*) *Views of the Whirlpools at Awa*. Two series of his begin with prints of crowd scenes at Nihonbashi Bridge, and he was inspired by a predecessor's thirty-six-part series about a certain mountain to create a series of his own. For 10 points, name this creator of *Fifty-Three Stations of the Tokaido*, the last great ukiyo-e artist of the generation succeeding Hokusai.

ANSWER: Ando Hiroshige [or Utagawa Hiroshige; accept names in either order]

12. One cause of the intensification of these events is the spread of *Dendroctonus ponderosae*, which introduces a blue-stain fungus to protect its larvae and block nutrients from flowing within the host. The invasive *Bromus tectorum*, which creates a bad feedback loop of these events, has been shown to increase biomass by around two grams per plant for every ten ppm increase in atmospheric carbon dioxide. It is unclear whether these events will increase in frequency in the long run, as the climatic changes favorable to them may be offset by an overall reduction in available (*) biomass. These events may themselves affect the climate, in part by releasing carbon dioxide previously stored by peat bogs. For 10 points, what are these events that affected Yellowstone in 1988 and killed 19 people in Arizona in 2013, in which large swathes of land are burned?

ANSWER: wildfires or forest fires

13. This organization ran a lottery called “The Two Million Adventure” which was promoted by John Blunt. Theodore Janssen was expelled from the House of Commons due to his involvement with this organization. An event involving this organization saw a so-called “night singer of shares” work on the streets. This organization was the vehicle for a scheme to (*) refinance government debt by exchanging it for ownership of this organization’s equity, in which role it competed against the Bank of England. This organization was nominally created to take advantage of the *asiento* granted by the Treaty of Utrecht by selling slaves in the Americas, and Robert Walpole came to power following a collapse in the price of its shares. For 10 points, name this joint-stock company, investment in which created a massive bubble that burst in 1720.

ANSWER: South Sea Company

14. This poem is analyzed in the first chapter of Edward Mendelson’s book on the “Later” works of its poet. In this poem, the future is described as a time when “each in the cell of himself is almost convinced of his freedom”. This poem describes an entity that “survives / In the valley of its making where executives / Would never want to tamper”. This poem says that “poetry makes nothing happen” shortly after telling its addressee: “You were silly like us; your gift (*) survived it all”. Its fourth and final section is in quatrains of rhymed couplets, and ends: “In the prison of his days / Teach the free man how to praise”. This poem repeatedly declares: “What instruments we have agree” that it was “a dark cold day” when a figure called “the Irish vessel...emptied of its poetry” died. For 10 points, name this W.H. Auden poem about the passing of a certain fellow poet.

ANSWER: “In Memory of W.B. Yeats”

15. In an African myth system, one of these creatures forms mineral-rich mountains with its feces and is ridden by the creator god. That creature is cooled by the ocean, eats iron bars supplied by red marine monkeys and causes earthquakes by moving. That example of these creatures is controlled by Nana-Bulukú and inspired a female loa addressed in the Rada Rite, who enjoys white foods and is the consort of Damballah. Another example of these creatures turns the bones of those it swallows into stone; that version is Ngalyod, whose counterpart Yingarna is feminine like the aforementioned (*) Aido-Hwedo. These creatures live in permanent waterholes in the dry season and cause rain to replenish billabongs. They created law during the Dreamtime. For 10 points, name these creatures from Fon, Voodoo and Aboriginal mythology, which are multicolored snakes.

ANSWER: Rainbow Serpents [accept Rainbow Snakes; accept specific Rainbow Serpents such as Aido-Hwedo and Ngalyod before mentioned; prompt on snakes or serpents or dragons or other less specific answers]

16. This painting incorporates details garnered from a map by Jacques Callot. A star fort is faintly visible in front of a large patch of white representing a lake with a bridge over it in this painting. A man in beige with his back to the viewer holds a sword which trails diagonally out of the lower left corner of this painting; that man stands in front of a man in blue who rests his firearm on his shoulder and looks directly at the viewer. An unfolded piece of (*) paper lies on a rock in the lower right corner of this painting. The rear right side of this painting is filled with a row of spears, and the front right side is dominated by the large rear end of a brown horse. In the center of this painting, Fredrick Henry bends over and hands the key to the city to Ambrogio Spinola. For 10 points, name this painting by Diego Velázquez of the aftermath of the siege of a certain Dutch city.

