**Minnesota Undergraduate Tournament 2015:** **My Torah Portion was an Archie Comic**

**Questions by Rob Carson, Mike Cheyne, Andrew Hart, Gautam Kandlikar, Shan Kothari, Bernadette Spencer, Cody Voight, and *special guest* Ike Jose**

**Packet 06: Tossups**

1. **This character reacts to an eagle greedily eating all four legs of an ox by striking the eagle with a huge pole, only to have the pole stick to the eagle’s back, resulting in his being dragged around. In another story, he borrows a net from Ran and uses it to imprison Andvari. This god transforms Idunn into a nut while rescuing her from Thjazi. He refuses Bragi’s offer of a horse, sword, and ring and kills Aegir’s servant Fimafeng in a poem in which he (\*)** insults almost all of the other gods. He loses an eating contest against a personification of fire while visiting the court of a jotun with Thjalfi and Thor. He and Heimdall will kill each other at Ragnarok, where his children Fenrir and Jormungandr will also die. For 10 points, name this Norse trickster god.  
ANSWER: **Loki** Laufeyarson

2. **The man who introduced this law did so to win the approval of a congressional bloc called the "F Street Mess," which included Senator David Atchison. During debate over it, Henry Edmundson nearly attacked Lewis Campbell, and Thomas Hart Benton denounced it because Congress "broke down the sacred laws" of the past. The "Peoria Speech" was directed against this piece of legislation. The passage of it led to the (\*)** shipment of numerous "Beecher's Bibles," which were actually rifles used by the invading "border ruffians." This act was the brainchild of Stephen Douglas and was meant to promote "popular sovereignty." For 10 points, name this 1854 law which allowed settlers in the two namesake Great Plains territories to vote on the legality of slavery.  
ANSWER: the **Kansas-Nebraska** Act

3. **In this opera’s second act, the strings play staccato *sotto voce* quarter-notes to depict raindrops at the onset of a storm. Afterward, two characters in this opera climb up to a balcony on a ladder, but when they try to leave, the ladder is gone. The oft-replaced song “Contro un cor” is sung during a music lesson, which is followed by a quintet when the real teacher (\*)** Basilio arrives. In a cavatina often transposed up from E major to F major, a woman sings that “A voice has just echoed here in my heart” in response to a love letter from a man disguised as the student Lindoro, who had serenaded her with “Ecco ridente in cielo.” The 6/8 Allegro vivace patter song “Largo al factotum” is sung by the title baritone, Figaro. For 10 points, name this opera in which Dr. Bartolo fails to keep Count Almaviva from seducing Rosina, a work by Gioachino Rossini.  
ANSWER: *The* ***Barber of Seville****, or the Future Precaution* [or *Il* ***Barbiere di Siviglia****, ossia L’inutile precauzione*]

4. **An author with this surname wrote a novel in which Mrs. Jolley and Mrs. Fleck gossip about the goings-on in the estate of Xanadu, which is owned by Mary Hare. In that novel, Blue and a gang of factory workers stage a mock crucifixion involving the Holocaust survivor Mordecai Himmelfarb. That author with this surname also wrote a novel in which a party at Mr. Bonner’s allows Laura Trevelyan to meet the title explorer, who leads a doomed expedition into the (\*)** Outback. Another author with this surname wrote a novel series in which a boy initially named “Wart” is mentored by a man who experiences time backwards, the wizard Merlin. For 10 points, give the surname shared by the Nobel-winning Australian author of *Riders in the Chariot* and *Voss* and the author of the Arthurian novel series *The Once and Future King*.  
ANSWER: **White** [accept Patrick (Victor Martindale) **White** or T(erence) H(anbury) “Tim” **White**]

5. **Ilie Fishtik et al. proposed a theory abbreviated RER to explain how behaviors apparently contradicting this principle arose from Hessian and non-Hessian components of a dual system. Because the relative partial pressures, rather than the total pressure, are relevant to this statement, it is not implicated when a noble gas is added to a system. The (\*)** common-ion effect is a consequence of this principle, which can be stated as the tendency of a system in which the forward and reverse reaction rates are the same to minimize the effect of a stress. For 10 points, what principle, named for a Frenchman, concerns a system in equilibrium shifting to counteract a change in concentration, temperature, volume, or pressure?  
ANSWER: Le **Chatelier**’s principle [prompt on “equilibrium law” or equivalents before “equilibrium”]

