

**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 8: Tossups**

1. A commission from the Érard company resulted in this composer's *Introduction and Allegro* for string quartet, clarinet, flute, and harp. Ricardo Viñes publicly premiered a work by this man that was inspired by Liszt's *Fountains of the Villa d'Este*. Percy Grainger orchestrated "The Valley of Bells", the final movement in a suite by this man that also includes "Oiseaux tristes". This man called for a sopranino saxophone in F in a work that was popularized in an extremely (\*) fast performance by Arturo Toscanini. This composer of *Jeux d'eau* and *Miroirs* omitted the fifth "Promenade" in his orchestration of Mussorgsky's *Pictures at an Exhibition*. In his most famous work, a melody in C starts in the flutes and is passed from instrument to instrument, constantly crescendoing, over an ostinato snare drum. For 10 points, name this French composer of *Boléro*.

ANSWER: Maurice Ravel [or Joseph-Maurice Ravel]

2. If a ring  $R$  is Noetherian, then the ring of these objects over  $R$  is also Noetherian according to the Hilbert basis theorem. Given a set of these objects  $S$ , the set of values which make every element of  $S$  vanish is an affine variety. For a ring or a field denoted  $K$ , the ring of these objects over the ring or field is denoted  $K[x]$  followed by  $x$  enclosed in brackets. A monic one of these objects whose roots are the eigenvalues of a matrix is the matrix's (\*) "characteristic" one. Descartes' rule of signs applies to equations of these objects. Techniques for solving equations of these functions degree 2 include completing the square, factoring, and using the quadratic formula. For 10 points each, name these functions consisting of variables multiplied by coefficients and raised to integer exponents, such as " $x$  squared minus four."

ANSWER: polynomials

3. This world leader overhyped his war record in his poorly written trilogy of memoirs that began with *The Small Land*. An assassin that tried to shoot this man at the Borovitsky Gate was judged to be insane because only a lunatic would try to kill this man. A photograph depicted this leader kissing Erich Honecker, and the "Era of Stagnation" began during his leadership. With the American president, this man participated in the (\*) Strategic Arms Limitation Talks. His namesake doctrine authorized intervention if socialist countries began to turn towards capitalism, which justified a 1968 invasion of Czechoslovakia during Prague Spring, as well as a later invasion of Afghanistan. For 10 points, name this successor to Nikita Khrushchev as General Secretary of the Soviet Union.

ANSWER: Leonid Brezhnev

4. In one entry in this collection, a woman hears an organ-grinder which reminds her of her mother's last words, "Derevaun Seraun", after which she refuses to go to Buenos Aires with Frank. The Hungarian pianist Villona performs aboard Farley's yacht in a story from this collection that introduces Jimmy Doyle as a passenger in Charles Segouin's car. In another of its stories, the narrator loses his affection for Mangan's sister after being delayed and finding the title (\*) bazaar closed. Its final story is set partly at the Morkans' Christmas party, where a performance of "The Lass of Aughrim" reminds Gretta of her young love Michael Furey, a revelation which saddens Gabriel Conroy. For 10 points, name this collection that includes "Eveline", "After the Race", "Araby", and "The Dead", and was written by James Joyce.

ANSWER: Dubliners

5. In Biblical times, these figures could be subjected to *sotah*, or the ordeal of the bitter water. In the Gemara, the rules of kol isha prohibit these people from singing, since it is considered *ervah* to do so in public. The Talmud dictates that they are entitled to one ma'ah per week in addition to medical care and a proper burial. These people are required to perform onah unless they use an *eid* that indicates they are (\*) *niddah*. To follow *tzunit*, these people often wear a *sheitl*, a wig covering their natural hair. This group of people usually do not study the Torah but is called to household duties unless they marry with large dowries. For 10 points, name this specific set of Jewish people that may include Rebekah, Rachel, and Hannah.