ANSWER: *The Surrender of Breda* [or *La Rendicon de Breda*; or *El cuadro de las Lanzas*]

17. This phenomenon is the subject of a paper that denounces a “reckless hypothesis” of certain “corpuscles,” but reports that experiments with a “machine shop in vacuo” support the corpuscular theory’s predicted maximum kinetic energy relation. This effect explains the linearity of a result discovered by Philip Lenard, who also noticed that the byproduct of it was similar to what he observed in Crookes tubes. A critical value for this phenomenon’s occurrence equals the negative sum of the (*) Fermi level and the outside potential times the elementary charge. Non-ion smoke detectors rely on smoke interrupting this phenomenon’s production of current. This phenomenon occurs when the energy of the work function is exceeded. The 1905 explanation of this effect by Albert Einstein won him the Nobel. For 10 points, identify this phenomenon in which photons of sufficiently high energy can dislodge electrons from a metal surface.

ANSWER: photoelectric effect

18. During one battle in this war, Jean de Gassion led a successful cavalry charge that allowed one commander to encircle forces under Francisco de Melo. During another battle in this war, the body of a commander was hauled away in an artillery cart after he was killed leading cavalry into a cloud of smoke, prompting Bernard of Saxe-Weimar to assume control of the army. That battle was where the leader of the Black Cuirassiers, Field Marshal (*) Pappenheim died. A major battle in this war was fought at Rocroi, at which the Prince de Condé decisively defeated several Spanish tercios as well as one at which the “Lion of the North” defeated Johann Tserclaes, Count von Tilly. For 10 points, name this war, during which forces under Albrecht von Wallenstein killed Gustavus Adolphus.

ANSWER: **Thirty Years** War [accept translations for “Thirty Years” in the language of any country that fought the “Thirty Years War”]

19. The Durham Statement and Budapest Initiative concern the products of this industry, and the Finch Report about it was ostensibly adopted as policy in the United Kingdom. Dmitry Sklyarov was arrested under “anti-circumvention” laws designed to protect the products of this industry. A procedure used by some organizations in this industry is subdivided into the “green” and “gold” varieties, the former of which involves the creation of institutional repositories. One question in a 2009 agreement involving this industry concerned its (*) “orphan” products. The Supreme Court addressed the legality of importing certain products of this industry in the 2013 case *Kirtsaeng*. The “bundling” practices of one company in this industry contributed to a boycott known as the “Cost of Knowledge” campaign, organized by Timothy Gowers. This industry’s Public Library of Science makes its products available for free under “open access.” For 10 points, identify this industry, which includes companies like Elsevier and Routledge.

ANSWER: **publishing** [accept more specific forms, such as “electronic **publishing**”, “internet **publishing**”, etc.; do NOT prompt on or accept “book industry” or anything related specifically to “books”]

20. In one work by this author, a visiting aunt takes the children to a sacred river for a ritual bath, during which the protagonist nearly drowns. In another novel by this author, the protagonist’s father is killed in a bizarre accident in which he flies out of the car and breaks his neck while the car remains unharmed. The central parents in one novel by her are so in accord that they are usually referred to by the single name “MamaPapa.” In one novel by her, an (*) autistic character who constantly plays his gramophone, Baba, is the brother of a character who loves Urdu poetry but cannot attend his preferred university, Raja. In another novel by her, a girl who collects Christmas cards is twice forced into scam marriages and is contrasted with her prized younger brother; those characters are Arun and Uma. For 10 points, name this Indian author of *Fasting, Feasting* and *Clear Light of Day*, the mother in a literary mother-daughter pair.

ANSWER: **Anita Desai** [do NOT accept Kiran Desai]

BONUSES

1. The Chorus tells of the making of man and asks, “What storm is this that tightens our sail?” to which Althaea answers, “Love” at the beginning of this verse drama. For 10 points each:

[10] Name this dramatic poem that pits Meleager against Althaea. Its most famous chorus begins: “When the hounds of spring are on winter’s traces”.

