

2023 IQBT Undergraduate Championship

Questions written by: Mike Cheyne, Erik Christensen, Kurtis Droge, Joseph Krol, James Lasker, Leo Law, Jonathan Magin, Ben Miller, Matt Weiner, and Chandler West

Questions edited by: Will Alston, Matt Bollinger, Emmett Laurie, John Lawrence, Evan Lynch, Eric Mukherjee, and Ryan Rosenberg

Round 5 – Tossups

1. According to Visayan folklore, a prince from this dynasty named Sri Lumay founded a state that governed Cebu (“seh-BOO”) until Spanish conquest. Another people’s king Surya-varman I (“the first”) may have requested that this dynasty launch a campaign which captured the Kadatuan palace in Palembang. Despite being a foreign conqueror, this dynasty’s prince Ellalan (“ay-LAH-lun”) is regarded as one of the greatest rulers of Anuradha-pura (“ah-noo-RAH-dah-poor”). At its height, it built three great “Living Temples” including (*) Brihad-isvara (“BREE-huh-DEESH-vuh-ruh”) in its capital of Thanjavur (“tun-JAH-voor”). This empire launched coastal attacks that ended Srivijayan (“shree-VIJ-uh-yun”) hegemony in the straits of Malacca under its rulers Rajendra I (“the first”) and Rajaraja I (“the first”). A thalasso-craic empire based in South India was built by, for 10 points, what Tamil dynasty which lasted over a thousand years?

ANSWER: Chola empire [or Chola Dynasty]

2. The first book of Nonnus’s *Dionysiaca* (“DYE-uh-niss-YAH-kuh”) depicts this figure’s deception by Cadmus, who visits him in the guise of a shepherd. The Fates weaken this figure by giving him wine in a story from Apollodorus. According to the *Homeric Hymn to Apollo*, Hera conceived this figure partheno-genically to get back at Zeus for the birth of Athena. Hermes and Aegipan (“ay-JIP-pan”) get past this figure’s servant, Delphyne (“del-FYE-nee”), to retrieve the stolen (*) sinews of Zeus. The animal totem of the Egyptian god Set is often likened to this figure from Greek mythology, who is sometimes depicted standing upright with two snake tails for legs. The Olympian gods turn into animals and flee to Egypt to escape from this hundred headed monster. For 10 points, name this husband of Echidna whose fiery breath causes Mount Etna to erupt.

ANSWER: Typhon (“TYE-fun”)

3. A low temperature neon matrix can be used to isolate unstable octa-carbonyl complexes based around atoms from this group. Slow accumulation of helium gas can cause crystals of the bromide of a member of this group to explode when heated. A toxic member of this group of elements is almost exclusively used in X-ray windows for synchrotron (“SIN-kruh-tron”) experiments. A suspension of a salt of a member of this group is a (*) milky-white solution used as a digestive radio-contrast agent; that member of this group conventionally provides the green color in fireworks. A common test for carbon dioxide bubbles the gas through a hydroxide of a member of this group; that hydroxide is known as lime-water. For 10 points, name this group of the periodic table, whose members include radium, barium and calcium.

ANSWER: alkaline earth metals [or alkali earth metals, or Group 2; reject “alkali metals”]

4. In a story told within a novel, a woman cries “Arise, Magician!” as she uses one of these objects on a girl, magically enslaving her to a bearded man in Oriental robes. In a story titled for one of these objects, the protagonist drops a wine glass while toasting newlyweds after glimpsing his reflection in a mirror. This object names the mesmeric “lady” whom Miles Coverdale consults in the opening of *The Blithedale Romance*.

Joseph (*) Moody inspired a story whose protagonist is abandoned by his fiancée Elizabeth for refusing to stop using one of these objects. That story ends with the protagonist on his deathbed telling his parishioners that he sees one of these objects “on every visage.” For 10 points, Reverend Hooper wears what sort of black garment on his face in a story by Nathaniel Hawthorne?

ANSWER: veil [accept silver veil; accept black veil; accept The Veiled Lady; accept “The Minister’s Black Veil”]

5. A variant of this instrument plays the main theme of the film score to *Picnic at Hanging Rock*. Another variant of this instrument is used in a throwing contest in Laos, known as “Wot Throwing.” This instrument is referenced in the title of a track that follows “Concierto de Aranjuez (“ah-rang-HWESS”)” and “Will O’ the Wisp” as the third track on *Sketches of Spain*. This instrument was the specialty of Gheorge Zamfir, who played a Romanian variant called the *nai*. Variants of this instrument called the (*) *antara* and the *siku* are, besides bagpipes, the main wind instruments of the Aymara people of the Andes and are traditionally made of multiple bamboo shoots. For 10 points, name this instrument that consists of tubes of various lengths tied together, and which is named after a figure from Greek mythology.

