

Chicago Open 2016: "An Insatiable Kingpin of International Meme-Laundering"

Packet By Editors (3)

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Tossups

1. Prior to this battle, Prospero Colonna was caught dining while his cavalry was captured by a force that took the unexpected Col de l'Argentiere pass through the mountains. The victorious commander at this battle was knighted on the field by Seigneur de Bayard and had appointed his mother Louise of Savoy regent before the campaign. The winning side in this battle was reinforced by troops under Bartolomeo d'Alviano arriving from Lodi. Prior to this battle, a treaty was signed which awarded Massimiliano Sforza the booby prize of the Duchy of Nemours. The 1438 Pragmatic Sanction of Bourges was annulled by a Concordat signed after this battle with Pope (*) Leo X. Pikemen under Matthaus Schiner were defeated in this battle fought near Milan. For 10 points, name this battle in the War of the League of Cambrai, a 1515 victory for Francis I of France over the Papacy and the Old Swiss Confederacy.

ANSWER: Battle of Marignano

2. This work's third movement opens with a melody for solo clarinet that alternates two bars of 4/8 time with one bar of 3/16 time. A recurring atonal theme from this work is introduced by three trombones and a tuba, playing in major thirds an octave apart. Takashi Harada has played a prominent solo part on many recordings of this piece. A different solo part, for piano, was played by its premiere by its composer's future wife Yvonne Loriod. One movement from this piece contains its composer's first use of a "chromatic" duration series, a concept he would use a year later in his *Four* (*) *Rhythm Studies*. A duet between piccolo and bassoon opens its second "Love Song" movement; and its movement "Joy of the Blood of the Stars" features the return of its "statue theme." This second piece in its composer's Tristan trilogy features a notable part for *ondes martenot*. For 10 points, name this Sanskrit-titled symphony by Olivier Messiaen.

ANSWER: Turangalila-Symphonie

3. The book that codified this technique, which was coauthored by Xue-Min Cheng, divides it into five strategies, including topological and transform-based. The CHIRON and LHASA software packages implement this technique by constructing an EXTGT tree. Practitioners of this technique try to identify ancillary keying elements. This process relies on labelling groups as either A-class, E-class, or G-class donors, then determining whether there is a consonant or dissonant pattern when latent (*) polarities alternate between positive and negative. *Umpolung* can be achieved in this technique using a formyl-acyl transformation. Double arrows are used in this technique to represent transforms between synthons and synthetic equivalents. For 10 points, name this technique formalized by EJ Corey, which plans an organic synthesis by starting from the target and working backwards.

ANSWER: retrosynthesis [or retrosynthetic analysis; or antithetic analysis; prompt on organic synthesis]

4. In one book, a man explains that this character's words "I set forth" should not be translated as "Je me mis" [zhurr murr mee] . This character inspires men to join him by saying: "Consider well your seed / You were not born to live as a mere brute does / But for the pursuit of knowledge and the good." A chapter named for this character describes two men carrying a hundred-pound pot of soup on poles. This character describes celebrating sighting the highest mountain he'd ever seen, before beginning to weep, as he perceives the (*) storm that will kill him and his crew. In *If This is a Man*, Primo Levi teaches this character's speech to Jean, to help him learn Italian. This character inhabits the larger prong of a two-pronged flame, which he shares with a companion; and he died after sailing past Hercules' pillars at the Western boundary of the navigable seas. For 10 points, name this character from the Eighth Circle of Dante's *Inferno*, who is punished with Diomedes for their deceit of the Trojans.

ANSWER: Ulysses [or Ulissee]

5. Benjamin A. Baker's play *A Glance at New York* introduced a popular stock character in this profession into 19th century American theater, named Mose. General Alexander Shaler reformed an organization of New Yorkers in this profession after taking over from Elisha Kingsland. In the 19th century, men in this profession might only service people who had marks from companies such as the Philadelphia Contributionship. In early America, youths known as (*) "laddies" worked in this profession. In 1910, 28 people in this profession known as the "Lost Crew" were killed during the Big Blowup. Rival gangs in this profession once fought to secure "first water" rights in New York. A union of 30 volunteers in this profession was organized in Philadelphia in 1736 at the suggestion of Ben Franklin. For 10 points, 343 members of what profession died while responding to the World Trade Center attacks on 9/11?
ANSWER: **firefighters** [or **firemen** or volunteer **firefighters**]

