

**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 2: Tossups**

1. **This company is the subject of the book *Meet You in Hell*. Its employees once used the Bost Building as a headquarters. In its home base of operations, this company's strongest rival was Jones and Laughlin, and its founder commissioned journalist Napoleon Hill to write the book *The Law of Success*. One of its administrators was stabbed by Alexander (\*) Berkman, the lover of Emma Goldman. That employee of this company was named Henry Clay Frick. Its founder wrote the text "The Gospel of Wealth." This company brought in Pinkertons to serve as strikebreakers during the 1892 Homestead Strike. J.P. Morgan would combine it with another company to form U.S. Steel. For 10 points, name this steel company founded by its namesake Scotsman.**  
ANSWER: Carnegie Steel Company [accept Carnegie-Illinois Steel Company, do not accept "U.S. Steel"]

2. **This man noted that "we the great gazebo built" and asked the reader to "bid me strike a match and blow" in a poem about two sisters from his collection *The Winding Stair*. A poem about this man relates how "in the nightmare of the dark / All the dogs of Europe bark" and claims that "he disappeared in the dead of winter", noting that "the day of his death was a dark cold day". This poet described writing his play *The (\*) Countess Cathleen* and expressed a need to lie down "in the foul rag and bone shop of the heart" in "The Circus Animals' Desertion". In another poem, he wrote of how "a vast image out of Spiritus Mundi troubles my heart" and asked "what rough beast...slouches toward Bethlehem to be born?" For 10 points, name this cofounder of the Abbey Theater, an Irish poet who wrote of a time when "things fall apart" in "The Second Coming".**  
ANSWER: William Butler Yeats

3. **The power predicted by the Larmor formula is proportional to charge squared times acceleration squared divided by the cube of this quantity. In cgs units, the fine structure constant is equal to the electron charge squared divided by the product of h-bar and this quantity. This quantity is equal to the ratio of the electric field to the magnetic field for a wave in free space. This quantity is equal to one over the square root of the product of the (\*) vacuum permeability and the vacuum permittivity. The spatial invariance of this quantity disproves the existence of the luminiferous aether. The ratio of this quantity in a vacuum to in a material gives that material's index of refraction. For 10 points, name this quantity symbolized c and equal to roughly 186,000 miles per second.**  
ANSWER: speed of light [prompt on "c"]

4. **This was the name of a monarch whose forces seized territory south of the Oxus River in the Panjdeh Incident, which almost prompted war with Great Britain. That monarch with this name signed, with his western neighbor, the Reinsurance Treaty. A ruler with this name was opposed in the failed January Uprising, while another passed non-German May Laws to crack down on Jews. After his country lost the battle of Friedland, a ruler with this name met on a (\*) raft to sign the Treaty of Tilsit with Napoleon. The Church of the Savior on Blood is dedicated to a ruler with this name, who was assassinated on that spot when his carriage was bombed by the People's Will. For 10 points, give this name of three Russian tsars, the second of whom emancipated the serfs.**  
ANSWER: Alexander [number does not matter]

5. **This actor is in the WWE Hall of Fame for being the first non-wrestling celebrity to enter a Royal Rumble. In a television show, he played the Internal Expediting Analyst at the online "Neverending Store." On that show, this man's character sang the original theme song, "Moon Over Parma," and had a cross-dressing brother named Steve. In that sitcom, this actor played an employee at a (\*) Cleveland department store who invented Buzz Beer and was harassed by the flamboyantly dressed Mimi. This man hosted the American version of a show where he often noted "everything's made up and the points don't matter." In his current television show, he succeeded Bob Barker as host. For 10 points, name this bespectacled comedian and current host of *The Price is Right*.**  
ANSWER: Drew Allison Carey

6. A function with this property that maps a compact convex set onto itself has a fixed point according to the Brouwer fixed point theorem. A mapping of this type from space X to space Y has this property if for any open subset V of Y, the inverse image of V is an open subset of X. A bijective mapping between topological spaces is a homeomorphism if the mapping and the inverse mapping are open and have this property. If for any epsilon there exists a delta such that the distance between f(x) and f(y) is less than epsilon when the distance between x and y is less than delta, the function is (\*) “uniformly” this. A function has this property if for any point c on an interval [a, b], the limit as x approaches c of f(x) equals f(c). For 10 points, all differentiable functions must have what property in which a function can be drawn without lifting pen from paper?  
ANSWER: continuity [or word forms like “continuous”]