ANSWER: Jewish women [or females; or wives]

6. The only non-*Earthbound*-series game designed by Shigesato Itoi centers on this activity, which is also the subject of a Vlambeer-designed 2013 iOS game whose title calls it “ridiculous”. Mark Davis lends his name to two videogames about this activity, while in *Final Fantasy 8*, a town on Horizon Bridge between Galbadia and Esthar is named for a performer of this activity. The Zora Tunic and Iron Boots can make it easier for the player to find (\*) “lunkers” while performing this activity in *Ocarina of Time*. In another series, “Gurus” of this activity give items labeled “Old”, “Good”, and “Super” to the player, who can use them to find Pokémon like Goldeen or Magikarp. For 10 points, name this sport-like activity, also the subject of videogames in the *River King* and *Bass Masters* series.

ANSWER: fishing [accept word forms; accept synonyms like “angling”; accept bass fishing; accept *Ridiculous Fishing*; prompt on “Fisherman” or “Fishermans Horizon”]

7. One form of this technique based off the cyclotron is FT-ICR. A reflectron is a variant on a common analyzer used in this technique which works by accelerating all analyte particles to the same kinetic energy, then passing them through a drift tube to measure their time-of-flight. The first step in the tandem version of this technique often employs “soft” techniques such as field desorption. Electron impact is a simple way of prepping samples for this technique which induces (\*) fragmentation. A typical graph generated by using this technique on an unbranched alkane consists of series of large peaks spaced 14 units apart with a few small peaks in between representing isotope substitution. For 10 points, name this technique in which a molecule is ionized and a detector is used to calculate its m/z, or mass-to-charge ratio.

ANSWER: mass spectrometry [accept MS or mass spectroscopy]

8. In one of this author’s plays, a single actor is tasked with playing the roles of a rag-and-bone man, a butterfly catcher, and a lemonade seller. One of this author’s characters initially refuses to retell a story involving a pot-bellied idiot with a trunk full of rice that begins “then at last we arrived”. Another of his characters misuses syllogisms to prove that both a dog and Socrates are cats. This author of (\*) *Macbett* wrote a play which ends with the main characters jumping out of a tower as the Emperor arrives, followed by the revelation that the Orator is a deaf-mute. In another of his plays, Mr. Boeuf, Mr. Papillon, Botard and Dudard, Jean, and Daisy, but not Berenger, eventually transform into the title animals. For 10 points, name this Romanian absurdist who wrote *The Chairs* and *Rhinoceros*.

ANSWER: Eugène Ionesco [or Eugen Ionescu]

9. The ruler in this position sent the Kagnew Battalion to fight in the Korean War. Male heirs to it were typically interned for life at mountains such as Amba Geshen, and one man ascended to it shortly after the failed Gugsu Wale’s rebellion. The only female to hold this position, Zewditu, was alarmed by the modernizing views of her heir, Tafari Makonnen. The Marxist (\*) Derg overthrew a man in this position in 1974. That man, like his ancestors, claimed descent from the Queen of Sheba. A man with this ruling title led his country to a victory at Adowa, and this title was technically held by Victor Emmanuel III after Italy’s successful 1936 conquest. For 10 points, name this royal position held by men like the Rastafarian messiah, Haile Selassie, who led an African country.

ANSWER: Emperor of Ethiopia [accept things like king for emperor; accept empress or queen]

10. One work by this man argued that the secure life available through lawful regimes like France was not actually a life of liberty. That work also claimed that the people were “more prudent ... and of better judgment” than lone rulers. Another book by this man contrasts the dangers of independent barons with the security of appointed bureaucrats. That work by this man compares the effectiveness of the (\*) cruelty of Hannibal and Scipio Africanus and outlines the virtues of Cesare Borgia to illustrate its claim that it is better for the title figure to be feared than to be loved. For 10 points, name this Italian political philosopher who wrote *Discourses on Livy* and a work dedicated to Lorenzo Medici, *The Prince*.