6. In some accounts, this faith's founder was accompanied by a lion named Togare. Contemporary writing about this faith likens its ritual spaces to an "intellectual decompression chamber." This religion claims that desire, timing, imagery, direction, and a "Balance Factor" are the five factors which let a person's will affect the world. A warning not to give one's opinion or advice unless asked for it begins a set of eleven rules of conduct promulgated by this faith, which was the subject of a 1990 history by Blanche Barton. A sacred text in this religion, which often uses the word (*) *Shemhamforash*, is partly plagiarized from the pseudonymous Ragnar Redbeard. Congregations called "grottos" preserve this faith, and its symbols include the sigil of Baphomet, which resembles a goat's head. For 10 points, name this religious movement that glorifies self-interest, whose *Bible* was compiled by Anton LaVey.
ANSWER: **Church** of **Satan** [or LaVeyan **Satanism**]

7. For a double-well, the time derivative of this quantity equals the Laplacian of it plus twice this quantity, times one minus this quantity squared, in a version of the Cahn-Hilliard equation. This quantity is conserved in Class B models in the Hohenberg-Halperin classification for it, while in Class A models it is not. A topological defect is one whose winding number on the field space of this quantity is nonzero, such as (*) hedgehog defects in ferromagnets. This quantity is the same as the wavefunction for a Bose-Einstein condensate, and it equals the difference in density between vapor and liquid at VLE. When this quantity is coarse-grained, as in the Ginzburg-Landau potential, it's usually just assumed to be the magnetization. For 10 points, name this quantity equal to the derivative of free energy with respect to the external field, which Paul Ehrenfest defined to be discontinuous in a first-order phase transition.
ANSWER: **order parameter** [prompt on m; prompt on psi; prompt on order]

8. According to Giles of Rome, this philosopher's sons spread his ideas to the court of Frederick II Hohenstaufen, where they lived. The school of thought named for him was coined by Ernest Renan's doctoral thesis. He claimed that humans were generated by the actualization of earth by celestial bodies, against an opponent's support of spontaneous generation. He wrote a treatise claiming that the study of philosophy was commanded by Divine Law, and therefore not blasphemous. This non-Jewish philosopher's belief that all humans share a single consciousness, which is called (*) "monopsychism," was attacked by Thomas Aquinas in *On the Unity of the Intellect*. This author of the *Decisive Treatise* was commissioned by Ibn Tufayl to summarize Aristotle in the commentaries he produced over three decades. For 10 points, name this Arabic philosopher who defended philosophy against the attacks of Al-Ghazali in his *The Incoherence of the Incoherence*.
ANSWER: **Averroes** [or Abū l-Walīd Muḥammad Ibn 'Aḥmad **Ibn Rushd**]

9. One character in this play is chastised for sitting in Betty Carstairs' box for the cricket match at Lord's rather than in the grandstand with his lover. Another character in this play is miffed to receive the reply "I have given you exactly what you deserve. No less and certainly no more" when asking if he has received his "remove." That character in this play is caught while doing an impression of a man who forced him to explain a pun that he laughed at out of politeness, but didn't understand. Dr. Frobisher asks the protagonist of this play to deliver his (*) farewell speech before Fletcher's, so as not to provide an "anti-climax." Its protagonist is encouraged by Frank Hunter to leave his unfaithful wife Millie, and is deeply hurt to discover that he is referred to as "the Himmler of the lower fifth." For 10 points, Taplow gives retiring Latin teacher Andrew-Crocker Harris a copy of the title translation of Aeschylus' *Agamemnon* in what one-act play by Terence Rattigan?
ANSWER: **The Browning Version**

10. This party's critics include Princeton professor Kim Lane Scheppele, who lauded the critiques of this party's human rights record levied in the Tavares report. This party had close ties to the leader of Quaestor Group, a brokerage firm which collapsed in February 2015, and was accused of cronyism in nationalizing its country's tobacco industry shortly thereafter. The leader of this party declared June 4 to be a "Day of National Cohesion" to commemorate territorial losses. Under this party's watch, an abandoned train station became a Holocaust museum called the House of (*) Fates, to complement the existing *Terrorhaza*. This party oversaw the building of a razor wire fence along its country's southeast border and made sweeping constitutional amendments before losing its two-thirds supermajority in 2015, largely due to gains by the far-right party Jobbik. For 10 points, what illiberal party led by Viktor Orban currently dominates Hungary?

