**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**

**Round 9: Tossups**

1. **This world leader formed the secret police known as the Bureau of Investigation and Statistics, and his country consistently failed to carry out Project National Glory. General Joseph Stilwell contentiously served as this man’s chief of staff. Along with his wife, this man founded the New Life Movement to mix Christianity and traditional beliefs. This first commandant of the Whampoa Military Academy had a first lady named (\*)** Soong May-ling, who lobbied the U.S. to support his Christian government. This man succeeded mentor Sun Yat-sen as party leader and until 1975, he held the title of President of the *Republic* of China. For 10 points, name this Kuomintang leader, the Chinese Nationalist who fled to Taiwan after his forces lost to the Communists in the Chinese Civil War.

ANSWER: **Chiang** Kai-shek [or **Jiang Jieshi**; or **Jiang Zhongzheng**]

2. **An adaptation of this man’s most famous play, set in Britain on the eve of Labour’s 1945 landslide election victory, was written by Patrick Marber. This author claimed that his mental torment was caused by “the Powers” and founded the Intimate Theater, where he used Arnold Böcklin paintings to dress the set of a play whose protagonist is sent to a performance of Wagner’s *The Valkyrie* by Jacob (\*)** Hummel. In addition to that play about the student Arkenholz, he wrote a play set on Midsummer’s Eve in which the “unfaithful” dog Diana is given an abortifacient by the cook Christine. A bird in that play is decapitated by the Count’s valet Jean, who sleeps with, then later hands a razor to, the title woman. For 10 points, name this Swedish playwright of *The Ghost Sonata* and *Miss Julie*.

ANSWER: August **Strindberg**

3. **This book attempts to curb debate about the “ambiguity of give and take”. It contrasts the natural “immanent” and free “transcendent” modes of life and imagines a future that “Soviet Revolution promised”. The “Myths” section of this work analyzes how Verlaine, Poe, and *Hamlet* reflect the current “everlasting disappointment” in the title figures. This book claims that Hegel’s master/slave dialectic does not apply to the title group, since it implies (\*)** equality between them and the free society. The second volume of this work outlines how the title subjects have become the passive and alienated “Other” to the “active” and “subjective” male, and it claims that “one is not born, but becomes, a woman”. For 10 points, name this work of feminist philosophy by Simone de Beauvoir.

ANSWER: *The* ***Second Sex*** [or *Le* ***Deuxieme Sexe***]

4. **The quantity “thermal expansivity times temperature minus one” times volume divided by this quantity gives the Joule-Thomson inversion temperature. A DSC apparatus produces a curve showing the relation between this quantity and temperature. For an ideal gas undergoing an adiabatic process, P times V raised to the ratio of two forms of this quantity is held constant. For a monatomic ideal gas, this quantity equals (\*)** 3/2 times R at constant volume. This quantity can be defined as the derivative of either internal energy or enthalpy with respect to temperature. For 10 points, name this quantity which measures the heat that must be added to a substance to increase its temperature by 1 degree Celsius.

ANSWER: **heat capacity** [accept “**specific heat**,” but that term is misleading. Accept more specific answers such as “specific **heat capacity**,” “molar **heat capacity**,” “heat capacity at **constant pressure**,” etc.]

5. **In a book on “assemblages” of this practice, Jasbir Puar argues that a developing “homonormative” ethos depends on orientalizing the bodies of those who engage in this practice. The UN’s difficulty in deciding upon a uniform definition of this practice has led to various “sectoral” definitions of it. Bruce Hoffman is an expert on this practice, which is paired with “humanism” in a book that discusses Marxist (\*)** revolutions by Maurice Merleau-Ponty. One instance of this practice led the U.S. to institute Operation Active Endeavor. The word for this practice derives from a period in which the Jacobins used the “national razor” to execute “enemies of the revolution.” For 10 points, name this systematic use of coercive violence that takes its name from a fearful “reign” during the French Revolution.

