

**Minnesota Undergraduate Tournament 2014: We're Not Happy 'til You're Not Happy**  
**Questions by Billy Busse, Rob Carson, Mike Cheyne, Andrew Hart, Melanie Keating, and Bernadette Spencer**  
**FINALS ROUND ONE: Tossups**

1. One character in this work receives a golden apple from a crow which causes her to become pregnant for six years. Another character in this text has his face smeared with honey in order to avoid the fate that befell nine of his brothers, namely being eaten by a she-wolf, while a third character in this story learns the language of the birds after tasting dragon's blood. That character's father is the only person able to retrieve a sword a (\*) one-eyed beggar plunges into the trunk of the tree Barnstokk. The main character of its second half kills his foster-father Regin shortly after slaying the serpent Fafnir and aids Gunnar in marrying Brynhild. For 10 points, name this Norse epic about the title patriarch and his descendents, including Sigmund and Sigurd.

ANSWER: the Volsung Saga [or the Völsungasaga; or the Saga of the Volsungs; do not accept "the *Nibelungenlied*" as none of the events described happen in it and "Gunnar" and "Brynhild" are Norse names]

2. A book about the "life and notions" of this country's natives was written under a pseudonym by James George Scott, who also introduced soccer to it. In 1945, its largest city was the target of an Allied assault codenamed Operation Dracula. A speech declaring that "we will fight sword with sword and spear with spear" was given by a politician who led a 1962 coup in this country. That highly superstitious leader dynamited this country's economy with his failed "Way to Socialism". This country, home to the long-suffering (\*) Rohingya people, was the location of the 8888 Uprising, which itself was crushed by a military coup led by SLORC. For 10 points, identify this Southeast Asian country where the 2011 dissolution of the military junta and Than Shwe's transfer of power to Thein Sein led to the release of native Aung San Suu Kyi.

ANSWER: Burma [or the Republic of the Union of Myanmar]

3. This composer used an A-flat *larghetto* in 3/8 time as the second movement of the later of his two piano quartets, while a piece named "Sleigh Ride" ends his *Three German Dances*. His cantata *Davide Penitente* reused music from the Kyrie and Gloria sections of his unfinished *Great Mass in C minor*. He omitted repeat signs from the exposition in the first movement of a symphony that he constructed by dropping the introductory march and a minuet from a serenade composed for Sigmund (\*) Haffner. The finale of another of his symphonies opens with the four-note theme C-D-F-E and ends with a five-voice fugato representing the five major themes. Franz Xaver Süssmayr completed the last entry in the Köchel catalog of this man's works. For 10 points, name this composer of the *Jupiter Symphony* who died before he could finish his 1791 *Requiem*.

ANSWER: Wolfgang Amadeus Mozart

4. An essay by this author opens with a letter from "Mrs. M-- in Maryland", outlines the Contract and Status models of reading and writing, and criticizes the codependency of literature and criticism in the works of William Gaddis. Richard Katz and his band Walnut Surprise release the hit album *Nameless Lake* in this man's novel about the Berglund family. This author of "Mr. Difficult" wrote an essay bemoaning the state of the American novel titled "Why Bother?" for (\*) *Harper's*. In his most famous novel, a patent developed by the Parkinson's-afflicted Alfred is used by the Axon Corporation to develop the drug Correcktall, while Enid Lambert attempts to organize a family reunion in St. Jude. For 10 points, name this contemporary American author of *Freedom* and *The Corrections*.

ANSWER: Jonathan Earl Franzen

5. The primary quantity characterizing this phenomenon for a 3D free electron gas equals minus one third times a similar quantity named for Pauli according to a result derived by Lev Landau. It's not NMR, but this phenomenon arises from Larmor precession in a model by Langevin. This phenomenon occurs when the orbits of the electrons in a material form small current loops in an application of Lenz's Law on the atomic scale. This phenomenon is characterized by a negative (\*) susceptibility. Bismuth and graphite exhibit a very strong form of this phenomenon. Superconductors exhibit a perfect form of this phenomenon in the Meissner effect. For 10 points, name this phenomenon in which a material in an external magnetic field creates an internal field that opposes the external field.