ANSWER: Atalanta in Calydon

[10] This sadomasochistic Victorian poet of *Atalanta in Calydon* also wrote some *Poems and Ballads* and a collection about political liberty, *Songs Before Sunrise*.

ANSWER: Algernon Charles Swinburne

[10] This Swinburne poem describes a place “In a coign of the cliff between lowland and highland” that “the years have rifled / Of all but the thorns that are touched not of time”.

ANSWER: “A Forsaken Garden”

2. One sign of the Tetralogy of Fallot is VSD, the presence of one of these pathways in the ventricular septum. For 10 points each:

[10] Name these pathways that bypass normal circulation. Fetal examples of these pathways include the foramen ovale and ductus arteriosus, whose persistence after birth leads to a “patent” congenital disorder.

ANSWER: cardiac shunts

[10] An R-L shunt connects the right atrium and aorta in the four-chambered hearts of these animals, whose left and right aortas meet at the foramen of Panizza. Epinephrine regulates the cog valve controlling their blood flow.

ANSWER: crocodiles [or crocodilians; or Crocodylus; accept eusuchians; accept crocodylomorphs; accept any other specific crocodilians such as American or Chinese alligators, gharials/gavials (or Gavialis) or caimans; accept any other crocodilian genus, which include most things that end in “suchus”; prompt on “reptiles” or “tetrapods” or other non-specific answers]

[10] Crocodiles shunt blood while resting underwater in order to bypass the pulmonary circuit and thus avoid taxing these organs. The pulmonary veins carry oxygenated blood from these organs to the heart.

ANSWER: lungs

3. This field secretary for the NAACP was assassinated in his driveway in 1963, and his assassin Byron De La Beckwith was finally convicted in 1994. For 10 points each:

[10] Name this D-Day veteran, who tried to integrate his state’s public law school in 1954.

ANSWER: Medgar Evers

[10] Evers was from this state, which was also where Emmett Till was murdered. James Meredith eventually integrated its flagship state university.

ANSWER: Mississippi

[10] Evers supported the cause of this man, a former UChicago student who tried to enroll at Mississippi Southern College, in return for which he was subjected to years of judicial harassment and frame-ups by the State Sovereignty Commission.

ANSWER: Clyde Kennard

4. Keys were thrown into a fire on this god’s festival. For 10 points each:

[10] Name this Roman god of keys and ports.

ANSWER: Portunes or Portunus

[10] Portunus shared the symbol of the key with this Roman god of beginnings and endings.

ANSWER: Janus

[10] Janus raped this nymph, then made her the goddess of hinges.

ANSWER: Cardea or Cranae or Carna

5. This man credited Thomas Hobbes and Robert Boyle with creating the modernist outlook that separates society and nature in *We Have Never Been Modern*. For 10 points each:

[10] Name this man, whose first major field work was conducted with Steve Woolgar at the Salk Institute.

ANSWER: Bruno **Latour**

[10] Latour and Woolgar observed this process happening at the Salk Institute. A 1987 Latour work about it “in action” stresses the social aspect over more abstract criteria like falsifiability.

ANSWER: **science**

[10] Another sociologist of science, Robert Merton, wrote a very weird book about this five-word phrase. R.W. Southern uses this phrase to describe the conception medieval cathedral schools had about their relationship with antiquity.

ANSWER: “**on the shoulders of giants**”

6. This poem describes bards singing “Of Turneys and of Trophies hung; Of Forests, and inchatments drear”. For 10 points each:

[10] Name this poem by John Milton that declares “Hail divinest Melancholy”. It is paired with a pastoral poem depicting joyousness.

ANSWER: “**Il Penseroso**”

[10] This Romantic poet opened his “Ode on Melancholy” with the lines “No, no! go not to Lethe, neither twist / Wolf’s-bane, tight-rooted, for its poisonous wine”. He also wrote an “Ode to a Nightingale”.

ANSWER: John **Keats**

[10] The speaker of this poem sees “through [her] tears / The sweet, sad years, the melancholy years”. This poem ends with the speaker being held by the hair by a figure who reveals himself to be “Not Death, but Love”.