ANSWER: **terrorism** [accept word forms such as **terrorist**s or **terror**; accept **Reign of Terror** or **War on Terror**]

6. **This man remarked being in the House of Lords was like being “dead in the Elysian Fields” and he was once arrested for challenging Daniel O’Connell’s son to a duel. He was the Chancellor of the Exchequer in the “Who? Who? Ministry” of Lord Derby. This man was *attacked* by his rival’s speeches in the Midlothian campaign, and lost support when his ministry passed the Royal Titles Act recognizing British rule of (\*)** India. He’s not Chamberlain, but he announced “peace with honor” after leading British negotiations on a treaty granting independence to Romania and Serbia. Besides leading Britain at the Congress of Berlin, this Prime Minister was made an earl by his friend Queen Victoria. For 10 points, name this Conservative Prime Minister in the late 1800’s, noted for his battles with rival William Gladstone.

ANSWER: Benjamin **Disraeli** [or the Earl of **Beaconsfield**]

7. **A 20th-century author from this country who wrote a semi-autobiographical novel titled *Paradiso* is named Jose Lezama Lima. A poet from this country wrote about an African ancestor who says “I’m dying” while a European ancestor says “I’m tired” during the middle passage in his poem “The Ballad of the Two Grandfathers.” Another poet wrote that this country was like a widow passing in the darkness in a poem in which he claimed to have two homelands, this country and the night. That poet from this home country of (\*)** Nicolas Guillen wrote that he “cultivates a white rose” and is a “sincere man” in two of the poems found in his *Simple Verses*, or *Versos Sencillos*, which were adapted into a nationalistic song. For 10 points, name this home country of Jose Marti, whose words were adapted into the lyrics of its patriotic song “Guantanamera.”

ANSWER: Republic of **Cuba** [or Republica de **Cuba**]

8. **During this event, Richard Queen was misdiagnosed with a “twisted spine,” which later turned out to be multiple sclerosis. A conspiracy theory about this non-Vietnam event was the subject of Gary Sick’s book *October Surprise*. The television show *Nightline* was created to report on this event. During it, a helicopter crash marked the failure of Operation Eagle (\*)** Claw.Espionage agents and a fake Canadian film crew helped several participants escape this event, and conspiracy theorists allege Ronald Reagan prolonged it to screw over President Jimmy Carter. This event was meant to punish the United States for its support of Mohammad Reza Pahlavi. For 10 points, name this 1979 crisis in which activists in a Middle Eastern country led by Ayatollah Khomeini took over an American embassy.

ANSWER: **Iran**ian **hostage** crisis

9. **In one painting of this place, a white-bearded William Butler Yeats appears in the background while the foreground is dominated by a profile view of a woman in a pink dress. In another painting, a woman “arriving” here wears a pale blue dress cut nearly to the navel. The most famous painting of this place depicts three men and two women sitting around a diagonal table and the artist walking by in the background while on the right side, looking directly at the viewer, is a red-haired woman with an eerily (\*)** greenish-white face. A lithograph displaying this place’s name three times depicts a gray silhouette of Valentin the Boneless and his partner La Goulue dancing the can-can, which was invented here. For 10 points, name this Paris cabaret depicted in many paintings by Henri de Toulouse-Lautrec, famous for its large red windmill.

ANSWER: the **Moulin Rouge** [prompt on “Paris”]

10. **This author asserted that “the steel of freedom does not stain” in a poem containing three stanzas of responses to the questions “Say, who are you that mumbles in the dark? And who are you that draws your veil across the stars?” A long work by this poet both begins and ends with the couplet “Good morning, daddy! Ain’t you heard?”; that book contains such sections as “Early Bright”, “Dig and Be Dug”, and “Vice Versa to Bach”. This author of (\*)** “Let America Be America Again” described an instructor as “a part of me, as I am a part of you” in a poem about an assignment to “let that page come out of you”, his “Theme for English B”. His most famous poem asks if a certain entity “sags / like a heavy load” and wonders if it dries up “like a raisin in the sun”. For 10 points, name this poet whose *Montage of a Dream Deferred* contains “Harlem”.