ANSWER: diamagnetism

6. Robert Calef's attack on these events was responded to in the text *Some Few Remarks upon a Scandalous Book*. They were criticized in the book *Truth Held Forth and Maintained* by Thomas Maule. During these events, Mary Sibley suggested baking a rye cake with urine in it and feeding it to a dog. They were the subject of the text *Wonders of the Invisible World* by (\*) Cotton Mather. These events began when Betty Parris and Abigail Williams seemingly developed epileptic fits after having been taught fortune telling by the slave Tituba. Eventually, ministers condemned these events for over reliance on "spectral evidence." For 10 points, name these series of 1690 hearings in which multiple people were executed in Massachusetts for supposedly working with the Devil.

ANSWER: Salem witch trials

7. A pioneering female artist working in this country, who painted *New Girl at School* and several portraits of Aylmer Maude, was Emily Shanks. A painter from this country showed a dark, hooded Judas casting a huge shadow as he walks away from a reclining Christ in his 1861 depiction of the *Last Supper*. Those painters from this country were members of the Wanderers, as was a man who depicted the surprising return of a political (\*) exile in *They Did Not Expect Him* and showed men laughing uproariously while writing a letter to Sultan Mehmed IV in another painting. The most famous painting by that native of this country depicts eleven tired men dragging a barge upriver. For 10 points, name this home country of Nikolai Ge and Ilya Repin, who painted *Volga Boatmen*.

ANSWER: Russia [or the Russian Empire; or Rossiia; or Rossiyskaya Imperiya; reverse-prompt on "Ukraine" since Repin was born in what's now Ukraine but it sure wasn't an independent country then]

8. Note to moderator:  $f(x)$  is pronounced " $f$  of  $x$ "

Approaches to this task which make use of a discretized mesh include the finite volume and finite element methods. This type of problem often will include Dirichlet or Neumann conditions in the problem statement. Abel's identity can be used to determine linear independence during this task by seeing whether or not the Wronskian is nonzero. One approach to this task multiplies (\*) both sides by  $e$  raised to the integral of some function, while another rearranges to get an equation of the form  $f(x)$  times  $dx$  equals  $g(y)$  times  $dy$  and integrating both sides. For 10 points name this task which can be done numerically by Euler's method or analytically by integrating factor or separation of variables, in which a function is found which satisfies an equation involving derivatives.

ANSWER: solving differential equations [accept any clear knowledge equivalent for "solving," accept "diff eqs," "ODEs" or "PDEs" in place of "differential equations," accept answers indicating specific types of differential equations]

9. One character in this novel claims that a column of smoke comes from a school burning "a hundred and eighty girls' worth" of sanitary napkins. Its frame narrative opens on a flight into Hamburg, after which the protagonist reminisces on a discussion about the "field well". Another character in this novel had a breakdown after her seduction by a mythomaniacal 13-year-old piano prodigy. A mutual love for *The Great Gatsby* prompts the womanizing (\*) Nagasawa to befriend this novel's protagonist, who adopts a cat named Seagull after leaving the dorms, where he roomed with a neat-freak cartographer nicknamed "Storm Trooper". Its protagonist meets Reiko at a sanatorium while visiting Naoko, who vies with Midori for his affections. For 10 points, name this book about Toru Watanabe, a Haruki Murakami novel named for a Beatles song.

ANSWER: Norwegian Wood [or Noruegi no Mori]

10. News of this battle was communicated by John Richards Lapenotiere, who arrived at Falmouth on the *Pickle*. Prior to it, John Pasco suggested to his superior that the word "confides" be changed. After this battle, Federico Gravina died from wounds suffered during it. This battle resulted in the capture of Admiral Villeneuve, and during it, Cuthbert Collingwood rallied the forces by an aggressive maneuver on the *Royal Sovereign*. The British commander in this battle was based on the (\*) *Victory*, signaled "England expects that every man will do his duty" prior to it, and was killed by a French sniper during it. For 10 points, name this October 1805 naval battle in which Horatio Nelson defeated Napoleon's navy off the coast of Spain.