6. **A poem by this author describes the “land of lost content” and asks “What are those blue remembered hills[?]” This poet observed “the old wind in the old anger” leaving the wood in trouble in the title place of another of his poems, which ends with a line describing “ashes under Uricon”. This poet’s unrequited love for Moses Jackson is the subject of Tom Stoppard’s play *The Invention of Love*. He noted that “early though the laurel grows, it (\*)** withers quicker than the rose” in a poem about a “townsman of a stiller town”. Another of his poems quotes a “wise man” who advises the speaker to “Give crowns and pounds and guineas, but not your heart away”. For 10 points, name this English poet who included “On Wenlock Edge”, “To an Athlete Dying Young” and “When I Was One-and-Twenty” in his collection *A Shropshire Lad*.  
ANSWER: A.E. **Housman** [or Alfred Edward **Housman**]

7. **A famous book about these things was published by Hardy, Littlewood, and Polya. “Arguably the most important [of these things] in all of statistics” relates the expected value of a convex function to the convex function of the expected value and was proven by Jensen. When stating a problem for linear programming, a method of mathematical optimization, constraints are defined by these things. One of these things named for Hölder is a generalization of the widely used one named for (\*)** Cauchy and Schwarz. An example of these things with wide application in maths competitions is the AM-GM, which relates the arithmetic and geometric mean. Perhaps the most famous of these statements says that the sum of any two sides of a triangle must be greater than or equal to the length of the third side. For 10 points, name this relation between two different quantities, as opposed to an equality.

ANSWER: **inequalities** [or word forms, such as an **inequality**]

8. **A ruler with this name ordered his wife to be executed by suffocating her in an over-heated bath. That leader with this name had his firstborn son, Crispus, win a key naval battle against his enemy, Licinius. A ruler with this name is called the "Marble Emperor" and supposedly is waiting under the Golden Gate to be revived. While fighting a ruler with this name, (\*)** Maxentius drowned in the Tiber River. A ruler with this name died as his capital fell to Mehmed II in 1453. The most famous ruler with this name issued the Edict of Milan and secured power by winning the Battle of Milvian Bridge after apparently seeing a vision of a cross. For 10 points, give the name of the first Roman emperor to publicly convert to Christianity.  
ANSWER: **Constantine**

9. **An early leader of this group led a circle called the Holy Brotherhood, or Chevraia Kadisha. A leader of a subsect of this group enumerated the five levels of divine service in a book referred to as the *Tanya*. Most subgroups of this sect gather in meetings called *tish*, which are called by leaders often known as “ADMOR”. After its founding, this sect was directly opposed by the Vilna Gaon and the rest of the (\*)** *misnagdim*. The highest poverty rate in the US is in a village dominated by this religious sect called Kiryas Joel. Male members of this sect wear a *rekelech* during the week and a *bekishe* on holidays, and like Yemenites, invariably wear *payot*, or sidelocks. It is divided into dynasties including Belz, Satmar, and the Crown Heights-headquartered Chabad, and it was founded by the Baal Shem Tov. For 10 points, name this mystical sect of Orthodox Judaism.  
ANSWER: **Hasid**ism [or **Hasid**im; or **Hasid**s; or **Hasid**ic Jews/Judaism; or **Chasid** in any of those forms; prompt on “**Haredi** Jews” or equivalents; prompt on “**Jew**s” or equivalents]

10. **In this director's first film, the song "If I Had a Hammer" accompanies the protagonist's nervous breakdown on television where he pictures numerous dead bodies. In another of his films, Don Hollenbeck kills himself after being labeled a Communist. In this director's most recent film, a Bill Murray played character realizes that the farmer he is visiting is actually a Nazi who has stolen** priceless art. This man played CBS producer Fred Friendly in a film he directed about Joseph McCarthy nemesis Edward R. Murrow. This director of *The Monuments Men* and *Good Night and Good Luck* recently broke up with Stacy Keibler to marry human rights lawyer Amal Alamuddin. For 10 points, name this man who also starred in the trilogy of *Ocean's Eleven* films in the title role.  
ANSWER: George **Clooney**