7. The rich couple Sapphira and Ananias were struck dead after being rebuked by this figure for their greed. This man once resurrected a girl named Tabitha while on a journey to Lydda and Joppa, after which he had a dream in which God commanded him to eat non-kosher animals. This man quoted Psalm 118 in a speech to the Sanhedrin after healing a lame man at the Temple. This figure is denounced by (\*) Paul in First Galatians for discriminating against non-Jewish converts. This man was called to follow Jesus while with his brother Andrew, and in Jerusalem, this man denied being a follower of Jesus three times. For 10 points, name this apostle of Jesus, the “rock of the Church”, and the first pope.  
ANSWER: Peter [or Simon Peter; or Saint Peter; or Petros; or Petrus]

8. A red-cloaked angel swings a censer toward a glowing triangle in this man’s extremely orange fresco *Adoration of the Name of the Lord*. A woman leans on what may be a burial mound topped by wrought-iron rails in a probable portrait of this man’s maid *Leocadia*, while a woman holding a striped box sits apart from a semicircle gathered around a goat-headed man in another of his paintings. Horses trample people and men fight with daggers and curved swords in a painting by this artist of *The (\*) Witches’ Sabbath* that served as a companion to a work in which a square lantern illuminates two opposing lines of people and a white-shirted man throws up his hands. A bloody, headless man is being eaten in one of this man’s *Black Paintings*. For 10 points, name this Spanish painter of *Saturn Devouring His Son* and *The Third of May, 1808*.  
ANSWER: Francisco Goya [or Francisco José de Goya y Lucientes]

9. At an auction in this novel, a character frantically signals her husband to buy another man’s turquoise shirt stud, then retreats to her fortune-telling tent, where the other man kisses her. Near the end of this novel’s first part, two characters take a five-day trip to the river country, where they encounter a man experimenting with clover hay and learn about Charley Fuller’s acquisition plans. A ruptured appendix causes the death of Amedee Chevalier in this novel’s climactic fourth section, “The (\*) White Mulberry Tree”. Its protagonist is advised to keep her hogs clean to ensure their survival by Crazy Ivar. Carl Linstrum marries this novel’s protagonist, whose brother Emil is found embracing Marie and is killed by a drunken Frank Shabata. For 10 points, identify this Willa Cather novel about Alexandra Bergson.  
ANSWER: O Pioneers!

10. This compound is added to phenol to generate salicylic acid in the Kolbe-Schmitt reaction. This compound’s vibrational modes include an IR-inactive symmetric stretch, an asymmetric stretch around 2350 inverse centimeters, and two bending modes around 670 inverse centimeters, a total of four vibrational modes. As a supercritical fluid solvent, this compound is renowned for its use in decaffeination via extraction. The reaction of this compound and water forms the centerpiece of the primary (\*) buffer system in human blood. Reaction of this compound with a Grignard reagent followed by acidic workup produces a carboxylic acid. The presence of this compound in the atmosphere is the primary cause of ocean acidification. For 10 points, name this compound that is produced alongside water in a complete combustion reaction.  
ANSWER: carbon dioxide or CO<sub>2</sub>

11. An acclaimed 24-sheet map of this city was created by the cartographer John Rocque, and John Evelyn's proposed plan for this city was ignored. A Doric column here is a monument that at one time contained an inscription blaming "Popish frenzy" for a disaster, while a later event here featured rioters painting an inscription referring to "King Mob" on a prison wall. In this city, Simon (\*) Sudbury was executed in an uprising, which was ended after Mayor William Walworth stabbed Wat Tyler to death. Its "Great Plague" was documented in the diary of Samuel Pepys, and Christopher Wren proposed a rebuilding plan of this city after a 1666 disaster. For 10 points, name this English city where St. Paul's Cathedral was rebuilt after the Great Fire.