ANSWER: Niccolò Machiavelli

11. The relative motion of the Earth with respect to the rest of the universe produces an anisotropy of this type in the CMBR. The Laporte selection rule only applies to electronic transitions of this type. The power of the radiation emitted by an oscillating one of these objects is proportional to the 4th power of the oscillation frequency. Hertz invented a simple antenna described by this word. The electric field created by one of these objects falls off with the (\*) inverse-cubed power of distance. The torque on one of these objects in an external field is given by the cross-product of a quantity characterizing them with the field. The Coulomb-meter and the Debye are units of their namesake “moment.” For 10 points, name this configuration of a positive and a negative charge separated by a short distance.

ANSWER: dipole [accept more specific answers like “electric dipole”]

12. One poet from this country described scratching figures on rocks in “The Individual's Soliloquy”, one of his *Poems and Antipoems*. Another poet from this country noted that it would be “delicious” to “kill a nun with a blow to the head” and mused “it so happens that I am tired of being a man” in a 1935 poem. Nicanor Parra and the author of “Walking Around” are from this country, which is also home to a poet who included “Decalogue of an Artist” in (\*) *Desolacion* and channelled the suicide of Romelio Ureta into her collection *Sonnets of Death*. This country’s most famous poet wrote a collection which includes the lines “in you, everything sank!” and “tonight I can write the saddest lines”. For 10 points, name this South American country home to Gabriela Mistral and the author of *Twenty Love Poems and a Song of Despair*, Pablo Neruda.

ANSWER: Chile [or the Republic of Chile; or República de Chile]

13. Ellis Kerley names a dating technique of these objects based on thin cross-sections of various parts of them. Arpad Vass, an anthropologist at the Oak Ridge National Laboratory, devised the odor analysis known as DOA to classify the smells of these objects, whose “PMI” can be calculated with a linear relation known as the Glaister equation. James Chatters was the first paleontologist to observe one of them found with a projectile point in Kennewick, Washington. In Knoxville, William M. Bass opened the first (\*) “farm” to study the decay of these objects, which proceeds via autolysis, bloating, and putrefaction. William Burke and William Hare were convicted of committing crimes to produce these objects for scientific study. For 10 points, name these objects that may become mummified or turn into skeletons.

ANSWER: dead body or bodies [accept synonyms such as corpses or cadavers or dead humans or dead people or human remains; accept human skeletons or human bones before “skeletons”; prompt on “humans” or “people” or “bones”]

14. This man pulls the body of a false Christian out of a tomb, after which he meets and rewards Melias de Lile. In another story, he receives a previously-cursed white shield bearing a blood-red cross from a squire of Bagdemagus. He and two older companions were imprisoned for a year by King Estorause. This man’s birth was arranged in part by Dame Brusen, who disguised his mother Elaine of Corbenic as another woman. According to the *Vulgate Cycle*, he is descended from Bron, the brother-in-law of (\*) Joseph of Arimathea. He dies on the island of Sarras after ferrying an object there on Solomon’s ship on orders from King Pelles. He quests alongside Sir Bors and Sir Perceval, and he is the only knight able to survive sitting in the Siege Perilous. For 10 points, name this illegitimate son of Lancelot whose purity of heart allows him to achieve the Grail.

ANSWER: Sir Galahad [accept Galeas or Galath or Gwalchavad, but not “Galehaut”]

15. This is the name of a ruler who rejected a debt-saving plan called the “Great Contract” and the name of a king who issued the Declaration of Indulgence granting religious freedoms. A ruler with this name attempted to arrange the marriage of his son to an Infanta in the Spanish Match, and another ruler with this name imposed the Bloody Assizes after the Battle of Sedgmoor. The (\*) Monmouth Rebellion targeted a ruler with this name, whose forces were defeated at the Battle of the Boyne by a Protestant Prince of Orange. This was the name of the king deposed in the Glorious Revolution and the one in Guy Fawkes’ Gunpowder Plot. For 10 points, give this name of two Stuart kings of England and Ireland, the earlier of which has a namesake translation of the Bible.