11. **This man was the alphabetically-first author of a book that developed a method to measure the intensity of certain personality traits called the F-scale. A book he wrote solo concludes that art-objects themselves contain “truth content”. Another of his books describes society as a “total system” and rejects Hegel’s argument that the parts that make up a dialectic are sublated into something greater and thus positive. He claimed that “life does not live” in a collection of aphorisms whose title (\*)** parodies a work of Aristotle. This author of *Negative Dialectics* and *Minima Moralia* was the younger author of a book that condemns radio while claiming that society is lulled into passivity by the products of a “culture industry”. For 10 points, name this social critic, a member of the Frankfurt School who collaborated on *The Dialectic of Enlightenment* with Max Horkheimer.  
ANSWER: Theodor W. **Adorno** [or Theodor **Adorno**-Wiesengrund; or Theodore Ludwig **Wiesengrund**]

12. **This city was served by waterwheels designed by Peter Morice. A popular cartoon depicted a scientist handing a torn piece of white paper to a "Dirty Fellow" that is a personification of a geographical feature here. That cartoon describes the so-called "Great Stink" that plagued this city. The Bow Street Runners served as an early, unofficial police force here, and John (\*)** Snow made spot maps of this city during an 1854 outbreak of cholera. Two major disasters that plagued this city were vividly described in the diary of Samuel Pepys; after that second disaster, Christopher Wren designed numerous new churches here. For 10 points, name this English city which suffered a 1666 "Great Fire" that burned St. Paul's Cathedral.  
ANSWER: **London**

13. **In 2013, a buyer paid a record $43.8 million for a Barnett Newman painting primarily in this color called *Onement VI* (WUN-ment six). A surprisingly weathering-resistant pigment of this color is often found in Mayan paintings. Jean Colombe’s use of a particularly intense version of this color characterizes many of the miniatures in the *Très Riches Heures du Duc de Berry*. A number of monochromatic works using a namesake “International” paint of this color were created by (\*)** Yves Klein. This is the dominant color in *The Tragedy*, *La Vie*, *Portrait of Suzanne Bloch*, and a series of other paintings created between 1901 and 1904. A painting of Jonathan Buttall in a suit of this color was created by Thomas Gainsborough. For 10 points, *The Old Guitarist* was one of many dolorous Picasso paintings created during a period referred to by the name of what color?  
ANSWER: **blue** [accept synonyms--**azure**, **cyan**, **cerulean**, etc.]

14. **A catalytically perfect enzyme in this pathway interconverts DHAP with GADP. A key regulator of this process is allosterically inhibited by a high ratio of ATP to AMP; that enzyme irreversibly converts fructose-6-phosphate to fructose-1,6-bisphosphate and is called PFK-1. The Warburg effect refers to the fact that cancer cells tend to have elevated rates of this process, followed by** (\*) lactic acid fermentation. This pathway occurs in the cytosol, and its first step involves the creation of glucose-6-phosphate by hexokinase. Because it uses two ATP and yields four, this pathway has a net gain of two ATP. During aerobic respiration, this pathway precedes the Krebs cycle. For 10 points, name this metabolic pathway in which glucose is turned into two pyruvate molecules.  
ANSWER: **glycolysis**

15. **A character in this novel chooses to sleep in an attic bed with a shard of mirror hidden under the mattress. Another of its characters makes a wedding dress out of scraps after receiving a letter written in shoe polish. At the end of this novel, a character suggests that “the Jim Bonds are going to conquer the western hemisphere” before posing a question that elicits the repeated answer “I don’t hate it”. An affair with 15-year-old Milly results in the death of this novel’s protagonist, years after his son Henry murders his other son (\*)** Charles Bon at the gates of his hundred-acre estate. This novel’s frame narratives include one involving the Harvard student Shreve and one in which Rosa Coldfield reminisces to Quentin Compson. For 10 points, name this Biblically-titled novel about Thomas Sutpen, a work of William Faulkner.  
ANSWER: ***Absalom, Absalom!***

16. **This man wrote to his friend, Wilhelm the Landgrave of Hesse, that he would send him a moose or elk, but the creature drank beer and died from falling down some stairs. A German associate of this man published this man’s observations in a work named for Holy Roman Emperor Rudolf II known as the *Rudolphine Tables*. This man, who constructed research facilities known as Stjerneborg and (\*)** Uraniborg, refuted Aristotelian beliefs in his work *De nova stella*, which analyzed a supernova of 1572. Because of an injury sustained while dueling, this man wore a prosthetic nose, and he likely died from a burst bladder after refusing to leave a dinner party to urinate. For 10 points, name this Danish astronomer.  
ANSWER: **Tycho** **Brahe** [accept either; or Tyge Ottesen **Brahe**]