ANSWER: “**I thought once how Theocritus had sung**” [or the **first sonnet from Sonnets from the Portuguese**; accept any equivalent answer that makes it clear that this is “Sonnet #1” from *Sonnets from the Portuguese*; prompt on a partial answer]

7. Answer the following about approximating pendulum motion, for 10 points each:

[10] To reduce pendulums to simple harmonic oscillators, one can use the small angle approximation, which states that for small values, sine of theta equals this quantity.

ANSWER: **theta**

[10] One way of estimating the elliptic integral to get an exact solution involves this function of two inputs. To evaluate it, one repeatedly takes the average of the two inputs and the square root of their products until it converges.

ANSWER: **arithmetic-geometric mean** or **AGM**

[10] The Kidd-Fogg approximation multiplies the expected period by one over the square root of this trig function. This function of theta can itself be approximated by one minus one-fourth times theta-squared, for small theta.

ANSWER: **cosine of theta/2**

8. This composer had a collaborative friendship with Arturo Toscanini, who conducted the premiere of his opera, *La Boheme*. For 10 points each:

[10] Name this Italian *verismo* composer whose *Il trittico* consists of the operas *Il tabarro*, *Suor Angelica*, and *Gianni Schicchi*.

ANSWER: Giacomo (Antonio Demonico Michele Secondo Maria) **Puccini**

[10] In this famous aria from *Gianni Schicchi*, Lauretta threatens to throw herself into the Arno river if her father will not consent to her marriage with Rinuccio.

ANSWER: “**O mio babbino caro**” [or “**Oh my beloved father**”]

[10] This playwright, who wrote the libretto for Giordano’s *Andrea Chenier*, collaborated with Giuseppe Giacosa in writing the libretti for most of Puccini’s greatest hits, including *La Boheme*, *Tosca*, and *Madama Butterfly*.

ANSWER: Luigi **Illica**

9. This event was supposedly perpetrated by the exiled descendants of Heracles. For 10 points each:

[10] Name this controversial event, used by Ancient Greek and many 19th century historians to explain the displacement of pre-classical Greek dialects and traditions in the Peloponnesus.

ANSWER: **Dorian** invasion [or **Dorian** migration; prompt on “Return of the Heraclidae”]

[10] The Dorian invasion was also used to explain the collapse of this city. This archaeological site is where the so-called Mask of Agamemnon was found, along with a number of inscriptions in Linear B.

ANSWER: **Mycenae** [or **Mykenai**; or **Mukanai**]

[10] The Treasury of Atreus is an example of this type of tomb common in late Bronze Age Greece and in the Mediterranean in general. The Thracian Tomb of Kazanlak is another example of this kind of tomb.

ANSWER: **tholoi** [accept **tholos**, the singular form; accept **beehive** tombs]

10. Owls and vultures reside with Lilith in a burned, deserted kingdom mentioned in this book, which the New Testament alludes to more than any other book of the Old Testament. For 10 points each:

[10] Name this book that predicts the coming of the “Suffering Servant,” who is usually taken to refer to Jesus. This first major prophetic book also includes a warning against King Hezekiah and a plea for Judah to embrace God.

ANSWER: Book of **Isaiah**

[10] Isaiah uses this phrase to describe the herald of the Messiah, interpreted as being John the Baptist. This phrase is echoed in the Gospels and is followed by an injunction to “prepare the way of the Lord.”

ANSWER: a **voice crying out in the wilderness** [accept any similar answers such as the **voice of one crying out in the wilderness**; anything with “voice” and “wilderness” or “desert” should be acceptable; if someone says **vox clamantis in deserto**, accept it and compliment them for the Dartmouth reference]

[10] Isaiah’s vision of the peaceable kingdom includes a prophecy of this action. As a consequence of this specific action, “nation will not take up sword against nation, neither shall they learn war any more.”

ANSWER: people **beating their swords to ploughshares** [accept any similar answers; accept people **beating their spears to pruning hooks** or similar answers; prompt on non-specific answers like “destroying weapons” or “making farm implements”]

11. This man first proposed the concept of a “natural rate of interest” that would equalize saving and investment at full employment. For 10 points each:

[10] Name this economist, whose work on the linkage between the real and financial sector presaged Keynesian macroeconomics.

ANSWER: Knut **Wicksell**

[10] Wicksell was an influential figure from this school of economics, which also included the namesakes of the Heckscher-Ohlin model and Mancur Olson, who published a 1937 book that is by turns admiring of Keynes and resentful of the lack of attention to this school’s earlier influential research.