ANSWER: **Fidesz** party [fee-DESS] [or **Fidesz** -- Magyar Polgári Szövetség; or **Alliance of Young Democrats**]

11. *Two answers required.* A 2004 paper by Alexander Krot et al. distinguishes structures named for the presence of *these two* elements from amoeboid olivine aggregates and from chondrules rich in only one of them. A paper by Martin Bizzarro et al. determined that a class of materials named for these elements formed in as few as 50,000 years; after that, "bipolar outflow" pushed them outwards. Neither of them is sodium, but these *two* metals partly compose a borosilicate commonly used as a bulking agent in many leave-on cosmetics. Silicates containing both of these metals include zoisite and anorthite. The cooling of the protoplanetary disk created namesake (*) "inclusions" rich in these two metals millions of years before chondrules, whose examples in meteorites are the oldest known materials in the solar system. For 10 points, identify these two elements, the lightest p-block metal and the cationic component of limestone.

ANSWER: **calcium** and **aluminum** [accept **calcium-aluminum**-rich **inclusion**s until "borosilicate"]

12. This man explained his political beliefs in a speech at Glasgow University outlining "The Knowsley Creed." This politician was mocked with a couplet about his namesake stagecoach gliding down "romantic Ashbourne," a zinger popularized by Daniel O'Connell. After resigning from Lord Grey's government, he joined Lord Ripon and Sir James Graham as a group of dissident Whigs. That faction led by this man had moderate views similar to those espoused in the Tamworth Manifesto, the founding document of a party he led until (*) 1868. This Prime Minister, the leader of a namesake "Dilly" faction, had a largely unknown Cabinet that was greeted with the shout of "Who? Who?" by the deaf Duke of Wellington. For 10 points, what three-time Prime Minister was the longest serving leader of the British Conservative Party and was succeeded as leader by Benjamin Disraeli?

ANSWER: Earl of **Derby** [or Lord **Stanley**; or Edward **Stanley**; or Edward **Smith-Stanley**]

13. After this work's protagonist refuses to wrestle with his older brother, his brother puts a perpetually empty fruit bowl on top of his head. One character in this work repeatedly asks the question: "What is time made of?" One character in this work disables a fusebox at a Harrods, so that he and his friends can steal a tiger from a carousel display. Two characters in this work are inspired by an Emily Dickinson poem to travel around South America recording volcanoes. The author uses syllogistic logic to puzzle through whether a certain man was blinded for his portrayal of Helen of Troy in this work's third (*) appendix. While in Argentina, this work's protagonist meets his former lover and that lover's new boyfriend, a Peruvian named Ancash. This work's first main section is a series of translations of fragments by the ancient Greek poet Stesichoros. For 10 points, name this update of the myth of Herakles and Geryon, a "novel in verse" by Anne Carson.

ANSWER: **Autobiography of Red**

14. This phenomenon's effect on "iconic architecture" is studied by Leslie Sklair, who advocates the type of "critical" studies of it presented by Richard Appelbaum and William I. Robinson. Paul Hirst is among skeptics of this phenomenon opposed by David Held's "transformationalist" view of it. A three-factor national ranking of this phenomenon is released by the Swiss think tank KOF. A theory of this phenomenon in which instances of "something" get overwhelmed by "nothing" is laid out in a 2006 book by George (*) Ritzer. The cultural dimensions of *this* are studied in *Modernity at Large*, by NYU anthropologist Arjun Appadurai. A 2002 book partly titled for this process, by a former Clinton advisor, lambasts the IMF's "market fundamentalism." For 10 points, name this process written about by Joseph Stiglitz along with *Its Discontents*, which integrates formerly disparate economies and societies.

ANSWER: **globalization** [Ritzer's book is called *The Globalization of Nothing*]

15. This character is educated in a two-story schoolhouse of such labyrinthine design that one cannot tell on which floor one is, at any given time. Upon leaving a party, this character is shocked to find that a visitor left behind a cloak of rare furs resembling one that he himself designed. At the end of the work in which he appears, a mirror appears, and this character sees his own reflection dabbled in blood. While attempting to seduce an Italian noblewoman at a (*) masquerade, he is confronted by a man in a blue velvet cloak and black silk mask. He meets his main enemy, who cannot speak above a low whisper, while they are students at a walled academy run by Dr. Bransby. After this character bankrupts Glendinning at cards, this man's enemy bursts in to demonstrate that he is cheating, forcing this man to flee Oxford. For 10 points, identify this namesake of an Edgar Allan Poe short story who, upon stabbing his doppelganger, finds that he has destroyed himself.
ANSWER: William Wilson [accept either underlined portion; accept "the narrator of William Wilson"]