17. **Only multiplets with an average value of zero for this property have G-parity. The density of this quantity at the surface of a dielectric is given by the divergence of the polarization vector. This quantity is the same for all particles on the same downward-sloping line of a baryon octet diagram. This quantity is equal to the third component of isospin plus quantity one-half times baryon number plus strangeness according to the Gell-Mann-Nishijima formula. This quantity is the generator of the U(1) group, and a system of particles which each have nonzero values of this property has no (\*)** stable static configuration according to Earnshaw’s theorem. Moving particles with this property generate magnetic fields. For 10 points, name this value symbolized Q.

ANSWER: **charge**

18. **The Largo cantabile second movement of one of these works by this composer slows and softens until two bassoons play a fortissimo C “fart.” One of these works by this composer begins with two horns and two English horns exchanging two-bar phrases over a muted eighth-note line in the strings. The Andante second movement of another is pervaded by a ticking eighth-note ostinato that begins in the bassoons. These pieces include** **“The (\*)** Philosopher” and a work that ends with an Adagio coda in which voices drop out until two violins remain. One is nicknamed for an unexpected fortissimo G major chord in its second movement. The last twelve were written while Johann Peter Salomon brought the composer to London. For 10 points, give the genre and composer of these 104 Classical era works, which include the “Clock,” “Farewell,” and “Surprise.”  
ANSWER: **symphonies** by Franz Josef **Haydn** [prompt on partial answer]

19. **This city is the headquarters of the largest container shipping company in the world, as well as the location of the most recently-voted Best Restaurant in the World, Noma. Urban development in this largest city in the “Medicon Valley” is guided by the “Finger Plan”. Its Churchill Park is located near its huge Gefion Fountain. Norman Foster designed the Elephant House for this city’s zoo, which is actually located in its enclave of (\*)** Fredriksberg. A tourist attraction in this city is home to the Nimb Hotel, a hundred-year-old wooden roller coaster, and the Pantomime Theater, and is named for an Italian town. This city is located on the west bank of the Oresund, spread over the islands of Amager and Zealand. For 10 points, name this home of Tivoli Gardens, the Little Mermaid statue, and the major governmental buildings of Denmark.  
ANSWER: **Copenhagen**, Denmark [or **København**]

20. **One of the first texts written in the progenitor of this major world language is the 9th-century *Sequence of Saint Eulalia*. Characters known as the four sons of Aymon appear in a cycle of poems in this language, centering on feudal revolts and named after the fictional knight Doon de Mayence. An early writer in this language divided the subjects of its poetry into the “Matter of” its home territory, the “Matter of Rome,” and the “Matter of (\*)** Britain.” Jean Bodel was an early poet in this language, which derives from the languages “l’oil,” as opposed to the languages “d’oc,” such as Occitan. Its early troubadours performed long poems in this language known as *chansons de geste*. For 10 points, name this language, the “old” version of which was used to write *The Song of Roland*, about a knight of Charlemagne.  
ANSWER: (Old) **French** [or **Francais**]

TB. **Two diplomats from this country were accused of smuggling rubles from the Soviet Union in a 1928 scandal. The British led Operations Freshman and Gunnerside took place in this country and sabotaged a project to acquire heavy water, which could lead to the production of nuclear weapons. A man from here compiled the 1,518 page long document *2083: A European Declaration of Independence*, which denounces** "cultural Marxists" and "Muslims."In this country, a man dressed as a police officer traveled to a youth summer camp and killed 69 people. During World War II, it was led by puppet Nazi stooge Vidkun Quisling. For 10 points, name this Scandinavian country, the site of horrific 2011 shootings carried out by Anders Breivik.  
ANSWER: Kingdom of **Norway**