ANSWER: panpipes [or pan flute; or svrinx; accept nai before mentioned; accept wot before mentioned; accept antara or siku before mentioned; prompt on flute; prompt on pipes]

6. A postscript by a priest declares that this book has “everything under the sky” and that the only lamentable thing is that its author is sick, with “frost on his eyebrows.” This book remarks that chestnut trees are holy, since they are denoted by a symbol for the west, and that a famous pine has kept its shape for a thousand years despite being repeatedly cut down. Its narrator weeps at the site where a brave warrior died, writing “when a country is defeated, there remain only mountains and rivers” and “only grasses thrive” in a “ruined castle in spring.” This book’s narrator sells his (*) hut and writes that a new owner may change it into a doll’s house in the first chapter, which opens: “days and months are travelers of eternity.” This chief example of *haibun* (“HIGH-bun”) describes creating poems with the author’s companion Kawai Sora. For 10 points, name this travelogue by Matsuo Bashō.

ANSWER: *The Narrow Road to the Deep North* [or *Oku no Hosomichi*; or *The Narrow Road to the Interior*]

7. Errol Morris traveled to this city for his article “Which Came First, the Chicken or the Egg?” which investigated whether a photograph was staged. This city was founded under the name Akhtiar (“ack-tee-AR”) by admiral Thomas Mackenzie. Troops defending a base near this city unsuccessfully attempted to charge guns at Causeway Heights. William Howard Russell coined a name for troops who fought off an attack on this city by General Liprandi. A siege of this city ended after allied forces took (*) Malakoff Redoubt. Roger Fenton photographed scattered cannon balls on a road in this city, where Russia unsuccessfully attempted to dislodge troops besieging this city from their base at Balaclava. For 10 points, the Charge of the Light Brigade took place during a siege of what Black Sea port during the Crimean War?

ANSWER: Sevastopol [or Sebastopol; or Aqvar]

8. A presidential campaign during this decade invented the format of a seeming public debate with a candidate, where the audience is actually made up of pre-screened supporters. That campaign during this decade is the subject of Joe McGinniss's first book. The highest voter turnout in a U.S. presidential election occurred at the start of this decade. Theodore White's *The Making of the President* series began in this decade, during which the term (*) the New Deal coalition began to collapse. The "Solid South" crumbled during this decade. At the start of this decade, the first televised debates between presidential candidates were held. For 10 points, name this decade in which the South shifted towards Republicans following the passage of the Civil Rights Act.

ANSWER: the 1960s (McGinnis wrote *The Selling of the President* 1968. Druckman reenacted the Nixon-Kennedy debates.)

9. Several structures named for this phenomenon were mapped by the SILVERRUSH ("silver-rush") survey. A class of objects including Ton 618 and Himiko are named for displaying this phenomenon. The shape of the damping wing of this phenomenon is a probe of the neutral hydrogen fraction of the intergalactic medium. The IGM's re-ionization causes this phenomenon to be damped in the spectra of active galactic nuclei. Due to spin-orbit coupling, this phenomenon forms a (*) doublet corresponding to "*J* equals three-halves" and "*J* equals one-half." Its wavelength is about four over quantity three times times the Rydberg constant. In quasar spectra, the Gunn-Peterson trough appears next to this transition's namesake forest. For 10 points, name this transition between the "*n* equals two" and "*n* equals one" energy levels of hydrogen.

ANSWER: Lyman-alpha line

10. Children in this religion are taught about the "stripling warriors" who abandoned their parents' pacifism. Horses mentioned in one of this religion's texts were posited by John L. Sorenson to be tapirs ("tapers"). The organization FAIR has published a several-page long rebuttal to the "CES Letter" criticizing this religion. People who have left this religion use the term "TBM" for family members still in it. The practice of penetrating without thrusting, or (*) "soaking," is a purported loophole around sexual prohibitions in this religion. The Anthon transcript is a transcription of "Reformed Egyptian" characters used in this religion's central text, which was translated using Urim ("oo-REEM") and Thummim ("too-MEEM"), a pair of seer stones. For 10 points, name this religion whose central text was translated from golden plates by Joseph Smith.