ANSWER: Battle of Trafalgar

11. In the 21st Surah, a bird reports to Jibril that one of these things is harming Ibrahim, who is actually wearing a magic ring from Allah that shields him from it. Orthodox Christians believe that a “holy” type of this thing appears over Jesus’ tomb every Great Saturday at the Church of the Holy Sepulchre. Zoroastrians distinguish between the *dadga*, *adaran*, and *behram* types of this thing that are used in temples of this name to (\*) purify things along with water. In the Bible, ritually slaughtered animals were subjected to this on the Temple altar. In Exodus, God guides the Israelites as a pillar of clouds by day and a pillar of this thing by night. At Pentecost, the Holy Spirit formed on the apostles’ heads as “tongues” of this thing. For 10 points, name this natural phenomenon that affected the burning bush.

ANSWER: fire [or a fire; or burning; a flame; prompt on “light”, I guess?]

12. One of this author’s characters is imprisoned in the Statue of Liberty in the second half of Giannina Braschi’s *The United States of Banana*. A bawdy song about “little blue flowers of rosemary” is sung by Chispa, the mistress of Rebolledo, in a play by this man subtitled “The Best Garrotting Ever Done”. A character adopts the motto “God is God” in a play by this author in which Clotaldo reveals that he is the father of (\*) Rosaura, who marries Astolfo at the play’s end. His plays include one in which Poland is nearly ruined when Basilio briefly frees Prince Segismundo, as well as one in which Pedro Crespo is elected to the title position. For 10 points, name this author of *The Mayor of Zalamea* and *Life is a Dream*, the most prominent Spanish Golden Age playwright after Lope de Vega.

ANSWER: Pedro Calderon de la Barca [or Pedro Calderón de la Barca y Barreda González de Henao Ruiz de Blasco y Riaño, of course]

13. A politician in this city, Kevin Crossley, was publicly attacked by a police officer disgusted at Crossley’s homophobia. The most powerful crime family in this city was the Masuccis, who were frequently targeted by Ben Stone. A man who works here was the biological son of serial killer Mark Ford Brady and the frequent nemesis of the psychopathic Nicole Wallace. After being dismissed from her job in this city, Serena Southerlyn asked “is this because I’m a (\*) lesbian?” For many years, prosecutions here were handled by District Attorney Adam Schiff, whose chief lieutenant was Jack McCoy. Longtime police officers in this city were Elliot Stabler and Olivia Benson, both members of the Special Victims Unit. For 10 points, name this city where the first three *Law and Order* programs took place.

ANSWER: New York City

14. The formation of PAMAM is a divergent form of this process. AIBN and a dithioester are common reagents in the RAFT form of this process. Miktoarm stars can be synthesized using a “living” form of this process, which produces a Poisson distribution of products. For one type of this process, N-sub-n is equal to 1 divided by 1 minus the extent of reaction, a relationship sometimes called the Carothers equation. Catalysts for this type of reaction are especially useful when they can control (\*) dispersity or tacticity. Free radicals can be used to mediate this type of reaction via initiation, elongation, and termination steps. For 10 points, identify this type of reaction that comes in “step-growth” and “chain-growth” variants which synthesizes a macromolecule from a series of monomers.

ANSWER: polymerization [accept anything along the lines of “making polymers,” accept any more specific type of polymerization such as step-growth, chain growth, dendrimer synthesis, etc.]

15. A border area in the north of this country is home to a series of fortified earthworks called Black Pig’s Dyke. An archaeological site in this country is buttressed by 97 decorated “kerbstones” and features a notable entrance stone decorated in the “plastic style.” This country is home to a boulder decorated in the La Tene style called the Turoe stone and a structure which is located just south of a series of ring forts called the Rath of the Synods and a tomb called the Mound of the (\*) Hostages, and which is topped by the “Stone of Destiny.” A structure in this country is famous for a roofbox which allows the illumination of its interior on the winter solstice. This country is home to the passage tombs of Carrowmore and Newgrange. For 10 points, name this island country whose High Kings were crowned at the Hill of Tara, near the River Boyne in County Meath.

ANSWER: Ireland

16. This ruler's last words were the question "Have I played the part well? Then applaud as I exit." This man sent his daughter and her mother, Scribonia, into exile on the island of Pandateria. He adopted the title "Princeps" after a naval victory won for him by Marcus Agrippa. A Senate phrase wished that people would be "better than Trajan" and more "fortunate" than this man. This ruler reportedly shouted at (\*) Quintilius Varus to "give me back my legions" after his forces lost the Battle of the Teutoburg Forest. This man assumed full power after his enemies lost the Battle of Actium. He previously aligned with Lepidus and Mark Antony as part of the Second Triumvirate. For 10 points, name this first Roman emperor, the adopted heir of Julius Caesar.