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**Packet 06: Bonuses**

1. Answer the following about Nolan North’s thousands of non-*Uncharted* voice-acting roles, for 10 points each.  
[10] He voices Desmond Miles, whose murderous ancestors Altaïr Ibn-La'Ahad, Ezio Auditore, Ratonhnhaké:ton (“rah-doon-ha-gay-doon”), and Edward Kenway are the stars of this series of Ubisoft games.  
ANSWER: ***Assassin’s Creed***  
[10] North is Captain Martin Walker, who leads a Delta Force team into a ruined Dubai in search of Colonel Konrad, in this 2012 third-person shooter, which is based largely on *Heart of Darkness*.  
ANSWER: ***Spec Ops: The Line*** [prompt on partial answer]  
[10] North plays himself as one of the voice options for the protagonist of this 2013 game. Its DLC mission packs include one in which its protagonists “Save Christmas”, one called “Enter the Dominatrix”, and one called “Gat Out of Hell”.  
ANSWER: ***Saints Row IV***

2. A modern approach to this topic was authored by Peter Norvig and Russel Stewart. For 10 points each:

[10] Name this field of study, whose name was coined by John McCarthy, informally defined as the science of making machines that can solve specific problems in a way that resembles thinking.

ANSWER: **artificial intelligence** [or **A.I.**]

[10] Named entity recognition and sentiment analysis are two tasks in the specialized branch of artificial intelligence, concerned with the “processing” of these systems.

ANSWER: **natural language** processing [accept **NLP**, prompt on “languages” do not accept “computer languages” or “artificial languages.”]

[10] This computer scientist at Google, is known for his wild predictions about artificial intelligence. In *The Singularity is Near* and *The Age of Intelligent Machines*, this dipshit predicts that machines will have autonomy, sentience and value equivalent to human life.

ANSWER: Ray **Kurzweil**

3. The daughters of Pierus were transformed into birds after losing a contest to these figures, several of whom were attested as the mother of the musician Linus. For 10 points each:  
[10] Name these nine daughters of Mnemosyne. They included Clio, who represented history, and Calliope, who ruled over epic poetry.  
ANSWER: the **Muses** [or the **Mousai**]  
[10] Unlike her eight more artistically-inclined sisters, this eldest muse was associated with the more scientific domain of astronomy.  
ANSWER: **Urania**  
[10] The Aganippe and the Hippocrene, two springs sacred to the Muses, were located on this mountain in Boeotia.  
ANSWER: Mount **Helicon**

4. Participants in this event failed to get weapons from the ship *Aud*. For 10 points each:  
[10] Name this April 1916 event in which forces under Patrick Pearse occupied the General Post Office in a certain city, but were eventually defeated by the British Army. Pearse's forces received some support from Germany.  
ANSWER: **Easter Rising** [or **Easter Rebellion**]  
[10] The Easter Rising was an attempt to create an independent version of this country, separate from the United Kingdom. Many members of the Sinn Fein party fought for this country's independence.  
ANSWER: **Ireland**  
[10] A failed 1867 Irish uprising was known by this name. A "Brotherhood" with this name staged a series of 1860's raids from the United States into British Canada.  
ANSWER: **Fenian**

5. The government ban on this novel was the subject of an essay collection titled *What Happened to [it] or How South African Censorship Works*. For 10 points each:  
[10] Name this 1979 novel about the white anti-apartheid activist Rosa, who was raised alongside a black boy called “Baasie” by her mother Cathy and her father Lionel, themselves members of the South African Communist Party.  
ANSWER: ***Burger’s Daughter***  
[10] *Burger’s Daughter* was written by this female South African author of *The Conservationist* and *July’s People*.  
ANSWER: Nadine **Gordimer**  
[10] In the final scene of *July’s People*, Maureen Smales runs toward a recently-arrived one of these things, despite being unaware about “whether it holds saviors or murderers”.  
ANSWER: a **helicopter** [or **chopper** or other synonyms]

6. The final two movements of this piece, “Tábor” and “Blaník,” quote the Hussite hymn “Ye Who Are Warriors of God.” For 10 points each:  
[10] Name this cycle of symphonic poems. Its first movement begins with two harps arpeggiating the motif B flat-E flat-D-B flat to represent its namesake castle, while the second quotes “La Mantovana.”  
ANSWER: ***Má vlast***  
[10] *Má vlast* was by this nationalist composer, who depicted his impending deafness with a high harmonic E in his first string quartet, *From My Life*.  
ANSWER: Bedřich **Smetana**  
[10] The viola part in the private premiere of *From My Life* was played by this other Czech composer, who wrote 16 *Slavonic Dances* and *Symphony No. 9, “From the New World*.*”*  
ANSWER: Antonín Leopold **Dvořák**