ANSWER: LDS [or Church of Jesus Christ of Latter-Day Saints; or Mormons; or Mormonism]

11. Unlike previous notable works in the same genre, this piece exhibits progressive tonality, beginning in A minor and ending on a Picardy third in C minor. A movement in this work begins with four onstage trumpets exchanging E-flats with four offstage trumpets, until their fanfares lead to a massive pileup for brass and timpani in A-flat minor. The most famous non-operatic work premiered by Teresa Stolz is this piece, which features an elaborate eight-voice fugue for double choir as its (*) "Sanctus." On-beats for the entire orchestra alternate with offbeats for the bass drum in the G-minor "Dies Irae" ("DEE-ess EE-ray") that recurs in this 1874 work, which was written for the death of Alessandro Manzoni. For 10 points, name this sacred choral work whose premiere shared soloists with the same composer's opera *Aida*.

ANSWER: Giuseppe Verdi's Requiem [accept Giuseppe Verdi's Messa da Requiem; accept Manzoni Requiem, before "Manzoni" is mentioned; prompt on requiem or Messa da Requiem by asking "whose requiem?"]

12. In an essay, this author recalls being fired from the B.Z. Ullstein-Verlag tabloid, for passing information to people codenamed Paula and Edgar. In a novel by this author, the protagonist describes a new generation born “without umbilical cord, without frivolity, without melancholy” epitomized by a “Neanderthal” who talks about the necessary role of scapegoats throughout history. This author, Ignazio Silone (“sill-OH-nay”), and André Gide (“zheed”) were the continental European contributors to *The (*) God that Failed*. In a novel by this author, Gletkin elicits a signed false confession from the protagonist, who taps his glasses against the wall to communicate with the man in Cell 402. For 10 points, former Communist revolutionary Rubashov is arrested and tried in what author’s novel, *Darkness at Noon*?

ANSWER: Arthur Koestler (“KEST-ler” or “KERST-ler”)

13. One of this period’s greatest rulers came to power after 19 years of exile, and ordered that a forest be burned down to find a loyal nobleman whom he forgot to reward. Commentaries named for Gōng-yáng, Gǔ-liáng, and Zuǒ (“ts’woh”) interpret a ritualistic, terse chronicle of this period describing events in the land of Lü. A duke nicknamed “Double Ears” or Chóng’ěr reigned during this period, which ended when three marquis (“mar-KEEZ”) partitioned (*) Jin. Sīmǎ Qiān (“ch’YEN”) names five dominant rulers in this period as bà, or “hegemon.” Beginning in this period, the Hundred Schools of Thought flourished. Its namesake *Annals* are traditionally attributed to Confucius. The early part of the Eastern Zhōu (“joh”) dynasty corresponds to, for 10 points, what period of Chinese history named for two seasons?

ANSWER: Spring and Autumn period [or Chūn-Qiū Shídài; accept Spring and Autumn Annals; prompt on Zhou dynasty or Eastern Zhou before “Zhou”]

14. This body of water is the only habitat of *Comephorus* (“kuh-MEFF-uh-russ”), a genus of scale-less fish which lack a swim bladder because their mass is up to 35% fat, and which are also called this body’s namesake “oilfish.” Invasive filamentous algae threaten this body’s yellow-finned sculpins, which are the main food for its most-harvested salmon variety, the omul (“OH-mull”). This body’s high level of dissolved oxygen contributes to gigantism among the 350 species of amphipods that live at its bottom. Its Nerpa (*) seals are the only exclusively-freshwater seals in the world. This lake, which is the subject of many Buryat tales, is widened by the southward movement of the Amurian plate. It is drained by the Angara (“un-guh-RAH”) river, a tributary of the Yenisei (“yen-uh-SAY”). The deepest body of freshwater in the world is, for 10 points, what lake in Siberia?

ANSWER: Lake Baikal (“bye-KAHL”)

15. Triple production of this particle was reported in February 2023 by the CMS collaboration. This particle’s excited states include ones designated 2S and 3770. Suppression of the production of this particle is one signature of the quark–gluon (“GLOO-on”) plasma phase transition. This particle’s mean lifetime of 7.2 times 10-to-the-negative-21st seconds is a thousand times longer than expected, due to suppression of decay modes by the OZI (“OH-zee”) rule. This particle’s constituents were predicted due to the suppression of Z-boson-mediated flavor-changing decays in the (*) G-I-M mechanism. This particle was discovered independently by Samuel Ting at Brookhaven and Burton Richter at SLAC (“slack”) in the November Revolution, leading to its conjoined name. For 10 points, name this particle, a bound state of a charm quark and its anti-quark.