16. Graves' *The Greek Myths* relates that a person in this occupation had his guts mixed into "umble soup" in a gruesome sacrifice to Lycaean Zeus. In a Solomon-like myth, people in this occupation dispute custody of a baby girl named Alope before king Cercyon. Perhaps punning on a Greek word for "apple," nymphs called Epimelides were thought to protect this occupation. It's not prince or king, but one of these people lay in a cave in Mount Latmos to be visited by his divine lover. One of them led Dionysus to an underworld entrance at the bottomless Alcyonian lake, but then died; Dionysus fashioned a fig-leaf phallus and (*) sodomized himself on the tomb of that one, Prosymnus. Before ritually castrating himself and becoming a vegetation god, Attis had this occupation, which John Keats's version ascribed to Selene's sleeping lover Endymion. Pan is the patron god of, for 10 points, what primary subjects of pastoral poetry?
ANSWER: shepherds

17. A man drives a cart in front of a mass of soldiers in the employ of Ferrante I of Aragon in a work of this type by Guglielmo Monaco in Naples with a large cannonball in it. The four Evangelists surround scenes of the *Entombment* and *Resurrection* in a work of this type by Jacopo Sansovino. Mercury is partially obscured by one of these structures in an ancient example which inspired one in Rome sculpted by Filarete. Michelangelo (*) coined the nickname for a work of this type which accompanied an earlier one on the eight virtues and John the Baptist by Andrea Pisano. Pope Eugenius IV commissioned a work of this type for the basilica of St. Peter's. The Bargello contains the original plates of the *Sacrifice of Isaac* scenes two artists made in a competition to design one of these objects. For 10 points, name this type of structure exemplified by the Gates of Paradise in the Florence Baptistery.
ANSWER: doors [or entrance; accept gate until "Gates of Paradise"; prompt on sculpture]

18. A man who was president of this country established a farm in 1928 that he named "The Endless Struggle." A former leader of this country said that Venezuelans spat on Richard Nixon in 1958 because they were spitting "at a foreign policy." In 1974, a president of it proposed a law preventing the extradition of foreigners solely to protect fugitive American financier Robert Vesco. In 1948, a bloody 44-day civil war featured the Caribbean (*) Legion overthrowing the head of this country. Another man to lead it won the Nobel Peace Prize in 1987 for creating the Esquipulas Peace Agreement to settle various Central American conflicts. An earlier president of this country created a constitution allowing for a 7,000 member national police force. For 10 points, name this country led by Oscar Arias and Jose Figueres Ferrer, the latter of whom abolished the army in 1948.
ANSWER: Republic of Costa Rica

19. Species in this genus secrete the K5 killer toxin with beta-glucanase activity to hydrolyze target cell walls. The most famous member of this genus was found in 2009 to be identical to *Komagataella phaffi*. The *augusta* species in this eukaryotic genus is used to study peroxisome function since it expresses formate dehydrogenase and di-hydroxy-acetone synthase. The AOX1 promoter is native to a species in this genus. GlycoFi engineered a species in this genus for both O- and N-linked human glycosylation patterns. A haploid-only (*) homothalloid organism in this genus has species name *methanolica*, because, like most of the rest of this genus, it is methylotrophic. This genus in the same family as *Candida* includes the species *anomala* and *pastoris*. For 10 points, name this genus which, like *Saccharomyces*, is often used for recombinant protein expression in yeast.
ANSWER: Pichia [PICK-ee-uh] [or Pichia pastoris; or Pichia anomala; or Pichia augusta; or Pichia methanolica]

20. One artist from this country died before his MoMA retrospective *Alibis*, which included his pink-tinted photographs made by exposing film to uranium. That same artist from this country claimed that the title food "manifests everything artists are supposed to be" when talking about his *Apparatus Whereby One Potato Can Orbit Another*. An artist from this country evoked Lichtenstein's Ben Day technique in his works such as *Carl Andre in Delft* and *Raster Drawing (Portrait of (*) Lee Harvey Oswald)* and painted only a corner of the canvas in *Higher Beings Commanded: Paint the Upper-Right Corner Black!* Another Capitalist Realist artist from this country declared that the title color "is the epitome of non-statement" when describing his *Grey Paintings* and is known for his blurry photo paintings. For 10 points, name this country, the home of Sigmar Polke and Gerhard Richter.
ANSWER: Germany [or West Germany or East Germany]