ANSWER: **Stockholm** School of Economics [or **Swedish** School of Economics]

[10] Stockholm School economist Erik Lindahl proposed a way to pay for these goods that requires knowledge of individuals’ marginal benefits. The Groves-Clark mechanism provides a way for funding them that is strategy-proof but not Pareto optimal.

ANSWER: **public** goods [do not accept “common goods”]

12. Algorithms for solving this type of optimization problem include the widely-known simplex method, and polynomial time interior point methods like the ellipsoid algorithm. For 10 points each:

[10] Name this type of problem in which the objective function is represented by a dot product, and the set of constraints is represented by an inequality involving a matrix vector product.

ANSWER: **linear programming**

[10] Unlike Linear Programming, 0-1 Integer Programming is in this class of optimization and decision problems. Informally, these problems are the ones which are at least as difficult as NP-Complete problems.

ANSWER: **NP-Hard**

[10] In this approximation algorithms technique, a 0-1 Integer Programming problem’s solution is approximated by allowing the variables to take on non-integer values, computing the optimal solution of the resulting LP problem, and then transforming that LP solution into a feasible 0-1 solution.

ANSWER: LP **relaxation**

13. The protagonist of this novel marries Sophie after his childhood friend disappears. For 10 points each:
[10] Name this novel, in which the narrator publishes Fanshawe's posthumous writings and searches for him through his biographical work, receiving an unnerving notebook when he locates him after a trip to Paris.

ANSWER: *The Locked Room* [DO NOT READ THIS PROMPTABLE ANSWER OUT LOUD but prompt on "*The New York Trilogy*"]

[10] *The Locked Room* is the third novel in a Paul Auster trilogy named for this city. Other works set in this city include "The New Colossus," *Maggie: A Girl of the Streets*, *The Age of Innocence* and *Bright Lights, Big City*.

ANSWER: New York City [accept The Big Apple or Gotham or other nicknames; antiprompt on specific boroughs]

[10] A cross appears on the roof of a New York synagogue in this author's *City of God*. Tateh becomes a filmmaker under the name Baron Ashkenazy in a novel by him that features appearances by Jacob Riis and Stanford White.

ANSWER: E(dgar) L(awrence) Doctorow

14. The title figure sits on a blue bench with his foot in the air, wearing a white bandana and black hat, and playing a guitar, in his *The Spanish Singer*. For 10 points each:

[10] Name this artist who showed the title figure in black breeches, lying on the ground, bleeding from the shoulder, next to a black sword and a pale pink flag in his *The Dead Toreador*.

ANSWER: Edouard Manet

[10] A nude woman enjoys a picnic with two clothed men while a woman bathes in the stream in the background in this Manet painting.

ANSWER: *The Luncheon on the Grass* [or *Le déjeuner sur l'herbe*]

[10] Manet painted this full-length painting of a man of the title profession wearing a brown hat and leaning on a cane. The title figure wears an ill-fitting white smock and blue pants, and he slings a sack over his shoulder.

ANSWER: *The Ragpicker* [or *Le chiffonier*]

15. According to their formulator, these statements are not true or false, but are rather felicitous or infelicitous, the latter term applying to them if they misfire. For 10 points each:

[10] Name these speech acts that through their utterance cause something to be so. They are opposed to constative acts, which describe things.

ANSWER: performative utterance(s)

[10] The concept of performative utterances is part of the theory of speech acts introduced by this British philosopher in *How to Do Things with Words*.

ANSWER: J(ohn) L(angshaw) Austin

[10] The infamous Searle-Derrida debate of the 1970's was set off by this paper, in which Derrida argues that the iterability of communication means that Austin's performative utterances are always prey to infelicity and his concept of intention is never unproblematic. This essay was later reprinted as the first chapter of *Limited Inc*.

ANSWER: "Signature Event Context"

16. This institution was established by the Fascists in 1933 in order to restructure and finance banks and industrial companies to help recover from the Depression. For 10 points each:

[10] Name this *ente pubblico economico*, an Italian state conglomerate instrumental in the 1960s-era economic miracle and controlled by members of the Christian Democratic party such as Giuseppe Petrilli.