ANSWER: J/psi meson (“J-sye MEE-zon”) [accept charmonium before “charm”]

16. Several unfinished depictions of this man appear in the satirical painting *The Greatest Homosexual*, by Larry Rivers. In a painting titled for this man, a thick copy of Plutarch's ("PLOO-tark's") *Parallel Lives* lies askew next to a chair leg carved into the shape of a lion. The National Gallery of Art holds a painting of this man in which a candle has nearly burnt through its wick, and a grandfather clock in the background reads (*) 4:13 A.M. This man appears disheveled after working into the early morning in a painting that popularized the "hand-in-waistcoat" pose for portrait subjects. The name "KAROLUS MAGNUS" is inscribed on a rock in a painting that depicts him wearing a two-cornered hat on a rearing horse. For 10 points, name this leader whom Jacques-Louis David painted "in his Study" and "crossing the Alps."

ANSWER: Napoleon Bonaparte [or Napoleon Bonaparte; or Napoleon Buonaparte; or Napoleon I ("the first")]

17. In api-complexans, this organelle takes on a tubular structure, and in *crypto-sporidium* its unique structure renders the organism resistant to atovaquone ("uh-TOH-vuh-kohn"). When this organelle is damaged, PINK1 ("pink-one") recruits parkin. This organelle's protein mdm10 helps form the ERMES ("ER-meez") complex, which mediates contact between this organelle and the E-R. One structure in this organelle has hypervariable HVR1 and HVR2 regions within its D-loop. The (*) TOM and TIM complexes import molecules into this organelle, which releases cytochrome c in apoptosis. This organelle has a folded inner membrane that contains the complexes of the electron transport chain; the folds of that membrane, called cristae ("KRISSE-tay"), surround the matrix. For 10 points, name this double-membraned eukaryotic organelle responsible for generating energy.

ANSWER: mitochondria [or mitochondrion]

18. In a play by this author, a man says "De Profundis" under his breath while restitching his coat, but is frightened when another man unexpectedly rises out of bed. In a play by this author, a character tells of a man who was kicked by a horse and went on a horse-killing spree until he ate the insides of a clock and died. After a man plays dead and catches a shepherd proposing marriage to his wife, he evicts her to live on the road with a tramp in this author's play about (*) Nora Burke, titled *In the Shadow of the Glen*. 19 years before another author's *The Plough and the Stars*, this author caused a riot at the Abbey Theatre with a play in which Pegeen ("PEG-eeen") is impressed by Christy Mahon's claims to have killed his own father. For 10 points, name this Irish playwright of *The Playboy of the Western World*.

ANSWER: J(ohn) M(illington) Synge ("sing") [or Edmund John Millington Synge]

19. Under this Chief Justice, a justice created the doctrine of "selective exclusiveness" to delineate state and federal commerce clause powers in the *Cooley* decision. Don Fehrenbacher ("FEH-ren-BAH-ker") won a Pulitzer for a book about a decision made by this Chief Justice which expanded his earlier *Strader v. Graham* decision. This justice argued that ambiguity in a contract must "operate... in favor of the public" in railing against an implied monopoly for a bridge over the (*) Charles River. Benjamin Curtis and John McLean dissented from a decision made by this Chief Justice about a man who accompanied Dr. John Emerson to Illinois; that case, which invalidated the Missouri Compromise, ruled that enslaved people had no right to sue. For 10 points, name this Chief Justice, who succeeded John Marshall and decided *Dred Scott*.

ANSWER: Roger Taney ("TAW-nee")

20. A 1979 study of this book unusually widens its scope to focus on people like housewives and was written by the founder of a Texas archive of sources that emphasize self-activity. Harry Cleaver wrote *33 Lessons* on this book and created the “autonomist” approach to its author. A commentary on this book suggests employing the “symptomatic” reading strategies that its author applied to his predecessors. A series of seminars about this book, organized by Étienne Balibar, (*) Louis Althusser (“all-too-SAIR”), and others, led to that work, titled *Reading* [this book]. This book’s third volume, which describes the “Tendency of the Rate of Profit to Fall” and the conversion of surplus value into profit, was published posthumously by Friedrich Engels. For 10 points, name this “critique of political economy” by Karl Marx.