ANSWER: James [number, like size, does not matter]

16. In this play, a man who used to work as an overseer for Straw and Ochello tells a story about giving money to “howling children in the hills around Barcelona” before relating another story about being approached by a child prostitute in Marrakech. Various characters in this play respond to declarations of love with the line “Wouldn’t it be funny if that was true?” A character in this play doesn’t feel peaceful unless he (\*) drinks until he hears a “click”, which also eases his disgust with the world’s “mendacity” and his sadness over Skipper’s suicide. Gooper and Mae scheme against this play’s protagonists to acquire the inheritance of the dying Big Daddy. For 10 points, name this Tennessee Williams play about Brick and Maggie Pollitt.

ANSWER: Cat on a Hot Tin Roof

17. A controversial parody of this painting featuring a loincloth-clad Nelson Mandela and AIDS activist Nkosi Johnson was created in 2011 by Yiull Damaso. It was likely inspired by a painting on a similar subject by Thomas de Keyzer, and its artist later painted another work on a similar subject that was heavily inspired by Mantegna’s *Dead Christ*. In its background, a set of rules is posted below a stone archway, in front of which a man consults a scribble-covered (\*) notebook. This painting’s bottom right features a large Andreas Vesalius text. Its central figure is the supine Aris Kindt, whose flexor digitorum superficialis is being held up for inspection. For 10 points, name this painting whose title character is explaining the musculature of the arm, a 1632 work of Rembrandt.

ANSWER: The Anatomy Lesson of Dr. Nicolaes Tulp [prompt on “The Anatomy Lesson” and accept any form of the title that specifies “Tulp” without otherwise being wrong]

18. This substance can be stained using luxol fast blue. This substance is damaged as a result of defects in the PMP22 gene, which causes type 1A Charcot-Marie-Tooth disease. This substance and the structure it typically binds to are eaten by macrophages after transection in Wallerian degeneration. A ceramide bonded to a phosphocholine gives a type of molecule referred to as “sphingo-*this*.” This substance induces saltatory conduction between (\*) nodes of Ranvier, and it gives white matter its white color. Its degradation is the cause of multiple sclerosis. For 10 points, name this substance created by oligodendrocytes and Schwann cells, whose function is to insulate the axon of a neuron.

ANSWER: myelin sheath

19. In a film by this director, Professor Richard Wanley apparently kills himself by a prescription drug overdose, only to wake up and discover he dreamed the entire movie while asleep in his club. In another of this director’s films, the protagonist asks a group including the “Safecracker” the question, “who knows what it’s like to be me?” as he frantically explains “this evil thing inside of me.” He created such characters as Rotwang, whose lover Hel left him to marry the powerful Joh Fredersen. This director made a film in which an inventor creates a (\*) robot woman based on Maria in an attempt to destroy the machines powering the title city. In another of his films, both the police and criminals pursue Hans Beckert, who whistles “In the Hall of the Mountain King” as he stalks children. For 10 points, name this German film director of such movies as *Metropolis* and *M*.

ANSWER: Friedrich “Fritz” Lang

20. A non-referee named Phil Lockett was Quartermaster General for this state in the Civil War, and its folklore celebrates servant Emily West distracting an enemy general by having sex with him. This state was where James Fannin and his men were massacred, and it was the site of the infamous brothel known as the Chicken Ranch. The end of slavery in this state is commemorated with the holiday (\*) Juneteenth, and General John Bell Hood left Kentucky to fight for it in the Civil War. This modern-day state was the site of the Goliad Massacre, which was avenged in the 1836 Battle of San Jacinto. A popular folk song describes its “yellow rose.” For 10 points, name this southern state that once existed as an independent republic led by Sam Houston.