ANSWER: Istituto per la Ricostruzione Industriale

[10] Also instrumental in the post-World War II recovery of Italy was this U.S. initiative that provided billions in economic aid to rebuild the economies of European countries.

ANSWER: Marshall Plan [accept Marshall Steinbaum Plan]

[10] The IRI invested heavily to close the economic gap between Northern and Southern Italy. That gap was one of the motivations for the creation of this separatist Italian political party, whose more radical members seek the creation of the independent state of Padania.

ANSWER: Lega Nord [or Northern League]

17. Like STN, this database allows access to CASREACT, a comprehensive guide to reaction pathways. For 10 points each:

[10] Name this ACS database produced by the Chemical Abstracts Service. Tools provided by this database include a catalogue of commercial sources, ChemPort abstracts and the interactive workspace SciPlanner.

ANSWER: SciFinder

[10] Web of Science, another popular database, helpfully allows users to sort searches by how many of these texts have been produced from a paper. In most chemistry papers, they are written in ACS style.

ANSWER: bibliographic citations [accept references; prompt on bibliographies]

[10] The citations that a journal receives are used to calculate its value for this measure of influence. The *Journal of Biological Chemistry* seems oddly unimportant when this metric is used instead of PageRank or the Eigenfactor.

ANSWER: Thomson Reuters impact factor [or IF]

18. The second of these pieces opens with a horn solo right before the soloist enters, and also features a dark second movement that its composer jokingly referred to as a “tiny wisp of a scherzo”. For 10 points each:

[10] Name these two works for soloist and orchestra. The first is in D minor and the second is in B-flat, and they were notably recorded by Emil Gilels in collaboration with Eugen Jochum.

ANSWER: Johannes Brahms’ Piano Concertos [prompt on partial answer]

[10] Leonard Bernstein infamously disavowed his performance of Brahms’ *Piano Concerto No. 1* with this eccentric Canadian pianist, known for his performances of Bach, including two recordings of the *Goldberg Variations*.

ANSWER: Glenn (Herbert) Gould

[10] Perhaps Brahms’ most popular compositions in his own time were this series of pieces for piano-four hands, based on traditional melodies. The most famous is No. 5 in F-sharp minor.

ANSWER: Hungarian Dances [or Ungarische Tänze]

19. A leader from this party launched the Golden Quadrilateral project and implemented free trade. For 10 points each:

[10] Name this leading party of the National Democratic Alliance, which was connected with the demolition of the Babri mosque and supports constructing a temple on its site.

ANSWER: Bharatiya Janata Party [or Indian People’s Party]

[10] A man with this surname quit the Indian National Congress in order to found the Bharatiya Jana Sangh party in 1951. Another man with this surname approved Manmohan Singh as governor of the Reserve Bank of India while serving as Finance Minister.

ANSWER: Mukherjee [accept variants that sound similar; accept Eric Mukherjee]

[10] Pranab Mukherjee was recruited to serve as Finance Minister during the tenure of this INC Prime Minister, who ordered the storming of the Golden Temple as part of Operation Blue Star.

ANSWER: Indira Gandhi [prompt on partial answer]

20. This work claims that “any demonstration of art succeeds inevitably in becoming impoverished” to describe the decline of Romanticism. For 10 points each:

[10] Name this 1886 work titled for an “enemy of education” and “objective description” that “tries to dress the Idea in a sensitive form.” This work includes two scenes between the caesura-loving Detractor and Theodore de Banville.

ANSWER: Symbolist Manifesto [or *Le Symbolisme*; accept translations like Symbolism]

[10] The title character of this Symbolist play throws a toilet brush into the middle of a banquet and murders the Polish king. The hard-to-translate “merdre” is the first word of this parody of Shakespearean tragedy by Alfred Jarry.

ANSWER: Ubu Roi [or King Ubu; or Ubu the King; or Ubu Rex; accept King Turd; accept other translations]

[10] Jane Taylor’s adaptation of *Ubu Roi* about the South African TRC is primarily performed using these objects. Maurice Maeterlinck’s *The Death of Tintagiles* is acted by these objects, which are the focus of bunraku theatre.

ANSWER: puppets [or marionettes or other equivalents]