ANSWER: London, England

12. Impulse! records was known as the "house that [this artist] built" based on the success of his early records, such as *Live! at the Village Vanguard*, which featured his classic quartet including Elvin Jones, Jimmy Garrison, and McCoy Tyner. This artist, who named one of his albums after the "loping" instrumental style of bassist Paul Chambers, used a cycle of chromatic thirds to rework standards in his namesake (\*) "changes." This jazz musician, whose fast-paced streams of notes Ira Gitler called "sheets of sound," played on Miles Davis's album *Kind of Blue*. He recorded the songs "Countdown" and "Naima" and titled one of his albums after a song from *The Sound of Music*. For 10 points, name this jazz saxophonist whose albums include *My Favorite Things*, *A Love Supreme*, and *Giant Steps*.

ANSWER: John William Coltrane

13. A series of novels about the first Botswanan woman to do this job includes *The Tears of the Giraffe* and stars Precious Ramotswe. Poets who seek after Cesarea Tinajero are the title people of this type in a 1998 novel that begins with the section "Mexicans Lost in Mexico." Alexander McCall Smith wrote novels titled for the *Number 1 Ladies'* (\*) agency of this profession, which is held by Georges Simenon's character Jules Maigret. People of this type are poets seeking the founder of "Visceral Realism" in a Roberto Bolaño titled for the "Savage" ones. A man of this profession, who figures out that the KKK has killed John Openshaw in "The Five Orange Pips," appears in *The Sign of Four* and *A Study in Scarlet*. For 10 points, name this profession of Arthur Conan Doyle's character Sherlock Holmes.

ANSWER: detectives [accept *The Savage Detectives* or *Los Detectives Salvajes* or *The No. 1 Ladies' Detective Agency*; accept synonyms such as inspectors or sleuths or gumshoes]

14. This thinker claimed both animals and humans both acquire customs through experimentation in a work that argues we trust some testimony since man has strong memory and is not inclined to lie. This man used the example of a house to disprove the argument from design in a work narrated by Pamphilus. One of this man's works that distinguished between "relations of ideas" and "matters of fact" woke Kant from his (\*) "dogmatic slumber". In that work, this author of *Dialogues Concerning Natural Religion* conceded that one exception to his distinction between "sense impressions" and "ideas" was the "missing shade of blue". For 10 points, name this author of *A Treatise of Human Nature* and *Enquiry Concerning Human Understanding*, a Scottish philosopher.

ANSWER: David Hume

15. One movement of this piece opens in 4/2 time, then shifts to 2/2, 3/2, 5/2, and 6/2 at various times. Gamblers cry "Wafna! wafna!" in a section of this work sung by the drunken "Abbot of Cockaigne", while its penultimate section compares the "rose of the world" to Blanchefleur and Helen. This work, the *Trionfo di Afrodite*, and a setting of poems by Catullus make up its composer's triptych *Trionfi*. In the second aria from its "In the (\*) Tavern" section, a tenor sings entirely in falsetto to express the feelings of a swan being roasted. Its movements include "Veni, veni, venias" and two which refer to a certain goddess as "Empress of the World". For 10 points, name this setting of 24 Goliard poems found in a Bavarian abbey, a cantata that both begins and ends with "O Fortuna" and was composed in 1936 by Carl Orff.

ANSWER: Carmina Burana [or Songs of Beuern]

16. As president, this man supported cutting university budgets with such slogans as “Shoes, yes! Books, no!” Pedro Aramburu issued a decree outlawing the mentioning of this man’s name, and his successor was replaced by the National Reorganization Process. Originally, he had left-wing support from groups like the Montoneros. This leader’s initial tenure as president ended in a 1955 coup in which he fled the country on a gunboat given to him by Alfredo Stroessner. This man’s working-class base was called the (\*) “shirtless ones” or *descamisados*. He was succeeded as president by his third wife, Isabel, while his charismatic second wife was the actress Eva Duarte. For 10 points, name this President of Argentina married to the woman known as Evita.

ANSWER: Juan Domingo Peron

17. A depiction of this deity being offered wine can be found on the 400 Year Stela. This god is represented by an unusual fork-tailed animal called the “sha”. This god’s cult center was near the modern town of Naqada, at a city called Ombos. He was tricked by another god’s use of gypsum-covered wood into building a boat out of stone, which naturally sank and lost him a race. In another story, a golden disk appears on this deity’s forehead, revealing his consumption of some (\*) semen-filled lettuce. He was chosen to be the patron god of the Hyksos, and he stood at the prow of the solar barque, where he fought Apep. This husband of Nephthys killed his brother, leading to a conflict over inheritance of the kingship with his nephew Horus. For 10 points, name this chaotic Egyptian storm god, the brother of Osiris.