ANSWER: Das Kapital [or Capital: *A Critique of Political Economy*]

Round 5 – Bonuses

1. When seeing live opera for the first time, this character hears the soprano’s voice as “the echoes of her conscience,” an “illusion that charmed her as some very thing of her own life.” For 10 points each:

[10e] Name this title character of a Gustave Flaubert (“floh-BAIR”) novel, who embarks on an affair with Léon shortly after that performance.

ANSWER: **Emma Bovary** [accept either name; accept **Madame Bovary**]

[10m] The title character falls in love with the opera soprano La Zambinella, who turns out to be a castrato, in this novella by Honoré de Balzac, which was analyzed by Roland Barthes (“bart”) in *S/Z*.

ANSWER: **Sarrasine** (“SAR-uh-SEEN”)

[10h] Soprano Pellegrina Leoni reinvents herself after losing her voice in a fire in this short story by Isak Dinesen, the sixth and longest of her *Seven Gothic Tales*. The title narrators of this story are Lincoln, Hohenemser, and Guildenstern.

ANSWER: “The **Dreamers**” [or “**Drømmerne**”]

2. This composer wrote six completed works for piano and orchestra, the earliest of which was his *Variations on “Là ci darem la mano.”* For 10 points each:

[10m] Name this composer whose other works for piano and orchestra include two concertos, one in E major and the other in F minor.

ANSWER: Frédéric (François) **Chopin** [or Fryderyk (Franciszek) **Chopin**]

[10e] Following Classical tradition, the finales to Chopin’s piano concertos are in this musical form, in which a refrain alternates with episodes. Mozart’s eleventh piano sonata ends with one of these “alla Turca.”

ANSWER: **rondo**

[10h] The slow movements of Chopin’s piano concertos have this tempo indication, also used by Mozart for the slow movements of three of his last four piano concertos. This tempo is slower than adagio, but not as slow as the tempo denoted by its root word.

ANSWER: **larghetto** (“lar-GET-toh”) [reject “largo”]

3. In Book 1 of a certain text, this concept is shown not to be the same as pleasure, honor, or wealth and is shown to be the only thing that is pursued for its own sake. For 10 points each:

[10m] Give the original Greek term for this concept, which is defined as humanity’s highest good in the foundational text of virtue ethics.

ANSWER: **eudaimonía** (“yoo-dye-MOH-nia”)

[10e] Those discussions of *eudaimonía* occur in this philosopher’s *Nicomachean* (“nico-MOCK-ian”) *Ethics*.

ANSWER: **Aristotle** [or **Aristotles**]

[10h] *Eudaimonia* is the subject of the 36th, 46th, and 54th treatises in this set of six books. This work’s final book expounds upon a first principle called The One, which is equated with Plato’s notion of The Good.

ANSWER: **Enneads** (“ENN-nee-adds”) (of Plotinus)

4. This function names, and is used in, a type of regression in which the output is binary. For 10 points each:

[10m] Name this function which takes the form: one over the quantity “one plus *e*-to-the-negative-*x*.”

ANSWER: **logistic** function [or **Verhulst** equation, or **Richards**’ curve, prompt on **sigmoid** or **S-shaped** curve]

[10e] A bounded logistic function is commonly used as an activation function for these constructs used in machine learning. These constructs have layers of connected nodes, inspired by the structure of the brain.

ANSWER: artificial **neural network** [or **ANN**]

[10h] Multinomial logistic regression uses this generalization of the logistic function. This function takes the exponential of each component of a vector, and normalizes by the sum of the exponential of each component.

ANSWER: **softmax** [or **soft·arg·max**]

5. This ruler may have owned one of Ceolfrith's ("CHOLE-frith's") giant bibles before donating it to monks at Worcester ("WORSE-ter"). For 10 points each:

[10h] Name this ruler, who promised his daughter Alfrida to king Ethelbert, then murdered him, apparently because his wife Cynethyrth ("KUE-neh-thuerth") wanted him to.

ANSWER: **Offa** of Mercia

[10m] Ethelbert's murder probably happened at Offa's palace, a hill fort whose name begins with this word. This is the first word in the name of a site where a burial ship likely belonging to East Anglian King Raedwald ("RAD-wald") was found.