ANSWER: Augustus Caesar [or Gaius Octavius, or Octavian]

17. The letters that open this book are paralleled by the emails sent by Jerome that open Zadie Smith's *On Beauty*, which is essentially a retelling of this novel. The dual origins of one family in this novel are represented by the squabbling between Frieda Mosebach and Aunt Juley. Other characters in this novel include the creepy caretaker Miss Avery and a woman who adopts the motto "only connect". Another character in this novel marries (\*) Jacky, who had earlier been seduced and abandoned on Cyprus by Henry, and dies when he is struck with the flat of a saber by Charles. At its end, Helen and Margaret both settle at the title location, which was formerly the property of the Wilcoxes. Leonard Bast and the Schlegel sisters appear in, for 10 points, which E.M. Forster novel, titled for an estate?

ANSWER: Howards End

18. This song's refrain derives from variant 2G in the Child catalog of the song "The Elfin Knight," which also echoes this song's request to "make me a cambric shirt." Martin Carthy's arrangement of this song was used without acknowledgement for a 1966 recording that paired it with a "Canticle." A variant of this song asks the addressee to "see for me if her hair's hanging long" and describes a place "where the winds hit heavy on the borderline." The lyrics of this song, which inspired Bob Dylan's "Girl from the North Country," asks the addressee to (\*) "remember me to one who lives there / for she was once a true lover of mine." For 10 points, name this traditional English folk ballad that contains the refrain "parsley, sage, rosemary, and thyme," and was popularized by Simon and Garfunkel.

ANSWER: "Scarborough Fair" [accept "Girl from the North Country" before "Girl"]

19. The removal of this functional group is inhibited by sodium orthovanadate and sodium fluoride. PTB and SH2 domains bind to this functional group. Two equivalents of this functional group are connected to a thiazole ring in a cofactor for transketolase and pyruvate dehydrogenase. That cofactor contains thiamine bonded to the "pyro" version of this functional group. This functional group is added to glucose in the first step of (\*) glycolysis. This functional group is added to tyrosine, serine, and threonine residues by kinases. The cell membrane's bilayer contains lipids modified by this functional group. Sugars in the backbone of DNA are connected by, for 10 points, what anion with charge minus three, three of which bind to adenosine in ATP?

ANSWER: phosphate [accept diphosphate or pyrophosphate due to those clues and triphosphate due to the giveaway]

20. This philosopher proposed "truth value gaps" as a way out of the Liar's Paradox in an essay that rejected Tarski's evaluation of truth in formalized languages. This man is the namesake of frame semantics for modal logic. This author's interpretation of another philosopher led him to propose "meaning skepticism" as a solution to the rule-following paradox. In another book, this author of (\*) *Wittgenstein on Rules and Private Language* used the example of "Hesperus is Phosphorus" to introduce a posteriori truths, and he examined names that refer to the same thing in all possible worlds, which he termed "rigid designators". For 10 points, name this American analytic philosopher who wrote *Naming and Necessity*.

ANSWER: Saul Kripke

**TB. In one scene in this story, the author of a well-received book on streptothricosis repairs a “huge, complicated machine” by replacing a faulty piston with a fountain pen. The onomatopoeic phrase “pocketa-pocketa-pocketa” repeatedly appears in this story, whose protagonist is mocked for saying “puppy biscuit” to himself and resents having to buy (\*) overshoes. Opening with the Commander shouting “We’re going through!”, it also depicts its protagonist testifying in court as “the greatest pistol shot in the world” and standing in front of a firing squad while, in reality, waiting for his wife to get something from a drugstore. For 10 points, name this James Thurber story whose title character is constantly daydreaming.**

**ANSWER: “The Secret Life of Walter Mitty”**

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**FINALS ROUND ONE: Bonuses**

1. Ralph Kirkpatrick, who catalogued this composer's most famous works, also identified a "crux" which divides many of those works into two thematically distinct parts. For 10 points each:

[10] Identify this Baroque composer, the son of fellow composer Alessandro, whose "Cat Fugue" and collection of thirty *Essercizi* are among the 555 sonatas he composed for various keyboard instruments.