ANSWER: Set [or Seth; or Setesh; or Setekh; or Suty]

18. The title character of a play written in this language mixes up the destination of a purse of money and runs two banquets at once after his endless hunger causes him to accept the title position. Two women hide stolen goods from their husbands by faking pregnancies in another play written in this language. *Servant of Two Masters* and *Can’t Pay? Won’t Pay!* were written in this language, which was also used for a play in which the (\*) Maniac impersonates a judge and tricks the police into reenacting a defenestration. In the final scene of another play in this language, a little girl drowns in a fountain, a boy shoots himself, and the Director laments having “lost a whole day” over the title intrusive sextet. For 10 points, name this language used by the playwrights Carlo Goldoni, Dario Fo, and Luigi Pirandello.

ANSWER: Italian language [or Italiano; or lingua italiana]

19. In one book, this thinker described “legality”, the “gift of grace”, and the “authority of the eternal yesterday” as the three sources of legitimation and noted that while the optimism of Shakespeare’s Sonnet 102 would be nice, it is not “summer’s bloom” that lies ahead of us, but a “polar night of icy darkness and hardness”. In that same book, he described the state as an entity which, within its boundaries, “claims the (\*) monopoly of the legitimate use of physical force”. In his most famous book, which was first translated into English by Talcott Parsons, he lamented how the “cloak” of care for external goods had become an “iron cage” of rationality and analyzed the economic effects of Calvinism. For 10 points, name this German sociologist who wrote *Politics as a Vocation* and *The Protestant Ethic and the Spirit of Capitalism*.

ANSWER: Max Weber [or Karl Emil Maximilian Weber]

20. Enzymes located in this non-organ structure include D-beta-hydroxybutyrate dehydrogenase and acetoacetate decarboxylase, which are involved in ketogenesis. A substance located inside this structure contains a D loop inside its control region. 2,4-dinitrophenol and thermogenin increase the permeability of this structure’s membrane, acting as uncoupling agents. This organelle contains its own (\*) maternally inherited DNA, and its most important function can be described using chemiosmotic theory, which uses the “proton motive force.” The folds in this organelle’s inner membrane are called cristae. For 10 points, name this organelle which uses the electron transport chain to generate ATP for the cell to use as energy.

ANSWER: mitochondrion [or mitochondria]

**TB. A three-membered ring containing a cation of this element is nucleophilically attacked by acetate to form a vicinal diol in the Woodward cis-hydroxylation. An acid of this element and oxygen is used to cleave vicinal diols into carbonyls. This element binds to 7 fluorine atoms in a classical example of a pentagonal bipyramidal compound. This is the largest element that can bind to silver in a chemical used in (\*)**

photographic film. Deficiency of this element in the human body leads to an enlarged thyroid, a condition known as goiter. This element is used to test for starch by staining it a blue-black color. The only diatomic element to be solid at room temperature, for 10 points, name this second-heaviest halogen, whose chemical symbol is I.

ANSWER: iodine [prompt on "I"]

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**Round 2: Bonuses**

1. The SHE, which consists of a piece of platinum in a solution with hydrogen gas bubbled into it, has a defined value of 0 for this quantity. For 10 points each:

[10] Name this quantity which can be determined from thermodynamics by the Nernst equation.

ANSWER: reduction **potential** [or **voltage**, prompt on “V” or “E”]

[10] The denominator of the term proportional to the natural log of the reaction quotient in the Nernst equation contains this constant, which is approximately 96,500 Coulombs per mol of electrons.

ANSWER: **Faraday** constant [prompt on “F,” do NOT accept or prompt on “Farad”]

[10] The difference between the actual electrode potential and the electrode potential determined by the Nernst equation is this quantity. When this quantity is low, the Butler-Volmer equation is approximately linear.

ANSWER: **overpotential**

2. This philosopher hypothesized a division of linguistic labor that occurs along the four part meaning vector in his essay “The Meaning of ‘Meaning’”. For 10 points each:

[10] Name this philosopher, better known for his “Twin Earth” and “Brain in a Vat” thought experiments, who, along with Jerry Fodor, claimed that one mental state could arise from different physical states, a theory called “multiple realizability”.