ANSWER: **Sutton** [accept **Sutton** Walls Hill Fort or **Sutton** Hoo or **Sutton** St. Nicholas]

[10e] Mercian supremacy during the Heptarchy was ended with this kingdom's unification under Æthelstan ("ATH-ul-stahn"). Alfred the Great ruled this kingdom.

ANSWER: Kingdom of **Wessex**

6. In an isotropic medium, the index of refraction can be substituted into this statement, since the ray velocity is equivalent to the phase velocity. For 10 points each:

[10m] Name this law, which states that a beam of light will take a path that minimizes travel between two points.

ANSWER: **Fermat's** principle [or principle of **least time**]

[10e] Fermat's principle of least time is used to show that the angle of incidence is equal to the angle of this phenomenon. In this phenomenon, light bounces off an object like a mirror.

ANSWER: **reflection**

[10h] The critical angle for total internal reflection can be found from Snell's law, which is derived from Fermat's principle. In total internal reflection, this kind of short-range exponentially-decaying wave occurs in the external medium.

ANSWER: **evanescent** wave

7. The chorus sings of "When the hounds of spring are on winter's traces" near the beginning of this poet's verse drama *Atalanta in Calydon*. For 10 points each:

[10m] Name this Victorian poet whose collection *Poems and Ballads* includes his "Hymn to Proserpine."

ANSWER: Algernon Charles **Swinburne**

[10h] The title figure of Swinburne's "Hymn to Proserpine" stands in for paganism, but Christianity is instead repeatedly addressed by this geographical word, as in the line, "Thou has conquered, O pale [this word], the world has grown grey from thy breath."

ANSWER: **Galilean**

[10e] Sue Bridehead reads the line beginning, "Thou has conquered, O pale Galilean," in this other Victorian author's novel *Jude the Obscure*. He also wrote *Tess of the D'Urbervilles*.

ANSWER: Thomas **Hardy**

8. In the watercolor *Backgammon Game*, this artist wrote his signature vertically, in red, to imitate the style of signatures on Japanese prints. For 10 points each:

[10e] Name this artist who painted a shirtless black man on a boat surrounded by sharks in *The Gulf Stream*.

ANSWER: Winslow **Homer**

[10m] This Homer painting, whose composition was influenced by that of Japanese prints, depicts three boys bringing in their catch on a rolling boat called the *Gloucester* ("GLAH-ster").

ANSWER: **Breezing Up: A Fair Wind**

[10h] Japanese composition again influenced this late Homer painting, which is his largest canvas. This painting depicts the title creature running across the snow to escape from predatory crows.

ANSWER: *The* **Fox Hunt**

9. These spirits' closest analogues in Chinese and Japanese mythology are *húli jīng* and *kitsune*, respectively. For 10 points each:

[10h] Name these Korean fox spirits who pose as beautiful women in order to seduce young men and eat their hearts or livers.

ANSWER: **gumiho** (“GOO-mee-ho”) [or **kumiho**]

[10e] As their name indicates, *gumiho* have this many tails. This is also the number of Muses in Greek mythology.

ANSWER: **nine**

[10m] The Japanese *kitsune* serve as messengers for this kami of rice, sake, and agriculture, who themselves is sometimes thought to take the form of a *kitsune*.

ANSWER: **Inari** Ōkami [or Ō-**Inari**]

10. In *State, Territory, Population*, Michel Foucault (“foo-KOH”) argued that this council’s requirement that laypeople confess at least once a year created self-disciplined people who internalized the values of the state. For 10 points each:

[10h] Name this council, the largest since the Council of Chalcedon (“kal-SEE-din”).

ANSWER: **Fourth Lateran** Council [or **Fourth** Council of the **Lateran**; or **Lateran IV**; prompt on answers indicating a **Lateran** council]

[10m] Though it was called by Innocent III (“the third”), the decrees of the Fourth Lateran Council were first written and disseminated by a pope of this name in the *Liber Extra* (“LEE-bair extra”). A pope of this name sent Augustine of Canterbury to convert Britain.

ANSWER: **Gregory** [accept **Gregory IX** (“the ninth”); accept **Gregory I** (“the first”)]

[10e] The Fourth Lateran Council placed restrictions on Jews who had performed this action. Muslims were forced to perform this action or leave Spain during the Inquisition.

ANSWER: **converting** to **Christianity**

11. Anan ben David is an early founder of this movement, members of whom do not wear tefillin (“tuh-FILL-in”). For 10 points each:

[10m] Name this group of Jews that reject the Oral Torah. They also unusually follow patri-lineal descent.