ANSWER: Langston **Hughes** [or James Mercer Langston **Hughes**]

11. **This man fathered the twins Nebrophon and Euneus with the Lemnian queen Hypsipyle. His father committed suicide by drinking bull’s blood, an act which prompted the murder of this man’s brother Promachus. This man ordered the construction of a pentekontoros built partly using wood from the oak grove at Dodona and employed the advice of Phineas in order to pass through the (\*)** Symplegades. While helping a disguised Hera cross the Anauros river, he lost asandal, thus fulfilling a prophecy involving his usurping uncle Pelias. During a trip to Colchis, this man plowed a field using fire-breathing oxen and, like Cadmus, defeated warriors grown from dragon’s teeth. His second wife Glauce was jealously killed by his first wife, the sorceress Medea. For 10 points, name this hero who led the Argonauts in search of the Golden Fleece.

ANSWER: **Jason** [or **Iason**, but definitely not “Aeson”]

12. **The complexity class named after this function includes the undirected graph reachability problem. In terms of the number of nodes, p, this is the approximate runtime of searching, inserting and deleting an element from an AVL tree. For a height-balanced binary tree consisting of q nodes, there are approximately this function of q levels. For the average case, if there are n inputs into (\*)** quicksort, then the algorithm will run in *n* times this function of *n*. This is the average case runtime of the binary search algorithm, since half of the list will be removed from consideration after any given step. For 10 points, name this mathematical function, the inverse of exponentiation.

ANSWER: **log**arithm [accept “discrete **logarithm**”]

13. **This work’s choreographer’s preferred interpreter of its central role was Christine Sarry. In its second section, a nocturne in 5/4, the bassoon and oboe represent the loneliness of the central character. That part of this work also contains music for solo piano written by Leonard Bernstein. Another section of this work takes themes from the songs “Gilderoy” and “McLeod’s Reel”, but is based primarily on an Alan Lomax recording of “Bonaparte’s Retreat”. The “Four Dance Episodes” its composer excerpted from this ballet included music from the sections (\*)** “Saturday Night Waltz” and “Buckaroo Holiday”, but omitted the “Ranch House Party”. Its final section climaxes in a kiss between the Champion Roper and the Cowgirl. For 10 points, name this ballet choreographed by Agnes de Mille to music by Aaron Copland, which contains the “Hoe-down”.

ANSWER: ***Rodeo***

14. **During a church service in this novel, a mysterious voice from behind a pillar tells the protagonist to meet on the Brigg at midnight. Characters in this novel include the militia leader Garschattachin and the protagonist’s superstitious guide Andrew Fairservice. Another character in this novel, Morris, carries a portmanteau which he claims is filled with clothing, but which actually holds gold intended to pay English troops. Owen is jailed as a debtor at the behest of MacVitie in this novel, but is freed by (\*)** Bailie Nicol Jarvie. The title character appears as a *deus ex machina* at this novel’s end to drive off Jobson and kill the villainous Rashleigh. Diana Vernon and Frank Osbaldistone fall in love in, for 10 points, which Sir Walter Scott novel, set during the Fifteen and titled for a Scottish outlaw?

ANSWER: ***Rob Roy***

15. **Iannis Xenakis used eight so-called “sound complexes” in a solo work for this instrument called *Nomos Alpha*. Six beats on the body of these instruments begin the main theme in Arvo Pärt’s orchestration of *Fratres* for twelve of them. An ensemble consisting entirely of these instruments was founded in the 1970s by twelve members of the Berlin Philharmonic. The first of Villa-Lobos’s *Bachianas Brasileiras* was composed for (\*)** eight of these instruments, while Jacqueline du Pré popularized Edward Elgar’s concerto for it. J.S. Bach’s six unaccompanied suites for this instrument were famously recorded by both Mstislav Rostropovich and Pablo Casals. For 10 points, name this instrument played by Yo-Yo Ma which joins two violins and a viola in a string quartet.

ANSWER: **cello** [or violon**cello**]

16. **One model of this phenomenon can be used to determine the time of coalescence, and is characterized by a Markov chain with multinomial sampling which inevitably approaches fixation. This phenomenon is the dominant driver of change according to the neutral theory posited by Motoo Kimura. Described by the Wright-Fisher model, this phenomenon is the primary driver of another process’s (\*)** peripatric variant. The effects of this phenomenon can be exacerbated when a small group establishes a new population in the founder effect or by natural disasters due to a population bottleneck. For 10 points, name this evolutionary mechanism where an allele frequency changes due to random sampling.