ANSWER: Hilary Whitehall **Putnam**

[10] Putnam’s “Brain in a Vat” experiment resembles the “evil demon” hypothesis that this philosopher used to argue for doubt of knowledge of the external world in his *Meditations on First Philosophy*.

ANSWER: René **Descartes** [or Renatus **Cartesius**]

[10] In his 1994 Dewey Lecture, Putnam provides three arguments against Locke’s causal theory of perception, partially drawing on this man’s book *Sense and Sensibilia*. This British man introduced the theory of speech acts.

ANSWER: J. L. **Austin** [or John Langshaw **Austin**]

3. A literary woman with this name is said to be “doubly dead in that she died so young” in a poem whose narrator enjoins her lover Guy de Vere to “weep now or never more” at the sight of her body on a bier. For 10 points each:

[10] Give the name used to title an 1843 poem which was originally titled “A Paean”. In another poem by the same author, it was given by “the angels” to a “rare and radiant maiden”, and is the only word whispered by the speaker.

ANSWER: **Lenore**

[10] This other woman was borne away by her “highborn kinsmen” and shut up “in a sepulchre in this kingdom by the sea”, according to an 1849 poem by the same author.

ANSWER: **Annabel Lee**

[10] The three poems described thus far, “Lenore”, “The Raven”, and “Annabel Lee”, were all written by this macabre Baltimorean author.

ANSWER: Edgar Allan **Poe**

4. This artist’s *East Wind over Weehawken* depicts four brownish houses in mismatching styles. For 10 points each:

[10] Name this artist whose painting *The House by the Railroad* inspired the look of the Bates house in *Psycho*.

*Moonlight Interior* and *Girl at Sewing Machine* are among his “window paintings”.

ANSWER: Edward **Hopper**

[10] This Edward Hopper painting depicts two men, a woman, and a waiter in a brightly lit diner on an empty street. Quizbowl players since time immemorial know that it features a sign advertising Phillies cigars.

ANSWER: **Nighthawks**

[10] Hopper’s biographer Gail Levin suggested that *Nighthawks* was inspired by this similarly-themed 1888 painting, set in an establishment owned by Joseph Ginoux. It features a clock showing 12:15, a skewed pool table, and bright red walls.

ANSWER: *The* **Night Café** [or *Le* **Café de nuit**; by Vincent van Gogh]

5. As a young congressman, this man introduced an amendment to recognize the “law and authority of Jesus Christ” in the United States. For 10 points each:

[10] Name this Illinois congressman best known for running as an independent in the 1980 presidential campaign after losing the Republican nomination to Ronald Reagan. He amassed support from liberal Republicans.

ANSWER: John Bayard **Anderson**

[10] Reagan and Anderson both ran against this embattled incumbent president, a former Georgia governor. As president, he was criticized for supposedly mishandling the Iranian hostage crisis.

ANSWER: James Earl “Jimmy” **Carter** Jr.

[10] Anderson had the best showing for a third party candidate since this man’s 1968 campaign for the American Independent Party. This southern governor was paralyzed after a 1972 shooting.

ANSWER: George Corley **Wallace** Jr.

6. Two answers required. The usage of these terms in an economic context may have originated in a speech from Senator Ellison D. Smith. For 10 points each:

[10] Name these two commodities frequently modeled on a simple production possibility frontier. These two goods effectively symbolize a nation’s choice between spending resources on defense or civilian goods.

ANSWER: **guns** and **butter**

[10] The guns or butter model can be used to indicate national spending as part of this quantity, the market value of goods and services produced within a country in a year. Considered an indicator of standard of living, it should not be confused with the similarly named gross national product.

ANSWER: **Gross domestic product** [or **GDP**]

[10] The question of commodity production efficiency was also examined by this English economist in his 1865 text *The Coal Question*, in which he argued British supremacy was reliant on a finite supply of coal. His namesake paradox says that as a resource is used more efficiently, it is consumed more.

ANSWER: William Stanley **Jevons**

7. According to legend, a man in this battle died after being struck by a soldier named Mithridates. For 10 points each:

[10] Name this battle in which Artaxerxes II put down a revolt led by his younger brother, Cyrus the Younger. Cyrus had hired a Greek group of mercenaries known as the Ten Thousand.