ANSWER: **Karaites** (“KAIR-uh-ites”)

[10e] Karaites do not light candles during this time, in which Jews traditionally do not use electricity. An *eruv* (“ay-ROOV”) wire is used to section off areas in which activities usually prohibited during this time are allowed.

ANSWER: **Shabbat** [or the **Sabbath**; prompt on **Saturday**]

[10h] A Karaite named Aaron ben Moses ben Asher helped to compile this definitive Hebrew text of the 24 books of the Tanakh, with vocalizations. The Leningrad Codex is the earliest extant copy of this text.

ANSWER: **Masoretic** (“MASS-uh-RETT-ic”) text [or **MT**]

12. A physical object representing this title was presented by Iusuf Kerisc (“YOO-soof KARE-isk”), a leader of the Italian-allied Berber tribes in Libya, to Benito Mussolini in 1937. For 10 points each:

[10h] What title was taken in the 1370s by a man seeking religious validation for conquests across Asia? Justin Marozzi used this title as the subtitle for a biography of that ruler, who was also chronicled by Beatrice F. Manz.

ANSWER: **Sword of Islam** [or **Sayf al-Islām**; or *Tamerlane: The Sword of Islam*]

[10e] This Turkic conqueror with a penchant for skull towers established his capital at Samarkand and proclaimed himself the “Sword of Islam.”

ANSWER: **Tamerlane** [or **Timur** Lenk or **Tamburlaine** or **Timur** the Lame or **Timur** Gurkhani]

[10m] Tamerlane captured this Ottoman Sultan, who regarded himself as the “Sword Arm of Islam.” This sultan, nicknamed “the Thunderbolt,” and his wife Olivera Despina were captured after losing the Battle of Ankara.

ANSWER: **Bayezid I** [prompt on **Bayezid**]

13. Robert Nemiroff's introduction to this play discusses several scenes that were cut from the original production. For 10 points each:

[10e] The neighbor Mrs. Johnson claims that the Younger family's decision to move to an all-white neighborhood is suicidal in one deleted scene of what Lorraine Hansberry play?

ANSWER: A **Raisin in the Sun**

[10m] A scene in which this character wears her hair in a "natural," anti-assimilationist style was cut because the production team thought that actress Diana Sands had gotten such a terrible haircut that the scene didn't work.

ANSWER: **Beneatha** Younger [prompt on Younger]

[10h] Also cut was a scene in which Travis Younger graphically describes how he and his friends performed this action on the street. In the opening scene of a novel, Bigger Thomas does this action with a skillet.

ANSWER: kills a rat [or attacks a rat; or chases a rat; prompt on kill, chase, or attack by asking "what animal?"]

14. One method of modeling diseases in which this substance is lost is feeding the copper-chelating ("copper-KEE-lay-ting") agent cuprizone to mice. For 10 points each:

[10e] Name this fatty substance that wraps nerves. White matter characteristically has a lot of this substance, which is absent in the nodes of Ranvier ("RAHN-vee-ay") to allow saltatory conduction.

ANSWER: myelin ("MY-uh-lin")

[10m] In the central nervous system, these cells are responsible for myelinating neurons. They are contrasted with Schwann cells, which perform the same function in the peripheral nervous system.

ANSWER: oligo-dendro-cytes [or oligo-dendroglia; prompt on glia]

[10h] Highly myelinated afferent Ib ("one-B") nerves are responsible for carrying signals from these proprioceptive organs, which sense muscle stretch.

ANSWER: Golgi tendon organ [or GTO; prompt on partial answer]

15. Judy Singer coined the term for this concept in a chapter called "*Why Can't You be Normal for Once in Your Life?*" adapted from her graduate thesis. For 10 points each:

[10h] Name this concept, which activists like Jim Sinclair cite when arguing for treating people as a social category. Steve Silberman wrote about the future of this concept in a book titled for its "tribes."

ANSWER: neuro-diversity [accept word forms like neurodiverse; accept neurodivergent]

[10e] Jim Sinclair wrote about people with this condition in the essay "Don't Mourn for Us." As of the DSM-5, Asperger's syndrome was merged into this condition's "spectrum."

ANSWER: autism spectrum disorder [or ASD]

[10m] The theory that people with ASD have an "extreme male brain" that overly systemizes was proposed by this British psychologist, who also created the Autism-Spectrum Quotient test for diagnosis.