21. It has nothing to do with France, but a man appointed to this post in 1933 teamed with Freud to write a widely panned psychoanalysis of Woodrow Wilson. A controversial recent holder of this post met with Strategy-31 representatives in a 2012 meeting partially captured on YouTube. In 1933, it was taken over by William C. Bullitt, who threw lavish parties featuring one hundred zebra finches and a drunken bear at the official residence for this post, the Spaso House. It was held during much of World War II by (*) W. Averell Harriman, whose deputy assessed a country's "instinctive...sense of insecurity." An Andrew Jackson campaign zinger claimed a man in this post acted as a pimp in providing prostitutes for a ruler. It was first officially held by John Quincy Adams. For 10 points, George Kennan was working under a man in what diplomatic position when he wrote the Long Telegram?
ANSWER: US Ambassador to Russia [or US Ambassador to the Soviet Union or US Ambassador to USSR; or Minister to Russia]

Bonuses

1. Identify the following about the feudal system, for 10 points each.

[10] Through this practice, tenants were allowed to live on the land of a lord in exchange for performing agricultural tasks or paying rent. After a relief was paid, the tenant's heirs continued working on the land in this system.

ANSWER: socage

[10] This class of people were not subject to socage laws, because the service they provided to their lords was of a military nature. These nobles were supposed to adhere to the chivalric code and had generally risen through the ranks of page and squire.

ANSWER: knights

[10] This is the term for money paid by a knight in lieu of participating in military service for a lord. It was eventually turned into a general tax on knights, and is sometimes named for a key part of a knight's military equipment.

ANSWER: scutage [or shield money or ecuage]

2. With his colleague John Anderson, this man developed a theory of Human Associative Memory, affectionately shortened to HAM. For 10 points each:

[10] Name this psychologist, who proposed that people comprehend stories by updating "situational models" and tracking characters' goals. With his wife Sharon, he developed the "DESC" script for assertive communication.

ANSWER: Gordon H. Bower

[10] Bower taught at this university, where he notably asked Philip Zimbardo what the F was up during a 1971 prison experiment.

ANSWER: Stanford University

[10] Bower once led the namesake Society of this interdisciplinary field, which often refers to vision theorist David Marr's three "levels of analysis" in studying the computation, representation, and implementation of mental content. At Rutgers, Zenon Pylyshyn runs a "Center for" this two-word field.

ANSWER: cognitive science [do NOT accept or prompt on any alternative answers; this is A Thing]

3. This novel begins with a flood on the protagonist's ninth birthday. For 10 points each:

[10] Name this novel narrated by G., in which the ex-schoolteacher Mr. Slime becomes a populist political leader and takes over Mr. Creighton's village.

ANSWER: *In the Castle of My Skin*

[10] *In the Castle of My Skin* is by this Barbadian author who contributed to Caribbean postcolonial studies with his essay collection *The Pleasures of Exile*.

ANSWER: George Lamming

[10] The title for *In the Castle of My Skin* comes from *Epitaph for the Young*, by this Saint Lucian poet of *Omeros* and *Dream on Monkey Mountain*.

ANSWER: Derek Walcott

4. This institution was co-founded by Harry Scherman, a former employee at the J. Walter Thompson Company. For 10 points each:

[10] What institution was started in 1926 and was identified as a symbol of middlebrow and middle-class culture by cultural historians Janice Radway and Joan Shelley Rubin?

ANSWER: Book-of-the-Month Club

[10] This man, the so-called "Sage of Emporia," was a founding editor of the Book-of-the-Month Club. The editor of the *Emporia Gazette*, this Progressive once claimed "Roosevelt bit me and I went mad."

ANSWER: William Allen White

[10] White's most famous editorial was an attack on William Jennings Bryan that asked "what's the matter with" this state.

ANSWER: Kansas

5. Structure factors are used to interpret the results of this technique, which was used to generate the majority of the protein structures in the Protein Data Bank. For 10 points each:

[10] Name this technique which makes use of Bragg's Law and high-energy incident radiation on a protein sample in order to determine its 3D structure.

ANSWER: protein **X-ray crystallography** [or **X-ray diffraction**; prompt on partial answer]

[10] Using a viewer like PyMOL or Jmol, PDB files can easily be transformed into visual representations of proteins, such as this common diagram, in which beta sheets are represented by arrows and alpha helices are represented by thick coils.

ANSWER: **ribbon** diagram [or **Richardson** diagram]

[10] For each atom, the PDB files report its coordinates, occupancy, and also this quantity, which is roughly the mean squared displacement of the atom from vibrations. It equals $\frac{8}{3} \pi$ squared times the trace of the displacement tensor.

ANSWER: **B**-factor [or **temperature** factor]

6. In the chapter titled for it, this concept is described as the echo instead of an answer that is heard when one shouts in the "Sibyl-cave of Destiny." For 10 points each:

[10] Name this term for the loss of religious belief. It is described as being "shut out from Hope," and having one's heart "unvisited by any heavenly dew-drop," as it smolders "in sulphurous slow-consuming fire."