ANSWER: **genetic drift** [prompt on “drift”, “mutation”, or “random mutations”]

17. **The last man to hold this position and go to a championship game was forced to accept John Treloar as his “associate head coach.” In 2002, the first ESPN television film ever made starred Brian Dennehy as a former holder of this position. John Feinstein wrote the book *A Season on the Brink* after spending a year with a man in this coaching position. After then-school president Myles Brand instituted a “zero tolerance” policy, that man was forced out of this position after (\*)** grabbing freshman Kent Harvey’s arm. During all of the 1980’s and 1990’s, this position was held by a sweater-wearing man known as the “General,” who once threw a chair onto the court. For 10 points, name this college basketball coaching position in the Big Ten, currently held by Tom Crean and held for over two decades by Bobby Knight.

ANSWER: Men’s Basketball Head Coach at **Indiana** [or **Hoosiers** Head Coach]

18. **This man was the star of a film specifically made for the 1964 World’s Fair called *Man in the 5th Dimension*.He worked with John Stott to found the Lausanne Movement in 1974. This person was criticized for agreeing with Richard Nixon that the Jews controlled the American media, a conversation that occurred during his frequent visits to the White House. His namesake association has run the radio program *Hour of Decision*, and in 1947, he began a series of Dwight (\*)** Moody inspired events that frequently ended with the song “Just as I Am.” This man’s son runs the Samaritan’s Purse organization and is named Franklin. For 10 points, name this evangelical leader who has been the spiritual adviser to many presidents and who has conducted more than 400 Christian crusades across the world.

ANSWER: William “Billy” **Graham** Jr.

19. **Joseph ibn Naghrela was killed in this city in a 1066 pogrom supposedly prompted by Abu Ishaq’s anti-Semitic writing. Cardinal Cisneros’ attempt to brutally convert the population of this city led to a revolt that spread to its nearby Alpujarras Mountain region. A former ruler’s wistful gaze back at this city supposedly gave rise to the term “the (\*)** Moor’s last sigh”. The capital of the small empire ruled by the Nasrid Dynasty, it was surrendered by a ruler known as Boabdil to the so-called “Catholic Monarchs.” A fortress in this city contains the Court of the Lions and is linked to an estate called the “Generalife” (HEN-uh-rah-LEE-fay). In 1492, its conquest by Castile and Aragon effectively ended the Reconquista. For 10 points, name this city in southern Spain where the Alhambra is.

ANSWER: **Granada**

20. **One of this quantity’s operators is a 3x3 matrix with a 1 in the top left, a -1 in the bottom right, and 0s everywhere else. The operators corresponding to the three Cartesian vector components of this quantity do not commute with each other, but they all commute with the operator corresponding to this quantity squared. The eigenfunctions of this quantity’s operators are the spherical harmonics. The conservation of this quantity causes the radius vector for the (\*)** orbit of a planet to sweep out equal areas in equal time, a fact known as Kepler’s 2nd Law. This quantity is equal to the product of moment of inertia with angular velocity, and it is conserved in the absence of an external torque. For 10 points, name this quantity symbolized L which is defined as the cross product of position with linear momentum.

ANSWER: **angular momentum** [or **rotational momentum**, DO NOT accept or prompt “linear momentum” or just “momentum”]

TB. **This device was the subject of a comic song after its namesake made a joking remark about working it in a “twinkling of an eye.” Its inventor was influenced by the similar Scottish Maiden and Halifax Gibbet. One of the oldest of these devices was sold by its primary user, Charles Henri Sanson, in order to make a profit. Sanson supported the usage of this device as it was less physically exerting. It was invented by Antoine Louis, although its namesake was a doctor who was a proponent of (\*)** reforming criminals. This device remained the standard means of execution in its country until Francois Mitterrand’s initiative to abolish capital punishment. For 10 points, name this device which beheads people that was frequently used during the French Revolution.

ANSWER: **guillotine**

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**Round 9: Bonuses**

1. Two of them, Jurojin and Fukurokujo, are sometimes said to inhabit the same body, while another of them, Benzaiten, is the biwa-carrying equivalent of Saraswati. For 10 points each:

[10] Identify this group of deities which also includes the hammer-wielding Daikokuten and Ebisu, the god of fishermen. They are usually depicted on the Takarabune, or “treasure ship”.