ANSWER: Domenico **Scarlatti** [or Giuseppe Domenico **Scarlatti**]

[10] The vast majority of Scarlatti's sonatas were written for this keyboard instrument, which unlike the pianoforte and its descendants involves the plucking, rather than hammering, of a string.

ANSWER: **harpsichord**

[10] This 20th-century composer's opus 40 is a harpsichord concerto. Then-Cardinal Karol Wojtyla commissioned his *Beatus Vir*, and he set a lament of Mary and a message written on the wall of a Gestapo prison in his third symphony.

ANSWER: Henryk Mikolaj **Gorecki** [go-RET-sky, but a phonetic reading is fine]

2. Sometimes, this diagram uses the spectral classification (O, B, A, F, G, K, or M) for its horizontal axis. For 10 points each:

[10] Name this doubly-eponymous diagram which contains a "main sequence" stretching from its top left to bottom right. It plots various stars on a luminosity vs temperature graph.

ANSWER: **HR** or **Hertzsprung-Russell** diagram

[10] The instability strip contains many stars of this type, whose luminosity changes periodically, allowing for them to be used as standard candles.

ANSWER: **variable** stars [accept more specific answers like "**Cepheid variables**"]

[10] The HR diagram can also be formulated in terms of this variable and magnitude, a formulation common in the use of galactic classification diagrams. Along with temperature and mass, this variable changes when moving between spectral classes, and Wien's Law indirectly describes the relation between this variable and temperature.

ANSWER: **color** [accept **wavelength**]

3. This man ordered the execution of the Count of Egmont. For 10 points each:

[10] Name this nobleman who established the "Council of Troubles," otherwise known as the "Court of Blood," to prosecute so-called "heretics." His actions helped inspire the Black Legend.

ANSWER: Grand Duke of **Alba** [or Fernando Alvarez de **Toledo** y Pimentel]

[10] The Duke of Alba hailed from this country and worked for its king, Philip II. This country was opposed in the Dutch revolts in the Eighty Years War.

ANSWER: **Spain**

[10] The leader of the Dutch revolt was this prince known as the "Silent." He was shot to death in an assassination in 1584 after the Spanish declared him an outlaw.

ANSWER: **William** I [or **William of Orange**]

4. The line "A terrible beauty is born" ends three of the four sections of this poem, which opens with the lines "I have met them at close of day / coming with vivid faces". For 10 points each:

[10] Identify this poem in which W.B. Yeats writes out "in a verse" the names "MacDonagh and MacBride and Connolly and Pearse", major figures in a certain Irish revolt.

ANSWER: "**Easter, 1916**"

[10] This Irish playwright used text from some of Patrick Pearse's speeches in *The Plough and the Stars*, which is set during the Easter Rising. This man also wrote *The Shadow of a Gunman* and *Juno and the Paycock*.

ANSWER: Sean **O'Casey** [or John **Casey**; or Seán Ó **Cathasaigh**]

[10] The leadup to the Easter Rising is fictionalized in *The Red and the Green*, a novel by this Plato-loving author of *The Sacred and Profane Love Machine*, who burst onto the literary scene with 1954's *Under the Net*.

ANSWER: Iris **Murdoch**

5. This item's fate is mirrored by that of a similar item belonging to Bata in the New Kingdom-era "Tale of Two Brothers". For 10 points each:

[10] Name this body part that, according to Plutarch, had to be either reconstructed by magic or replaced with a golden replica since, after it was removed from its owner and thrown into the Nile, it was eaten by an oxyrhynchus fish.

ANSWER: **Osiris's penis** [accept synonyms for "penis" like "**phallus**" or "**genitalia**"; prompt on partial answer]

[10] Unlike his penis, the rest of the scattered parts of Osiris's body were recovered and reassembled by this goddess, Osiris's wife.

ANSWER: **Isis**

[10] Osiris's soul was occasionally worshipped in its own right as the ram god Banebdjedet, who was considered to be the northern equivalent of this other ram-headed deity. This god created humanity at his potter's wheel.