ANSWER: Battle of **Cunaxa**

[10] An account of the Ten Thousand’s expedition to Cunaxa and return home can be found in this Greek author’s *Anabasis*. He expanded Thucydides by chronicling the last years of the Peloponnesian War in *Hellenica*.

ANSWER: **Xenophon** of Athens

[10] Cyrus and Artaxerxes fought for control of the Achaemenid Empire, an empire founded by Cyrus the Great that was the first empire in this region, which is modern-day Iran.

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

8. The unusual tempo marking “Adagio e staccato” is used for the second piece of its F major first suite, other popular entries in which include the fifth, an air, and the seventh, a bourree. For 10 points each:

[10] Name this collection of three suites, supposedly written to regain the favor of King George I. Its most famous piece is probably the D major, 3/2 time “Alla Hornpipe”.

ANSWER: **Water Music** [accept **HWV 348, 349, and 350**]

[10] *Water Music* was composed by George Frideric Handel, whose most famous choral work is this oratorio to a libretto compiled from the KJV by Charles Jennens. Its second part concludes in the famous “Hallelujah Chorus”.

ANSWER: the **Messiah** [or **HWV 56**]

[10] Though it was originally written in a slightly faster tempo, Handel’s aria “Ombra mai fu” became popularly known by this term. William Fisher adapted a theme written for a section of a larger work in this tempo into the song “Goin’ Home”.

ANSWER: **largo** [accept “**Largo** from *Serse*” or “**Largo** from *Xerxes*”; the other thing is the second movement of Dvorak’s Ninth]

9. These regions are often mapped using seismic profilers. For 10 points each:

[10] Name these plains, which are the bottom-most layers of oceanic floors. The benthos is a community of organisms that live here.

ANSWER: abyssal plains

[10] One resident of the abyssal plain is this fish, which typically uses a bioluminescent organ called an esca as a lure to capture its prey.

ANSWER: anglerfish

[10] At the bottom of abyssal plains are these underwater extinct volcanoes that sporadically dot the bottom of the ocean. When they are eroded so that they have a flat-top, these structures are called guyots.

ANSWER: seamounts

10. “Conversation” Kenge, Mr. Vholes, and Mr. Tulkinghorn represent the various parties in this case, which involves a will that may benefit Lady Dedlock, Richard Carstone, or the guardian of Esther Summerson. For 10 points each:

[10] Identify this fictional court case, created to mock the inefficiencies of the Chancery court, from the novel *Bleak House*.

ANSWER: Jarndyce v Jarndyce [or Jarndyce and Jarndyce]

[10] *Bleak House* was written by this prolific English author who serialized his own novel *Hard Times* in his magazine *Household Words*. He also wrote *Oliver Twist*.

ANSWER: Charles John Huffam Dickens

[10] In *Bleak House*, the paper-hoarding landlord Mr. Krook dies in this fashion. This fate also befalls the father of Clara and Theodore Wieland in Charles Brockden Brown’s first novel.

ANSWER: spontaneous human combustion [accept word forms; prompt on “fire” or equivalents but don’t accept things like “self-immolation” that imply agency on the part of the immolated]

11. In his final speech in his highest office, this man said “it is time to get off the stage,” then said his family was going to watch cricket. For 10 points each:

[10] Name this leader of the Conservative Party who oversaw his country’s exit from the Exchange Rate Mechanism after the events of Black Wednesday, an event that helped pave the way for a Labour Party resurgence.

ANSWER: John Major

[10] Major succeeded what female Conservative as Prime Minister of the United Kingdom? She was known as the “Iron Lady.”

ANSWER: Margaret Hilda Thatcher [or Margaret Roberts]

[10] During Major’s ministry, the foundation was laid for the 1998 Good Friday Agreement, which was signed in what conflict-laden region in an attempt to provide peace and stability there?

ANSWER: Northern Ireland [or Ulster; do not accept or prompt on “Ireland”]

12. This man’s relationship with Mamah Borthwick ended when she was killed by an axe-wielding servant from Barbados. For 10 points each:

[10] Name this man who proposed a garden city like model called “Broadacre City,” in which each family would be given one acre of land. That model was financed by his patron Edgar Kaufmann.