ANSWER: the **Seven Lucky Gods** [or the **Shichi Fukujin**]

[10] Many stories identify Ebisu with Hiroku, the boneless “leech child” who was the failed first offspring of these two gods. When these two gods later got the marriage ritual right, they created Amaterasu and Susano’o.

ANSWER: **Izanami**-no-mikoto and **Izanagi**-no-mikoto [both needed; either order is fine; prompt on partial answer]

[10] Izanami and Izanagi are the major figures in the creation myth of this Japanese religion, which venerates kami.

ANSWER: **Shinto**ism [accept word forms; prompt on “kami-no-michi”]

2. This man opposed the sorcerer king Soumaoro. For 10 points each:

[10] Name this ruler whose mother was the ugly hunchback Sogolon. The subject of a historical epic, this empire builder was born a cripple but through his sheer determination was able to walk on his own.

ANSWER: **Sundiata** Keita

[10] The empire Sundiata founded was later led by this man, who notoriously carried thousands of gold bars with him on a 1324 pilgrimage to Mecca. On his trip, he reportedly gave away numerous gold bars and built a mosque every Friday.

ANSWER: Mansa **Musa** I

[10] This African empire was led by Sundiata and Mansa Musa. It shares its name with a modern-day landlocked West African country.

ANSWER: **Mali** Empire

3. Ralph Vaughan Williams’s *Hodie* and a six-part oratorio by J.S. Bach labeled BWV 248 were both written for this holiday, as was a song by Adolphe Adam that originally set the poem “Minuit, chrétiens”. For 10 points each:

[10] Identify this Christian holiday for which Benjamin Britten wrote his *Ceremony of Carols* and his cantata *Saint Nicolas*.

ANSWER: **Christmas** [or **Noël**; or **Weinacht**; or **Natale**]

[10] A 1953 *Christmas Cantata* was the last completed composition by this member of Les Six, who scored his second symphony for strings and trumpet and channeled his love of trains into his symphonic poem *Pacific 231*.

ANSWER: Arthur **Honegger** [or Oscar-Arthur **Honegger**]

[10] A *pastorale ad libitum* finale caps off this Baroque Italian composer’s G minor *Christmas Concerto*, the eighth of his twelve Opus 6 concerti grossi.

ANSWER: Arcangelo **Corelli**

4. Annie Proulx conjectured that this character suffers from John Wayne syndrome, stemming from an incident in World War II in which he left his unit’s heavily-shelled position and blamed himself. For 10 points each:

[10] Identify this character whose many italicized internal monologues reveal his growing inability to deal with crime in the modern world, as exemplified by the violent clash between Llewelyn Moss and Anton Chigurh.

ANSWER: Sheriff **Ed** Tom **Bell** [accept either underlined portion]

[10] Sheriff Bell has probably the best claim on being the protagonist of *No Country for Old Men*, a novel by this punctuation-disdaining author of *All the Pretty Horses* and *The Road*.

ANSWER: Cormac **McCarthy** [or Charles **McCarthy**]

[10] The nameless teenage protagonist of this McCarthy novel, referred to only as “the kid”, joins up with the Glanton gang and clashes with Judge Holden, a hairless embodiment of evil.

ANSWER: ***Blood Meridian*** *or the Evening Redness in the West*

5. This type of motion is contrasted with nutation, and it can either be torque-free or torque-induced. For 10 points each:

[10] Name this type of motion easily visible in gyroscopes, in which the angular momentum vector of an object rotates about an axis.

ANSWER: **precession**

[10] Thomas precession is a mathematical correction to the motion of the spin of an elementary particle derivable from this theory. In this theory, the inner product of two four-vectors is a Lorentz-invariant quantity.

ANSWER: **special relativity** [or **SR**; prompt on “relativity”; do NOT accept or prompt “general relativity”]

[10] Precession and nutation can both be described as changes in one of these angles, which are a convenient choice of coordinates to describe rotations. Precession is a change in the first of them, while nutation is a change in the second of them.

ANSWER: **Euler** angles

6. This event targeted a man known as Dutch Henry, although he was not present. For 10 points each:

[10] Name this 1856 event in which five settlers were hacked to death in a Kansas creek. It occurred as retribution for the sacking of Lawrence that had occurred a few days before.