ANSWER: **Khnum** [or **Khnemu**]

6. Identify the following about the Air Coryell offense, for 10 points each.

[10] Don Coryell developed his namesake pass-happy offense while serving as this team's coach from 1978 to 1986. Current players for this team include tight end Antonio Gates and quarterback Philip Rivers.

ANSWER: the **San Diego Chargers** [accept either underlined portion]

[10] The quarterback in the Air Coryell system was this Oregon graduate. After his playing career, he became a constantly-incredulous color commentator, and can now be found teaming with Ian (EYE-an) Eagle for CBS.

ANSWER: Dan **Fouts** [or Daniel Francis **Fouts**]

[10] One of Fouts's primary targets was this Hall of Fame tight end. His son of the same name, also a tight end, referred to himself as a "fucking soldier" while in college at Miami and got into a motorcycle accident in 2005 while with the Browns.

ANSWER: Kellen Boswell **Winslow** [Sr. or II/Jr.]

7. This reaction mechanism exhibits stereochemical inversion and can be envisioned as an umbrella turning inside out. For 10 points each:

[10] Name this reaction mechanism, the replacement of a leaving group with a nucleophile in a single step due to a backside attack.

ANSWER: **SN2** [or **bimolecular nucleophilic substitution**]

[10] The transition state in an SN2 reaction possesses this VSEPR geometry.

ANSWER: **trigonal bipyramidal**

[10] Perhaps the most famous SN2 reaction is the Williamson synthesis of these compounds from an alkoxide and an alkyl halide in the presence of a base. They have general formula R-O-R', and they were commonly used as anaesthetics in the 19th century.

ANSWER: **ethers**

8. He described how "people with monocles still complain, and sting, politely, like snakes in the grass" in the title poem of his collection "My Sister -- Life" and lamented that "this life is not a stroll across the meadow" in another poem. For 10 points each:

[10] Identify this poet of "Hamlet", which he attributed to the title character of a novel that was smuggled to Milan and published in 1957.

ANSWER: Boris Leonidovich **Pasternak**

[10] Pasternak won the Nobel Prize shortly after the aforementioned publication of this novel. Its title character, a physician and poet, dies of a heart attack shortly before his great love Lara dies in the gulag.

ANSWER: **Doctor Zhivago** [or **Doktor Zhivago**]

[10] This poet walked out of the 1958 show trial in which Pasternak was expelled from the Union of Soviet Writers. He lamented the fact that "no monument stands over" the title location in his poem "Babi Yar".

ANSWER: Yevgeny Aleksandrovich **Yevtushenko** [or Evgeny **Evtushenko**]

9. Wikipedia concludes that the first Prime Minister of this country had a “robust waist-line” and notes “that he was fat is certain.” For 10 points each:

[10] Name this country which utilized the racist system of apartheid from 1948 to 1994. It was once led by Nelson Mandela.

ANSWER: Republic of **South Africa**

[10] As a political prisoner fighting against the apartheid system, Mandela spent eighteen years imprisoned within a prison on this island off the coast of Cape Town. Current President Jacob Zuma also spent time here.

ANSWER: **Robben** Island

[10] This student leader and founder of the Black Consciousness Movement died in police custody in 1977, which the police blamed on a hunger strike. Donald Woods publicized this man’s death, which inspired the film *Cry Freedom*.

ANSWER: Stephen Bantu **Biko**

10. Name some things related to the Waynflete Professorship of Metaphysical Philosophy, for 10 points each.

[10] This holder of the chair from 1945-1967 dismissed Cartesian mind/body dualism for advocating a “ghost in the machine” in *The Concept of Mind*.

ANSWER: Gilbert **Ryle**

[10] This man who held the chair right after Ryle attempted to tease out a non-constructivist Kant in *The Bounds of Sense*. He also wrote “In Defence of a Dogma” with Paul Grice.

ANSWER: P F **Strawson** [or Peter **Strawson**; or Peter Frederick **Strawson**]

[10] In one chapter of *Individuals*, Strawson compared his “ontological hypothesis” to the theories of this German author of *Theodicy* and *Monadologie*. This man also independently discovered calculus.

ANSWER: Gottfried Wilhelm **Leibniz**

11. This scientist renowned for his teaching skill collected a series of his lectures into a three-volume textbook titled [this man’s] *Lectures on Physics*. For 10 points each:

[10] Name this Caltech physicist whose namesake diagrams are used to depict particle interactions.