ANSWER: the "**Everlasting No**"

[10] The "Everlasting No" appears in *Sartor Resartus*, a novel by this Scottish author whose book *The French Revolution: A History* inspired Dickens' depiction of the revolution in *A Tale of Two Cities*.

ANSWER: Thomas **Carlyle**

[10] Carlyle's wife is the title woman in this poem by Leigh Hunt, in which she performs the title action after "Jumping from the chair she sat in," which the poet will remember even if he grows weary, sad, and old.

ANSWER: "**Jenny Kissed Me**"

7. This protein's receptor is in the ErbB family along with HER2/neu, the receptor targeted by Herceptin. For 10 points each:

[10] Name this 53-amino acid protein which has six cysteine residues that form three intramolecular disulfide bonds. Its receptor is also targeted by chemotherapeutics like cetuximab and erlotinib.

ANSWER: **epidermal growth factor** [or **EGF**; or **epidermal growth factor receptor**; or **EGFR**]

[10] EGFR dimerizes when it binds its ligand, activating a signaling cascade involving auto-phosphorylation of this amino acid. This amino acid with an aromatic side chain is the starting point for biosynthesis of L-DOPA.

ANSWER: **tyrosine** [or **Y**; or **Tyr**]

[10] JAKs, another family of tyrosine kinases, are regulated by these proteins, which compete for STATs in binding the SH2 residues on the kinase actuator domain. The namesake "box" on these proteins recruits ubiquitin ligases.

ANSWER: **SOCS** [or **suppressors of cytokine signaling**]

8. This artist built his own boat called *Le Botin* which also served as a studio from which he could paint his landscapes. For 10 points each:

[10] Identify this proto-Impressionist of paintings such as *Return of the Flock* and *Springtime*. Van Gogh thrice painted this artist's garden.

ANSWER: Charles-Francois **Daubigny**

[10] This Impressionist took up Daubigny's idea of constructing a studio in a boat in 1872. Edouard Manet painted this artist of 1877's smokey *Le Gare Saint-Lazare* in that boat.

ANSWER: Claude **Monet** [or Oscar-Claude **Monet**]

[10] Daubigny's uncle and teacher Pierre specialized in these types of paintings. The Flemish Horenbout family was one of the first in Europe to make paintings in this genre, and Nicholas Hilliard was a successful English painter of "Limnings," Tudor-era works of this type.

ANSWER: **miniatures** [or **miniature** portraits; prompt on **portraits**]

9. Legendary figures in this country's lore include a prince named Havelock, a mysterious destructive goddess named Yngona, and forest spirits called *snogsnufo*. For 10 points each:

[10] Name this European country. A mytho-history of its people by Saxo Grammaticus, whose characters include "Prince Amleth," was probably a source for Shakespeare.

ANSWER: **Denmark** [or **Danmark**]

[10] Danish lore includes a variant of this Germanic spirit or elf, whose name may be etymologically linked to the alder tree. It got literary fame in a 1782 poem in which it takes the life of an infant.

ANSWER: the **Erlking** [or **Erlkönig**; or **Ellerkonge**; or **Elf-King**][the poem is by Goethe]

[10] In *Gesta Danorum*, Saxo retells the story of this huge Norse strongman, who inadvertently kills King Vikar as the first of his three great crimes. Odin favored this warrior with a ridiculous kill count as Thor sought to bring him down.

ANSWER: **Starkad** [or **Starcatheus**; or **Starkathr**]

10. After this man was diagnosed with polycythemia, he joked that he was "suffering from an excess of reds." For 10 points each:

[10] What Archbishop was controversially put on trial by Tito and convicted for treason for his relationship with the Ustase government during World War II? While eventually released from prison, he died soon after and was declared a martyr years later by Pope John Paul II.

ANSWER: Aloysius **Stepinac**

[10] During the war, Stepinac worked alongside the Ustase, although he did condemn their atrocities. The Ustase were a nationalist group of this ethnicity, which also named the Axis puppet state they led during the war.

ANSWER: **Croats** [or **Croatia**]

[10] The Independent State of Croatia was led by Ante Pavelic, who was referred to by what title, loosely translated as "supreme leader"? It was equivalent to Hitler's title of "Führer" or Mussolini's "Il Duce."