ANSWER: **Pottawatomie** Creek Massacre

[10] The massacre was carried out by the followers of this fanatical anti-slavery opponent, who later raided the armory at Harper’s Ferry, leading to his arrest and execution.

ANSWER: John **Brown**

[10] This future Civil War general led the Marines to arrest John Brown at Harper’s Ferry. He famously remarked that “it is well that war is so terrible—we should grow too fond of it.”

ANSWER: Robert Edward **Lee**

7. A pair of rabbits, two mounted riders, and a flock of sheep are among the minor background details of this painting, which Walter Friedländer suggested depicted characters from the *Hypnerotomachia Poliphili*. For 10 points each:

[10] Name this 1514 painting in which a boy dips his hand into a pool of water between two women, one naked and one clothed.

ANSWER: ***Sacred and Profane Love*** [or ***Amor Sacro e Amor Profano***; or ***Amor Divino e Amor Profano***; or ***Divine and Profane Love***; or ***Venus and the Bride***]

[10] *Sacred and Profane Love* was painted by this Venetian artist, who also painted such mythological scenes as *Bacchus and Ariadne* for Alfonso d’Este. He lends his name to a brownish-orange hair color he favored.

ANSWER: **Titian** [or Tiziano **Vecelli**o]

[10] A knight carrying a red banner bearing the papal arms and leading a Turk and a Moor, two putti erecting a cross on a cloud, and St. Peter reading from a book all appear in this Titian painting, created for the Frari Basilica.

ANSWER: the ***Pesaro Madonna*** [or the ***Pala Pesaro***; or, as Wikipedia seems to insist, the ***Madonna di Ca' Pesaro***]

8. A speleologist named William Whyte proposed using ground-penetrating radar and other techniques to explore these regions that lack an entrance. For 10 points each:

[10] Name these regions of the Earth, where one can find stalagmites.

ANSWER: **cave**s or **cavern**s

[10] These structures within caves may be ramiform, if the rooms radiate outward in a hub-like fashion, or spongework, if the cave’s rooms are organized like pockets in a void.

ANSWER: cave **maze**s

[10] Most water found in caves come from the surface through this process, in which gravity forces water to flow down a porous substance, like soil, onto what is eventually bedrock.

ANSWER: **percolation** [accept word forms]

9. Ramatoulaye Fall recounts the death of her husband Modou in *So Long a Letter*, a novel written by an author from this country, which also produced the author of *The Belly of the Atlantic*. For 10 points each:

[10] Identify this country home to Mariama Ba, Fatou Diome, and the poet of *Prayer to Masks*, the latter of whom edited a collection for which Jean-Paul Sartre wrote an introduction called “Black Orpheus”.

ANSWER: Republic of **Senegal** [or Republique du **Senegal**]

[10] The aforementioned Léopold Senghor co-founded this literary movement, which sought to recognize the colonial experiences of black Africans, with Léon Damas and the Martinican author Aimé Césaire.

ANSWER: **négritude**

[10] Senghor, Damas, and Césaire all wrote primarily in this European language, which was also used by the primary colonizers of their three home countries.

ANSWER: **French** language [or la langue **française**]

10. Legendarily during this battle, a female apparition chastised a navy for backing their ships away. For 10 points each:

[10] Name this September 480 B.C. naval battle fought near the namesake straits, which was won by Greek forces under Themistocles. It is considered one of the pivotal battles in the Greco-Persian War.

ANSWER: Battle of **Salamis**

[10] Themistocles hailed from this Greek city-state, which fought Sparta in the Peloponnesian War.

ANSWER: **Athens** [or **Athina**; or **Athenai**]

[10] This harbor was the port city of classical Athens and the chief harbor of ancient Greece. It continues to serve as Greece’s chief port. Its shipyards constructed the fleet that won at Salamis.

ANSWER: **Piraeus**

11. Name some things about Aristotle’s gigantic opus, for 10 points each:

[10] This word describes the study of the nature of being and the world. This term also titles a collection of Aristotle’s works cataloged after the *Physics*.

ANSWER: **metaphysics**

[10] In this work, Aristotle argues that all art is mimesis, or representation. This work proposed six characteristics of tragedy, including plot and spectacle.