ANSWER: Simon Baron-Cohen

16. For 10 points each, answer the following about desperate attempts by the Académie française ("ah-kah-deh-MEE fron-SEZ") to replace ubiquitous English tech words:

[10e] This English word is usually rendered in French as *mot-dièse* ("mot-dee-EZ"), the French word for a sharp sign in music. This word is an alternate name for a pound sign.

ANSWER: hashtag [or hash; prompt on octothorpe]

[10m] In the early 1980s, French retailers agreed to call this Japanese product a "baladeur" ("bah-lad-YOOR") instead of its English name. This product's first version, the TPL-92, worked with cassettes.

ANSWER: Sony Walkman

[10h] In 2022, the Académie insisted that government officials replace this English word with the French phrase "joueur-animateur en direct" ("zhoo-UR ah-nee-mah-TUR on dee-REKT").

ANSWER: streamer(s)

17. This technique received its misleading common name due to its use in German expressionist films. For 10 points each:

[10m] Name this cinematographic technique common in horror film, in which the camera is tilted so that a shot produces a sense of unease or anxiety.

ANSWER: **Dutch** Angle [or **Dutch** tilt; or **canted** angle; or **oblique** angle]

[10e] The Dutch angle is heavily employed in this Carol Reed film noir. In this film, Orson Welles plays Harry Lime, who gives an iconic speech while riding on a Ferris wheel.

ANSWER: *The **Third Man***

[10h] Dutch angles are used to accentuate Veronika's emotional pain in this Mikhail Kalatozov ("kuh-luh-TOH-zuff") film, in which Boris gives Veronika a stuffed squirrel before leaving to fight in the Red Army during World War II.

ANSWER: *The **Cranes are Flying*** [or ***Letyat Zhuravli***]

18. Charles Eliot, a president of this university, tried to ban football and baseball, the latter because deceptive pitches like the curveball were teaching bad morals to its students. For 10 points each:

[10e] Name this university, which was routinely walloped by rival Yale in the early days of college football.

ANSWER: **Harvard** University

[10h] Yale was frequently coached by this "father of American football," who led Theodore Roosevelt's 1905 committee to reform college football. He is credited with distinguishing the game from rugby.

ANSWER: Walter **Camp**

[10m] Burt Wilder, a professor at a school established using this act, debated with superfan Woodrow Wilson whether football should be encouraged. An 1890 act built on this act by preventing discrimination against HBCUs.

ANSWER: **Morrill** Act of 1862 [or **Morrill** Land-Grant Act or **Land-Grant** Act of 1862 or **Morrill** Act of 1890]

19. Answer the following about Horacio Quiroga's "Decalogue of the Perfect Short-Story Writer," for 10 points each.

[10e] The Decalogue advises to believe in a teacher as god, citing as one personal example this British author of *The Jungle Book*.

ANSWER: Rudyard **Kipling**

[10h] The Decalogue places special importance on the first words of short stories; Quiroga himself used the line "Alicia's entire honeymoon gave her hot and cold shivers" to open this story in which Alicia's blood is drained by a parasite.

ANSWER: "The **Feather Pillow**" [or "El **Almohadón de Pluma**"]

[10m] Though Quiroga wrote the Decalogue while working in Argentina, he was born in this Latin American country. Eduardo Galeano, the author of the trilogy *Memory of Fire*, was from this country.

ANSWER: **Uruguay**

20. For alkali metal chlorides, the degree of this process is exactly equal to the van 't Hoff factor minus 1. For 10 points each:

[10m] Name this process, which by definition occurs almost completely in solutions of strong acids such as hydrochloric acid, but only occurs to a small percentage in weak acids.

ANSWER: **dissociation** [accept degree of **dissociation**; prompt on "ionization" with "What process is causing the ionization?"; prompt on "heterolytic fission" with "What general process is happening to the acid molecule?"]

[10e] The acid dissociation constant K_{a} can be easily calculated from the half-equivalence point determined by this common lab experiment, which uses a burette ("bew-RET") to find the concentration of an analyte.

ANSWER: **titration**

[10h] A law of dilution named for this chemist relates the degree of dissociation, alpha, to the dissociation equilibrium constant. He's not Italian, but this chemist also coined the name for the mole unit.

ANSWER: (Friedrich) Wilhelm **Ostwald** [accept **Ostwald**'s law of dilution]