ANSWER: Frank Lloyd Wright

[10] Wright designed the Imperial Hotel in this Japanese city. The structure survived the 1923 Kanto earthquake.

ANSWER: Tokyo

[10] The aforementioned lunatic servant murdered Borthwick while setting fire to this Wisconsin estate of Wright, which has a mythological name. Wright would rebuild it, and also have a “western” equivalent to it built in Scottsdale, Arizona.

ANSWER: Taliesin [or Taliesin West]



13. The complement system uses the membrane attack complex to poke holes in invading cells, causing them to undergo this form of cell death. For 10 points each:

[10] Name this form of cell death caused by osmotic pressure when a cell is placed in a hypotonic environment.

ANSWER: cytolysis

[10] Lysis of these cells can lead to anemia. These cells use hemoglobin to transport oxygen throughout the body.

ANSWER: red blood cells or erythrocytes

[10] Perforin is used by cytotoxic T cells and these cells to form holes in the cell membrane of foreign invaders. These innate immune cells can then insert chemicals into the foreign cell that lead to apoptosis or lysis.

ANSWER: natural killer cells [NK cells]

14. This man's many efforts to troll mythical Greece included attempting to seduce Tyro in order to blamelessly kill her father Salmoneus and tricking Thanatos into chaining himself up, thus temporarily halting death. For 10 points each:

[10] Name this king of Corinth whose hubristic cleverness eventually incurred, as punishment, the task of endlessly rolling a boulder almost all the way up a hill, only to see it roll back down.

ANSWER: Sisyphus

[10] Sisyphus was the son of Enarete and a Thessalian king of this name. Another character of this name lived on a floating island, where he gave a bag containing all winds except the west wind to Odysseus.

ANSWER: Aeolus [or Aiolos]

[10] Sisyphus founded the Isthmian games after finding the body of this son of Athamas and Ino, which had been carried to Corinth by dolphins. This man was deified as Palaemon, the protector of ships.

ANSWER: Melicertes

15. Unlike his brother Pratap, this novel's protagonist does not stay on as an estate worker, a decision which later allows him to read Marcus Aurelius's *Meditations* on his Slumbering bed. For 10 points each:

[10] Identify this 1961 novel whose title polydactylic sign-painter marries into the Tulsi family, gets a job as a journalist, and becomes obsessed with building the title structure.

ANSWER: A House for Mr. Biswas

[10] A *House for Mr. Biswas* was written by this Indo-Trinidadian author of *A Bend in the River* and *In a Free State*.

ANSWER: V.S. Naipaul [or Vidiadhar Surajprasad "Vidia" Naipaul]

[10] This critic discussed the "two sides" of V.S. Naipaul in his essay "Wounder and Wounded", which was collected in his book *The Fun Stuff*. This *New Yorker* writer also wrote the book *How Fiction Works*.

ANSWER: James Douglas Graham Wood

16. Michael Tippett's oratorio *A Child of Our Time* was written after this event. For 10 points each:

[10] Name this November 1938 event, a pogrom carried out by Nazi organizations against Jews throughout Germany and Austria. Its name refers to what was found in the streets afterwards.

ANSWER: Kristallnacht [or Crystal Night, or Night of Broken Glass, or Reichskristallnacht]

[10] The event was carried out primarily by the SS and what other group known as the "Brownshirts"? This original paramilitary wing of the Nazis was mostly purged in the Night of the Long Knives.

ANSWER: SA [or Sturmabteilung, or Storm Detachment]

[10] This co-founder of the SA was a close ally of Hitler despite being homosexual. Arrested during the Night of the Long Knives, he was shot after refusing to commit suicide when ordered to by the Nazis.

ANSWER: Ernst Rohm

17. The Hindu festival Raksha Bandhan celebrates the importance the relationship between these sorts of people. For 10 points each:

[10] Name this specific familial relationship, exemplified by such people like Scholastica and Benedict, Aaron and Miriam, and Susano-o and Amaterasu.

ANSWER: opposite-sex **siblings** [or **brother** and **sister**]

[10] During Raksha Bandhan, a sister gives her brother a colorful *rakhi*, which is usually made of this substance. The Upanayana initiation ceremony bestows a boy with a three-stranded one of these that symbolized the three debts or *devis*.