ANSWER: ***Poetics***

[10] In *Nichomachean Ethics*, Aristotle claims that this is the highest goal of all human activity. This term is usually translated as “happiness” and “flourishing”.

ANSWER: ***eudaimonia***

12. This character’s “smile” titles the final section of a novel in which she befriends a pig named Mefisto while on a collective farm and gives birth to “two rolls and a bee” in her owner’s dream. For 10 points each:

[10] Name this dog with an unusually masculine name, whose death from cancer greatly distresses her owner Tereza.

ANSWER: **Karenin**

[10] Karenin and her owner Tereza appear in this 1984 novel, in which Tereza’s womanizing husband Tomas has an affair with the bowler hat-wearing painter Sabina.

ANSWER: *The* ***Unbearable Lightness of Being*** [or ***Nesnesitelná lehkost bytí***; or *L'****Insoutenable légèreté de l'être***]

[10] *The Unbearable Lightness of Being* was written by this Czech author of *The Joke*.

ANSWER: Milan **Kundera**

13. He broke into American media as the masked chauffeur Kato in *The Green Hornet*, which led to his roles in 1971’s *The Big Boss* and 1972’s *Fist of Fury*. For 10 points each:

[10] Identify this pioneering martial artist who died before he could finish his final film, *Game of Death*, in which he fights Kareem Abdul-Jabbar.

ANSWER: Bruce **Lee** [or **Lee** Jun-Fan; or **Li** Yuanxin; or **Li** Yuanjian; or **Li** Xiaolong]

[10] *Game of Death*’s filming was interrupted so that Lee could star alongside John Saxon in this 1973 film, the first Chinese martial arts film to be produced by a major Hollywood studio. It ends with an iconic fight in a hall of mirrors.

ANSWER: ***Enter the Dragon*** [or ***Long Zheng Hu Dou***]

[10] Though he initially studied Wing Chun under Yip Man, Lee eventually developed his own martial-art-slash-philosophy, which he gave this name. It roughly translates as “the way of the intercepting fist”.

ANSWER: Jun Fan **Jeet Kune Do** [or **JKD**]

14. Tertiary examples of these compounds are more stable than secondary ones, which are more stable than primary ones, which explains why *tert*-butylbromide more readily undergoes SN1 reactions than methyl bromide. For 10 points each:

[10] Name these compounds, which are characterized by a carbon with three bonds and zero lone pairs.

ANSWER: **carbocation**s

[10] Tertiary carbocations are more stable than primary carbocations due to this phenomenon, in which electron density is donated from a sigma bond to an adjacent empty orbital.

ANSWER: **hyperconjugation** [do NOT accept or prompt on partial answers]

[10] Carbocations can also be stabilized via resonance caused by an adjacent one of these bonds in a phenomenon known as conjugation. These bonds are present in double and triple bonds and are contrasted with sigma bonds.

ANSWER: **pi** bonds

15. One of these animals, Britches, was infamously used to test a sonar device called the Trisensor Aid before he was released by the Animal Liberation Front. For 10 points each:

[10] Give the general animal type of Britches. Other animals of this type were placed in the “pit of despair” by Harry Harlow to test clinical depression.

ANSWER: **monkey**s [or rhesus macaque **monkey**s; prompt on **primate**s; do not accept “apes” or specific types of apes such as “chimpanzees”]

[10] Harlow’s monkeys are not to be confused with a delightfully named chimpanzee, Nim, who was used to test animal language acquisition. Nim’s name parodies that of this MIT linguist and author of *Syntactic Structures*.

ANSWER: (Avram) Noam **Chomsky**

[10] Chomsky outlined his anti-Vietnam War views in a book describing *American Power and the New* type of these people, a specific type of bureaucrat.

ANSWER: **Mandarins**

16. This man had a son nicknamed “Rufus” who mysteriously died in a hunting accident in the New Forest. For 10 points each:

[10] Name this ruler who was married to Matilda of Flanders. This English monarch compiled the Domesday Book survey listing English landholdings and defeated the victor of the Battle of Stamford Bridge.

ANSWER: **William the Conqueror** [or **William I**; or **William the Bastard**]

[10] William had won the English throne by defeating Harold Godwinson at this 1066 battle.