ANSWER: Richard Phillips **Feynman**

[10] The Feynman diagram for this weak-force mediated process consists of a down quark which is changed to an up quark as it meets a W-minus boson at a vertex. The other end of the W-minus boson forms a vertex with an electron and an electron antineutrino.

ANSWER: **beta**-minus **decay**

[10] In the Feynman path integral formulation of quantum mechanics, the propagator acts as one of these functions for the Schrodinger equation. These functions describe the unit impulse response for a linear inhomogeneous differential equation.

ANSWER: **Green**’s functions

12. Jaja takes the blame for his mother Beatrice’s murder of her abusive, devoutly Catholic husband Eugene in this author’s novel about Kambili Achike, *Purple Hibiscus*. For 10 points each:

[10] Identify this contemporary Nigerian author who also wrote a novel about the sisters Olanna and Kainene set during the Biafran War called *Half of a Yellow Sun*.

ANSWER: Chimamanda Ngozi **Adichie**

[10] The title story of Adichie’s collection *The Thing Around Your Neck* uses this stylistic quirk. This narrative mode is also adopted in Tolstoy’s “Sevastopol in December” and Jay McInerney’s *Bright Lights, Big City*.

ANSWER: **second-person** perspective/narrative/etc.

[10] Adichie’s story “The Headstrong Historian” includes a major character named Obierika and mentions a girl from the “Okonkwo family”, some of its many references to this famous 1958 Chinua Achebe novel.

ANSWER: **Things Fall Apart**



13. This book popularized the term “conventional wisdom.” For 10 points each:

[10] Name this 1958 book which described rampant income disparity in the postwar United States. The author notes that the private, not public sector, is becoming wealthy. Many of the ideas appear in the author’s later book, *The New Industrial State*.

ANSWER: *The Affluent Society*

[10] A much earlier book on the “affluent society” in the United States was *Theory of the Leisure Class* by this thinker, who did his undergraduate work at Carleton College.

ANSWER: Thorstein Veblen

[10] This 1962 Michael Harrington book also described income inequality within the United States. This book is credited with instigating Lyndon Johnson’s War on Poverty and Medicaid programs.

ANSWER: *The Other America*

14. Nobody likes tossups on Church councils, so identify these bonus parts on them instead, for 10 points each.

[10] In 325, this first ecumenical council settled the debate over the date of Easter and adopted a namesake creed of beliefs that was later modified at the 381 Council of Constantinople.

ANSWER: First Council of Nicaea

[10] In addition to affirming the truth of the Nicene Creed, the Council of Trent rejected this Protestant doctrine as a “vain confidence”. Martin Luther used Romans 3:28 to argue that this principle was the “chief principle” of all Christian doctrine.

ANSWER: sola fide [or justification (by grace) through faith alone; accept “salvation” instead of “justification”; PROMPT on “justification by grace through faith”]

[10] Trent also blasted the Utraquists by upholding the practice of withholding this from the lay participants in the Mass. Since Vatican II, this parts, or species, of the Eucharist has become virtually always offered along with the host.

ANSWER: wine [or blood of Christ; or cup; or chalice; I guess accept mustum from AA members]

15. This book begins with a description of Edward VII’s funeral. For 10 points each:

[10] Name this classic Barbara Tuchman historical text describing the build-up to and the early stages of World War I, particularly within the title month of 1914.

ANSWER: *The Guns of August* [or August 1914]

[10] *The Guns of August* spends some time profiling this ruler of Germany during World War I, who eventually abdicated in the final stages of the conflict.

ANSWER: Wilhelm II [or William II]

[10] This 1915 battle marked the first mass use of poison gas by Germany on the Western Front. The sub-battle of Kitchener’s Wood took place during this battle.

ANSWER: Second Battle of Ypres [prompt on Ypres]

16. One member of this literary family described Ralph Waldo Emerson as “a convert to--nothing but Emerson” in *A Fable For Critics*, while another asked “Christ! What are patterns for?” in her most famous poem. For 10 points each:

[10] Identify this Boston literary family whose members include the aforementioned James Russell and Amy, as well as Robert, who wrote “Skunk Hour” and “For the Union Dead”.