ANSWER: **thread** [or **string**, or small **rope**, I guess]

[10] Modern legends claim that this Hindu god's sons Kema and Labha were so jealous of those celebrating Raksha Bandhan that this god created Santoshi Mata for them. This son of Shiva and Parvati is usually depicted with an elephant head.

ANSWER: **Ganesha**

18. Helga Brandt and the Ronald Rich-portrayed bodyguard Hans both fall into a pool of piranhas in this film, whose protagonist works with Tiger Tanaka and stages a marriage with Kissy Suzuki. For 10 points each:

[10] Identify this 1967 film whose title is spoken when Donald Pleasence, playing Ernst Stavro Blofeld, comments on James Bond's having earlier faked his death in Hong Kong.

ANSWER: ***You Only Live Twice***

[10] In *You Only Live Twice* and the four films preceding it, Bond was played by this Scottish actor, whose other roles include the defecting Soviet captain Ramius in *The Hunt for Red October* and Indiana Jones's father.

ANSWER: Sean **Connery** [or Thomas Sean **Connery**; please respond to incompetent faux-Connery accents with disdain]

[10] Charles Gray, who plays Bond's contact Henderson in *You Only Live Twice*, appeared as Blofeld in this campy Bond film, which features the gay assassins Wint and Kidd, a moon buggy chase, and a plot to build a huge laser.

ANSWER: ***Diamonds Are Forever***

19. You are trying to solve a physics problem involving boxes sliding down ramps connected to each other using pulleys and springs. Answer the following about approaches you might take to solve this problem for 10 points each:

[10] The simplest approach is to draw one of these constructs, which is done by examining the various forces present on each mass involved and drawing an arrow pointing in the direction of the force. The forces are then summed up to obtain the equations of motion of the system.

ANSWER: **free-body** diagram [or **FBD**]

[10] Alternatively, you could compute the Lagrangian for each mass, then set up one of these equations for each generalized coordinate upon which the Lagrangian depends. Solving these differential equations will then give you your equations of motion.

ANSWER: **Euler-Lagrange** equations

[10] This quantity, which is sometimes symbolized  $T$ , is added in the definition of the Lagrangian. When comparing the motion of a solid sphere and a cubic block sliding down a ramp, if all other quantities are equal, this quantity will be 40% higher for the sphere due to a rotational contribution.

ANSWER: **kinetic energy**

20. An author born in this country used the semi-autobiographical character Jozef Pronek in *Nowhere Man* and *The Question of Bruno* and included many photographs in his 2008 novel *The Lazarus Project*. For 10 points each:

[10] Name this modern country, the birthplace of Aleksandar Hemon and the setting of a novel whose title structure is eventually destroyed by Hapsburg forces, *The Bridge on the Drina*.

ANSWER: **Bosnia** and Herzegovina [or **Bosna** i Hercegovina; prompt on "Yugoslavia"]

[10] Bosnian author Ivo Andrić's *The Vizier's Elephant* is not to be confused with *The Elephant's Journey*, a 2008 novel by this author of *Death with Interruptions*, *The Stone Raft*, and *The Year of the Death of Ricardo Reis*.

ANSWER: Jose **Saramago**

[10] A shepherd assumed to be the devil in disguise attempts to instruct this character in hedonism in a controversial Saramago novel about *The Gospel According to him*. A Nikos Kazantzakis novel depicts his *Last Temptation*.

ANSWER: **Jesus Christ** [accept either]

Extra. This author and Anna Strunsky co-authored the pseudonymous novel *The Kempton-Wace Letters*, while his second wife Charmian described their life together in *The Log of the Snark* and *Our Hawaii*. For 10 points each:  
[10] Identify this socialist author of the dystopian novel *The Iron Heel*, who also wrote two novels set during the Klondike Gold Rush, *White Fang* and *The Call of the Wild*.

ANSWER: Jack **London** [or John Griffith **London**; or John Griffith **Chaney**]

[10] The protagonist of this London story disregards the advice of the old-timer from Sulphur Creek while traveling through the Yukon on a cold day, and eventually freezes to death after failing at the title endeavor.

ANSWER: “**To Build a Fire**”

[10] London may have taken a phrase from H.G. Wells’s *Anticipations* to title this 1903 exposé about life among the poor in the workhouses of the East End of London.

ANSWER: *The **People of the Abyss***