ANSWER: Battle of **Hastings**

[10] William used bloody scorched Earth policies in this 1069-1070 process, which featured William’s forces burning villages and slaughtering livestock in places like Staffordshire and Mercia.

ANSWER: **Harrying of the North** [or the **Harrowing of the North**]

17. Thomas Sterling’s *The Evil of the Day* is a murder mystery based on this play, in which Bonario rescues Celia from an attempted rape at the hands of the title character. For 10 points each:

[10] Identify this play in which the title character enacts an elaborate plan involving faking his own death in order to trick Corbaccio, Corvino, and another greedy inheritance-seeker.

ANSWER: ***Volpone***

[10] Volpone and his cunning servant Mosca were created by this Jacobean playwright of *Every Man in His Humour*, who also wrote about comical scammers in *The Alchemist*.

ANSWER: Ben **Jonson** [or Benjamin **Jonson**]

[10] This memorably-named character from *Volpone* is a doofy English traveler who keeps a detailed diary of his actions. A smarter Englishman, Peregrine, tricks him into hiding under a tortoiseshell to avoid arrest for sedition.

ANSWER: Sir **Politick** **Would-Be** [accept either underlined portion]

18. Paul Bartlett’s *Apotheosis of Democracy* is a sculpture located on this element of the U.S. Capitol. For 10 points each:

[10] Name this triangular architectural elements that are typically supported by columns and include a flat surface called a tympanum that often contains relief sculptures.

ANSWER: **pediment**s

[10] Pediments depicting the birth of Athena from Zeus’ forehead and the contest between Athena and Poseidon once adorned this temple to Athena on the Acropolis.

ANSWER: **Parthenon**

[10] This classical Greek sculptor designed the chryselephantine sculpture *Athena Parthenos* once found in the Parthenon, as well as the *Statue of Zeus at Olympia* that was a Wonder of the Ancient World.

ANSWER: **Phidias** [or **Pheidias**]

19. These molecules can be anchored at their namesake organizing centers, and they are arranged in a 9+2 formation in a flagellar axoneme. For 10 points each:

[10] Name this component of the cytoskeleton, a polymer of tubulin.

ANSWER: **microtubule**s

[10] Microtubules are assembled into the spindle apparatus during this stage of the cell cycle, which is contrasted with interphase. This form of cell division does *not* divide the number of chromosomes in the daughter cells in half.

ANSWER: **mitosis** [accept **M** phase]

[10] This protein complex’s function is to attach the microtubules of the mitotic spindle to the centromere. One of them is present in the center of each sister chromatid.

ANSWER: **kinetochore**

20. This is the most fundamental religious characteristic of both Judaism and Islam. For 10 points each:

[10] Name this English term for tawhid - the belief in one, and only one, god.

ANSWER: **monotheism** [accept word forms]

[10] This Arabic term denotes any sort of “turning away” from God, including egoism, idolatry, and polytheism. It is often divided into akbar and asghar, or greater and lesser, forms.

ANSWER: **shirk**

[10] Egotistical people are doubly bad since they also emulate this figure, who defied God’s command that all angels worship Adam because he was “made of clay”, while this figure was made of fire.

ANSWER: **Satan** [or **Iblis**; or **Shaytan**; or the **Devil**]

Extra. One law describing these objects fails at high frequencies due to the erroneous assumption that the equipartition theorem describes the amount of energy possessed in each normal mode in a cavity. For 10 points each:

[10] Name these objects which absorb all incident radiation. The Rayleigh-Jeans law predicts an “ultraviolet catastrophe” when attempting to describe the radiation they emit.

ANSWER: **black bodies** [or **black body** radiation]

[10] This physicist corrected the Rayleigh-Jeans law by assuming the normal modes in the cavity have a quantized energy equal to his namesake constant, which is symbolized h, times the frequency.

ANSWER: Max **Planck**

[10] In Planck’s law of blackbody radiation, one of the terms is e raised to the quantity energy divided by the product of Boltzmann’s constant and temperature. Adding a negative sign to the exponential in that term gives what quantity, which is summed over all microstates of a system to give the partition function?

ANSWER: **Boltzmann** factor [or **Boltzmann** distribution]