7. Identify these Arthur Miller characters, for 10 points each.  
[10] A desire to live up to the example of his diamond-tycoon brother Ben drives this father of Biff and Happy, whose fatal suicidal car crash provides the title of the play *Death of a Salesman*.  
ANSWER: **Willy** Loman [prompt on “Loman”; accept **W**illy **Loman**]  
[10] Members of this family at the center of *All My Sons* include the missing-in-action Larry, his brother Chris, and their father Joe, who inadvertently caused the death of 21 pilots by producing faulty aircraft engine parts.  
ANSWER: the **Keller** family [or the **Keller**s]  
[10] In *A View from the Bridge*, Eddie and Beatrice Carbone take in Beatrice’s two immigrant cousins, one of whom plans to marry their adopted niece Catherine but is accused of homosexuality by Eddie. The other kills Eddie in a scuffle at the end of the play. Name either.  
ANSWER: **Rodolfo** or **Marco**

8. The first person to consider the application of this theory to quantum chemistry was Bertha Swirles. For 10 points each:  
[10] Name this theory that explains why gold has a golden color rather than silvery like most other metals; because the 1s electrons in gold travel 58% the speed of light, this theory is implicated.  
ANSWER: special **relativity** [accept **relativistic** effects; do not accept or prompt on “general relativity”]  
[10] Relativistic effects explain some amount of the “contraction” experienced by this series of 15 metallic elements that sit above the actinides on the periodic table.  
ANSWER: **lanthanide**s [or **lanthanoid**s; accept **Ln** or **lanthanide contraction**]  
[10] Relativistic effects also explain this effect, the tendency of late p-block elements to form ions with oxidation states 2 less than the group valency.  
ANSWER: **inert pair** effect

9. Answer the following about a family portrait titled *The Bellelli Family*, for 10 points each.  
[10] It is found in the Musee d’Orsay in this European city, which also contains the Louvre.  
ANSWER: **Paris**, France  
[10] It was painted by this French artist, whose *Before the Race* is one of his many paintings of horses.  
ANSWER: Edgar **Degas** [or Hilaire-Germain-Edgar De **Gas**]  
[10] It shows Mr. Bellelli at his desk, Mrs. Bellelli standing, and this many offspring of this gender. John Singer Sargent’s *Carnation, Lily, Lily, Rose* also shows this many offspring of this gender. We want an answer like “four boys” or “one girl.”  
ANSWER: **two girl**s [accept **two daughter**s or **two female**s or other equivalents]

10. Shortly before this event took place, the residents of Rennie's Mill were evicted. For 10 points each:  
[10] Name this event that happened on July 1, 1997, creating a Special Administrative Region under the principle of "one country, two systems." Four years before it happened, the Kowloon Walled City was demolished.  
ANSWER: **Hong Kong** being transferred to **China** [accept descriptive answers, prompt on the **United Kingdom/Great Britain/England** etc. giving up **Hong Kong**]  
[10] Many Hong Kong residents applied for residency in the U.K. after the 1989 Tiananmen Square protests in this Chinese city.  
ANSWER: **Beijing** [or **Peking**]  
[10] This man was General Secretary of the Communist Party in China during the transfer. He took power after his predecessor was forced out after the 1989 protests and remained in that office until 2002.  
ANSWER: **Jiang** Zemin

11. Descartes divided the forms and properties of these things into attributes and modes, and Malebranche argued that because space is infinitely divisible, there are an infinite number of these. For 10 points each:  
[10] Name this philosophical term used to describe a kind of fundamental entity that is not dependent on others. Spinoza argued that there is only one of these entities, which he called “God, or Nature.”  
ANSWER: **substance**s  
[10] Descartes’s belief that created substances can only be either mental, or material and spatially extended, led him to this kind of ontology. David Chalmers argues for the property type of this kind of ontology.  
ANSWER: **dualism** [accept word forms]  
[10] This German rationalist author of *Theodicy* claimed there are infinite substances which each contain all their past and future predicates in his *Discourse on Metaphysics*. He called those non-interacting substances monads.  
ANSWER: Gottfried Wilhelm **Leibniz**