ANSWER: **Poglavnik**

11. In the title of a study by media theorist Lisa Gitelman, this adverbial phrase modifies *New*. For 10 points each:

[10] Give this two-word adverbial phrase commonly used in English translations of Continental philosophers such as Heidegger and Derrida. When used to modify an adjective, this phrase implies that the adjective is necessarily pre-existent in any human cognition of the thing.

ANSWER: **always already** [or **always-already** given; or **always-already** present; accept **Always Already** *New*]

[10] Gayatri Spivak's English translation of this Derrida tome used the phrase "always-already" a whopping 82 times. It claims "There is nothing outside the text," and shows Thoth chillin' on the cover.

ANSWER: **Of Grammatology** [or **De la grammatologie**]

[10] This other overuser of "always already," a comp lit professor at UC-Berkeley, asserted that human lives matter due to their quality of "grievability" in her 2009 book *Frames of War*. She also wrote *Excitable Speech*.

ANSWER: Judith **Butler**

12. You are quizbowl's favorite Israeli-Canadian geometric topologist, Dror Bar-Natan. Answer some questions about yourself, for 10 points each.

[10] One of your favorite constructs is this categorification of the Jones polynomial, which preserves more information about a knot than the Jones polynomial.

ANSWER: **Khovanov homology**

[10] You love using resolution cubes to show that the Khovanov homology is invariant under these three knot moves. These moves help to determine whether two knots are equivalent to each other up to ambient isotopy.

ANSWER: **Reidemeister** moves [or **R** moves]

[10] When you gave your first ever knot theory lecture, you probably showed your class the cinquefoil knot, a knot containing this many crossings. Polynomial equations of this degree or higher cannot be solved by radicals.

ANSWER: **five**

13. A ruler of this dynasty had a concubine who requested a lake of alcohol and then had 3,000 men drink it dry; of course, they drowned. For 10 points each:

[10] What dynasty's troops, under the command of the corrupt Jie, lost to the forces of a man named Tang at the battle of Mingtiao?

ANSWER: Xia dynasty

[10] The names of the Xia dynasty rulers have not been discovered written on these pieces of turtle shell or bone used for divination purposes during the Shang dynasty. Inscriptions on these things do list Shang rulers.

ANSWER: oracle bones

[10] This school of Chinese historians during the 1910's and 1920's argued that dynasties like the Xia did not actually exist. In 1993, Li Xueqin argued to leave behind this so-called "Skeptical School"; his speech was the manifesto for a so-called "Believing" school of thought.

ANSWER: Doubting Antiquity [accept anything with the words Doubting and Antiquity; or Yigupai; or Yigu Sichao]

14. Answer the following about strategy and tactics in the United States armed forces, for 10 points each.

[10] The U.S. Army publishes hundreds of these booklets, which provide soldiers with advice on how to handle specific situations while deployed.

ANSWER: Army Field Manuals

[10] Between the Persian Gulf and Iraq wars, many officers used this phrase to denote a putative impending huge shift toward high-tech weaponry, sensor systems, and precision strike capacity. Phrase or acronym acceptable.

ANSWER: revolution in military affairs [or RMA]

[10] While theorizing about dogfighting, John Boyd proposed this four-step procedure by which actors in combat situations take in data and then choose their next move. Getting "inside" an opponent's procedure of this type can disrupt their planning.

ANSWER: OODA loop [or observe, orient, decide, act; or observation, orientation, decision, action]

15. Berlioz suggested that Mozart plagiarized some of the Commendatore's music in *Don Giovanni* from this opera, in which the title character sings "Divinités du Styx." For 10 points each:

[10] Name this 1767 opera. It was the second "reform opera" its composer wrote with Ranieri de' Calzabigi, after *Orfeo ed Euridice*, and was written before his French-language operas about Iphigenia.

ANSWER: Alceste [grudgingly accept Alcestis]

[10] This 18th-century German composer wrote the music for *Alceste* and *Orfeo ed Euridice*, the latter of which contains his most famous aria, "Che farò senza Euridice."

ANSWER: Christoph Willibald Gluck

[10] In the 1770's-80's, Parisian operagoers were divided between "Gluckists" and fans of this Neapolitan composer of *La Cecchina*, a favorite of Marie Antoinette. The Paris Opera commissioned him and Gluck to write rival settings of *Iphigénie en Tauride*.

ANSWER: Niccolò Piccinni [in a rare exception to the vowel rule, do NOT accept or prompt on "Puccini," as that's a different composer!]

16. *Kuchipudi* is a South Asian form of this activity, and the *rasa lila* was a night on which the *gopi* girls did this with Krishna for what felt like 4.32 billion years. For 10 points each:

[10] Name this performing art which the Apsaras are awesome at. In his dwarf-crushing aspect Nataraja, Shiva is the "Lord" of it.