ANSWER: the Lowell family

[10] Amy Lowell was particularly associated with this early-20th-century poetic movement, much to the dismay of another prominent member, Ezra Pound, whose poem “In a Station of the Metro” exemplifies it.

ANSWER: Imagism [accept word forms; accept “Amygism”]

[10] Imagism was a major influence on this last editor of *The Dial*, who described “scale lapping scale with spruce-cone regularity” in “The Pangolin” and wrote of a desire to create “imaginary gardens with real toads in them” in “Poetry”.

ANSWER: Marianne Moore

17. This painting, originally a fragment of a triptych that also produced its artist's *The Wayfarer* and *Allegory of Gluttony and Lust*, depicts a green cloaked man dropping coins into a chest. For 10 points each:

[10] Identify this gremlin-filled painting whose first title character leans in from a door at left and points an arrow at the emaciated, bedridden form of the second title character.

ANSWER: **Death and the Miser**

[10] Another section of the triptych that contained *Death and the Miser* is this painting, in which a roast goose, a tree, and a red banner are tied to the mast of the central vessel, which is filled with carousing people.

ANSWER: **Ship of Fools**

[10] All of those paintings were created by this Dutch artist, whose more famous triptychs include *The Haywain* and *The Garden of Earthly Delights*.

ANSWER: Hieronymus **Bosch** [or Jheronimus van **Aken**; or Jeroen Anthoniszoon van **Aken**; or Jheronimus **Bosch**]

18. The three leaflets comprising this structure are displaced in Ebstein's anomaly. For 10 points each:

[10] Name this valve which connects the right atrium to the right ventricle. This valve and the mitral valve comprise the atrioventricular valves

ANSWER: **tricuspid** valve

[10] Defects of the tricuspid valve or anywhere else in the heart can be seen in the results of this test, in which electrodes attached to the chest detect electrical signals from the heart and translate them into a waveform

ANSWER: **electrocardiogram** [or **ECG** or **EKG**, accept word forms like "**electrocardiography**"]

[10] This wave on an EKG manifests as a small positive deflection caused by the repolarization of the ventricle.

ANSWER: **T** wave

19. A Carl Milles fountain depicting two nude, sexualized figures riding fish as they prepare to be married called *The Meeting of the Waters* is found outside this city's Theodore Link-designed Union Station. For 10 points each:

[10] Name this Midwestern city that contains Eero Saarinen's Gateway Arch.

ANSWER: **St. Louis**, Missouri

[10] This early skyscraper, a red-brick office building designed in the Palazzo style by Henry Sullivan, is a St. Louis architectural landmark.

ANSWER: **Wainwright** Building

[10] The Wainwright Building was co-designed by Sullivan and this German-born architect, the second named partner in Sullivan's architectural firm.

ANSWER: Dankmar **Adler** [accept **Sullivan & Adler**]

20. This man was convicted of murdering William Micke in August 1967. For 10 points each:

[10] Name this burglar who was sentenced to death until the Supreme Court ruled in a 1972 case that the death penalty may constitute "cruel and unusual punishment." That case resulted in a moratorium on capital punishment for several years.

ANSWER: William Henry **Furman**

[10] This Midwestern state's Governor George Ryan imposed a moratorium on executions in 1999. Ryan was succeeded by the scandal plagued Rod Blagojevich.

ANSWER: **Illinois**

[10] This Supreme Court justice joined with William Brennan in writing an opinion for the *Furman* case that said the death penalty was "cruel and unusual." As a lawyer, he used the results of the Clark study in arguing against "separate but equal" laws during the *Brown v. Board of Education* case.

ANSWER: Thurgood **Marshall**

Extra. You are Charles Guiteau. For 10 points each:

[10] On July 2, 1881, you kill this U.S. President, who is then succeeded by his Vice-President, Chester Arthur.

ANSWER: James **Garfield**

[10] Since you are a "disgruntled office seeker," your killing of Garfield prompts the 1883 passage of this piece of legislation meant to reform the civil service.

ANSWER: **Pendleton** Civil Service Reform Act

[10] This man, Garfield's Secretary of War, witnessed your killing of Garfield. He was morbidly present or nearby at three presidential assassinations.

ANSWER: **Robert Todd Lincoln**