12. As Governor, this man helped to take down the corrupt "Canal Ring." For 10 points each:  
[10] Name this man who earned his reputation battling Boss Tweed and Tammany Hall. He lost his most notable election thanks to a political compromise promising to remove federal troops from former Confederate states.  
ANSWER: Samuel Jones **Tilden**  
[10] As mentioned, the Compromise of 1877 pulled troops from the South, ending this period of time in which the federal government directly controlled former Confederate states after the Civil War.  
ANSWER: **Reconstruction** [or Radical **Reconstruction**]  
[10] Tilden was a member of this conservative subgroup of Democrats, whose other members included Grover Cleveland. This group supported the gold standard and had a name referring to French history.  
ANSWER: **Bourbon** Democrats

13. Identify the following about novel series of the U.K., for 10 points each.  
[10] *Old Mortality* and *The Heart of Midlothian* are among the seven “Tales of My Landlord” novels, a subseries of the *Waverley* novels, which were written by this author of *Rob Roy* and *Ivanhoe*.  
ANSWER: Sir Walter **Scott**  
[10] The many novels of this comically prolific author include *Can You Forgive Her?*, which opens his Palliser series, and *Barchester Towers*, the second volume of his “Chronicles of Barsetshire”.  
ANSWER: Anthony **Trollope**  
[10] Two short “interludes” join the novels *In Chancery*, *To Let*, and *The Man of Property* in this series of novels about a family whose members include the patriarch Old Jolyon and his son Soames.  
ANSWER: the **Forsyte** Saga [by John Galsworthy]

14. Answer the following about Mike Cheyne’s third-favorite joint, the knee, for 10 points each.  
[10] The knee’s two articulations are the one between the femur and the tibia and the one between the femur and this sesamoid bone, which is commonly referred to as the kneecap.  
ANSWER: **patella**  
[10] The so-called “unhappy triad” is a particularly unpleasant knee injury involving damage to the ACL, the medial meniscus, and this other ligament, which prevents the lower leg from twisting outward in a valgus deformity.  
ANSWER: **MCL** [or **medial collateral** ligament]  
[10] This muscle is located in the back of the knee and is responsible for “unlocking” the straightened knee while bending it. The pit at the back of the knee joint is known as its namesake “fossa”.  
ANSWER: **popliteus** muscle [or the **popliteal** fossa]

15. This time period was effectively the subject of the book *You Have Seen Their Faces*. For 10 points each:  
[10] Name this time period from American history also chronicled by James Agee and Walker Evans in their book *Let Us Now Praise Famous Men*.  
ANSWER: The **Great Depression** [or the **Dust Bowl**; prompt on the **1930's**]  
[10] Evans was a photographer that, along with artists such as Dorothea Lange and Gordon Parks, was employed by this government agency which documented and sought to fight rural poverty in areas like the Dust Bowl.  
ANSWER: **Farm Security Administration** [or **FSA**; or **Resettlement Administration**; or **RA**]  
[10] Lange is most famous for her 1936 photograph of Florence Owens Thompson that labels her a "migrant" one of these people.  
ANSWER: **mother** [or *Migrant* ***Mother***]

16. The Sun will become one of these stars in about 5 billion years or so, likely leading to the extinction of life on Earth. For 10 points each:  
[10] Name this type of star formed once a main sequence star exhausts the hydrogen fuel in its core, leading to core collapse, the restart of hydrogen fusion, and a great expansion of the outer layers of the star.  
ANSWER: **red giant**s  
[10] In the process of becoming white dwarfs, late-stage red giants lose mass and often form this type of nebula. They are usually ring or dumbbell shaped, and their nearest example to us is the Helix Nebula.  
ANSWER: **planetary** nebula [or **PN**e]  
[10] The spectra of carbon stars, which are usually red giants, often contain strong emission lines of technetium and helium, which indicates that material is being “dredged-up” via this process. This process occurs outside of the radiative zone and involves the movement of plasma.  
ANSWER: stellar **convection**