ANSWER: dance [or dancing]

[10] More specifically, Shiva performs in this masculine dance style, which when done by him accelerates the destruction and regeneration of the universe. Parvati dances a counterpart of it called *lasya*.

ANSWER: tandavam [or thandavam; or *ananda tandava*; or *rudra tandava*; there are apparently 108 subtypes so hopefully nobody gives those, but anti-prompt if someone does]

[10] This classical Sanskrit treatise on such arts as dance, music, and theater describes the details of *tandava* in the fourth of its 36 surviving sections. It is attributed to a Bharata, but not the same Bharata who was Rama's brother.

ANSWER: Natyashastra [or Natya Śāstra]

17. The life of Emily Dickinson inspired this author's creation of the title reclusive poet in her play *Alison's House*. For 10 points each:

[10] Name this author of the play *Trifles*, who co-founded The Provincetown Players with her husband George Cram Cook.

ANSWER: Susan (Keating) **Glaspell**

[10] Glaspell reworked *Trifles* into this short story in which Martha Hale and Mrs. Peters find a strangled canary in a sewing box, suggesting a motive for why Mrs. Wright might have strangled her husband.

ANSWER: "A **Jury of Her Peers**"

[10] The Provincetown Players briefly presented an adaptation of this author's short story "The Eldest" before she withdrew her permission. She wrote the novels *So Big* and *Show Boat*.

ANSWER: Edna **Ferber**

18. This composer wrote a mass taking his own chanson "Se la face ay pale" as the cantus firmus. For 10 points each:

[10] Name this 15th-century Burgundian composer who wrote the motet *Nuper Rosarum Flores* for the consecration of the Florence Cathedral.

ANSWER: Guillaume **Dufay** [doo-fah-ee] [or Guillaume **Du Fayt**]

[10] Dufay was an early and prominent practitioner of this homophonic technique, in which three voices move in parallel motion, with the lower two voices a fourth and sixth respectively below the upper voice.

ANSWER: **fauxbourdon**

[10] Dufay is sometimes credited with being the first composer to write a mass based on this ubiquitous cantus firmus tune, which describes a soldier.

ANSWER: "L' **homme armé**"

19. Answer some questions about the diffraction limit in microscopy, for 10 points each:

[10] This scientist stated that microscopes could not resolve features smaller than the wavelength of light used over twice the numerical aperture. He also names a number which quantifies a material's dispersion.

ANSWER: Ernst **Abbé**

[10] Stephen Hell developed this super-resolution microscopy technique where two opposing lenses are used to selectively activate fluorescent markers, allowing resolution of figures with dimensions in the tens of nanometres.

ANSWER: **STED** microscopy [or **stimulated emission depletion** microscopy]

[10] SNOM can be used to bypass Abbé's limit by placing the tip of an optical fibre in this region, where evanescent waves carrying information about the surface can be detected.

ANSWER: the **near field**

20. This work's protagonist causes consternation by repeatedly splashing around in a fountain in the dead of night, when he is attacked by a sense of anxiety and fear of the dark. For 10 points each:

[10] Name this unfinished novella that describes the title author's gradual mental breakdown as he stays with pastor Johann Friedrich Oberlin in the village of Waldbach.

ANSWER: **Lenz**

[10] *Lenz* is by Georg Büchner, who wrote this play in which the title historical figure resists the violent excesses of the French Revolutionary Tribunal he helped create, but is condemned by Robespierre.

ANSWER: **Danton's Death**

[10] The real-life Lenz belonged to this emotionally turbulent 18th-century German literary movement, which took its name from a play by Friedrich von Klinger.

ANSWER: **Sturm und Drang**

21. This system relies on namesake triples which state that, given pre-condition Q , and a statement of code S , then post-condition R must be satisfied. For 10 points each:

[10] Identify this system for proving a computer program's correctness. The consequence and conditional rules are part of this system.

ANSWER: **Hoare logic**

[10] A more pragmatic way of automatically finding bugs in a computer program is to run an analysis described by this adjective. In Java, methods with this keyword can be called without instantiating the class they belong to.

ANSWER: **static** [or **static** analysis or **static** methods]

[10] This logician is the alphabetically first namesake of a doubly-eponymous formulation that, in simple terms, connects mathematical proofs to programs. He also lends his name to the process of converting a function with multiple arguments into several functions, each with one argument.

ANSWER: Haskell **Curry** [or **currying**; the formulation is the **Curry**-Howard correspondence]