17. Tomoko Masuzawa has argued that 19th century European influences “invented” one of these religions through a series of misinterpretations through the lens of the other, including drawing false parallels with Martin Luther. For 10 points each:  
[10] Name these two distinct religions. Both Elaine Pagels and Will Durant argued that they commingled due to Ashoka’s ministers eventually influencing Gnostic beliefs.   
ANSWER: **Buddhism** and **Christianity**  
[10] The Majjhima Nikāya and three gospels recount the Buddha and Jesus, respectively, doing this unnatural action. Jesus called Peter “you of little faith” when the latter was unable to do this after jumping from a boat on the Sea of Galilee.   
ANSWER: **walk**ing on **water** [accept word variants]  
[10] This scholar explored the similarities between Buddhism and Christianity in his seminal textbook *The World’s Religions*. This associate of Timothy Leary campaigned for the sacramental use of peyote by Native Americans.  
ANSWER: Huston **Smith** [or Huston Cummings **Smith**]

18. The combatants in the Toyota War of the late 1980s had a disputed border along this geographical area. For 10 points each:  
[10] Name this strip of land between Chad and Libya.  
ANSWER: **Aouzou** Strip  
[10] The Aouzou Strip first originated as a chunk of land promised by Pierre Leval to this Italian fascist dictator, who was killed during World War II.  
ANSWER: Benito [Amilcare Andrea] **Mussolini**  
[10] Leval hoped to quell Mussolini’s claims on Nice, which arose from this nationalist attitude that areas with substantial populations of ethnic Italians should be a part of Italy. It derives from the Italian word for “unredeemed.”  
ANSWER: Italian **irredentism** [or **irredentismo**; accept word forms such as **irredentist**s]

19. This book came about as a result of its addressee hearing that its author had also been a cadet at the Theresian Military Academy who was unsure whether his future lay in the military or in writing. For 10 points each:  
[10] Identify this collection of missives written to Franz Xaver Kappus, the opening section of which contains its author’s advice “Nobody can advise and help you, nobody. [...] Go into yourself”.   
ANSWER: ***Letters to a Young Poet*** [or ***Briefe an einen jungen Dichter***]  
[10] The *Letters to a Young Poet* were written by this slightly older, substantially more popular German poet of the *Duino Elegies* and the *Sonnets to Orpheus*.  
ANSWER: Rainer Maria **Rilke** [or René Karl Wilhelm Johann Josef Maria **Rilke**]  
[10] Both the first and second *Duino Elegies* claim that these figures are “terrifying”. They are a recurring symbol in the elegies, the first of which asks “Who, if I cried out, would hear me among” their “orders?”  
ANSWER: **angel**s [or **Engel**; or word forms like **angelic**]

20. Widely-used tools created by this man include namesake self-reporting scales for hopelessness, suicidal ideation, anxiety, and depression. For 10 points each:  
[10] Name this former UPenn psychiatrist who theorized a “cognitive triad” that explains the three major types of negative thoughts held by depressed people while developing a common type of cognitive behavioral therapy.  
ANSWER: Aaron **Beck** [or Aaron Temkin **Beck**]  
[10] Beck’s work on depression inspired Martin Seligman’s formulation of this theory of behavior, which he originally developed in experiments where dogs subjected to electric shocks eventually became convinced they couldn’t escape them.  
ANSWER: **learned helplessness** theory  
[10] Seligman’s findings directly contradicted the suppositions of behaviorism, which was pioneered by this American psychologist who invented a namesake operant conditioning chamber and wrote *Walden Two*.  
ANSWER: B.F. **Skinner** [or Burrhus Frederic **Skinner**]

Extra. The military engineer William Moore developed a precursor to this equation thanks to experimental data gathered by using a weapon designed by Sir William Congreve. For 10 points each:  
[10] Identify this equation that sets delta-v equal to the effective exhaust velocity times the logarithm of the ratio of initial and final masses. As its name suggests, it is useful for describing the motion of things that decrease in mass as they use fuel.  
ANSWER: the ideal **rocket** equation [accept, but DO NOT MENTION, the Tsiolkovsky **rocket** equation]  
[10] The ideal rocket equation is often named for this reclusive Russian scientist, who like Hermann Oberth and Robert Goddard is considered a father of rocketry.   
ANSWER: Konstantin **Tsiolkovsky** [or Konstantin Eduardovich **Tsiolkovsky**; or Konstanty **Ciołkowski**]  
[10] Because a rocket’s mass changes during flight, its motion is not governed by this classical law named for an English scientist, which simply states that force equals mass times acceleration.  
ANSWER: **Newton**’s **second** law of motion [prompt on partial answer]