ANSWER: Texas [or Republic of Texas]

TB. One process which acts on these proteins only occurs at segments flanked by two RSS sites with spacers 12 and 23 nucleotides long. One type of these proteins is a pentamer containing a central J chain surrounded by 10 F-sub-a-b regions. These proteins are used to precipitate a protein-DNA complex in ChIP, and they can be used to detect specific proteins in a (\*) Western blot. Examples of these proteins made from identical cells which all bind to the same epitope are known as “monoclonal.” Consisting of two heavy chains and two light chains, these proteins come in 5 different isotypes labeled A, D, E, G, and M. Produced by plasma B cells, for 10 points, name these Y-shaped proteins which mediate the immune response by binding to antigens.

ANSWER: antibodies [or immunoglobulins]

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**Round 8: Bonuses**

1. Johann Zoffany painted this man's death. For 10 points each:

[10] Name this British explorer, the most notable commander of the HMS *Endeavour*. He was slain in a 1779 brawl when natives hit him over the head and then stabbed him.

ANSWER: James Cook

[10] Cook is credited with leading the first European voyage to this continent, which he claimed for Britain without consulting the aboriginal population.

ANSWER: Australia [prompt on Oceania]

[10] This 1828 to 1832 war took place on what is now Tasmania between aborigines and British colonists. A human chain that shares its name with this war swept across the island to corral the natives, although some contemporary historians question accounts of atrocities during it.

ANSWER: Black War

2. A woman who married into this family acquires a pistol with the goal of shooting Old Wobbly, but ends up firing at a rider leading a parade of the "Fighting Veterans League". For 10 points each:

[10] Name this fictional family which includes three generations of architects, one of whom, Robert, destroyed the Abbey of St. Anthony that had been built by his father Heinrich.

ANSWER: the Faehmel family

[10] *The Train Was on Time* and *Group Portrait with Lady* are among the works of this Nobel-winning German author, who created the Faehmel family for his novel *Billiards at Half-Past Nine*.

ANSWER: Heinrich Theodor Böll

[10] Böll wrote a "journal" of his time on Achill Island in this country, whose own native authors include Flann O'Brien, Seamus Heaney, and Samuel Beckett.

ANSWER: Ireland [or Eire; or Irland; prompt on "*Irish Journal*" or "*Irishes Tagebuch*"]

3. The work argues that specific discourse led to the proliferation of perversions, and its books *The Use of Pleasure* and *The Care of the Self* examine the title subject's change between Greece and Rome. For 10 points each:

[10] Name this three volume work by Michel Foucault, which opens by refuting the "repressive hypothesis" of its title subject in "We, Other Victorians".

ANSWER: *The* History of Sexuality [or *Historie de la sexualité*]

[10] *The History of Sexuality* was the first published incidence of this Foucauldian term, which is roughly defined as the various means the State exercises power over its subject population and their bodies.

ANSWER: biopower

[10] Foucault's lectures in "Society Must be Defended" were originally publically delivered at the College de France in this city, which was home to other notables like Simone de Beauvoir and the Eiffel Tower.

ANSWER: Paris

4. The hematopoietic type of these cells can be isolated from adult bone marrow. For 10 points each:

[10] Name these cells which differentiate into other cells. This type of cell is commonly extracted from the embryo during the blastocyst stage.

ANSWER: stem cells

[10] This term is used to describe the set of cells that a particular type of stem cell can differentiate into. For example, cells that are toti-*this* can differentiate into any other cell, where cells that are pluri-*this* can differentiate into cells from all three germ layers.

ANSWER: potency [or word forms like "potent," accept specific types of potency]

[10] This type of multipotent stem cell is able to differentiate into adipocytes, chondrocytes, cardiomyocytes, and osteocytes, among other cell types. Their name comes from a type of embryonic connective tissue derived from the middle germ layer.

ANSWER: mesenchymal stem cells

5. Answer the following about the “ticking time bomb” scenario in ethics, for 10 points each.

[10] The scenario imagines that a terrorist in custody has knowledge of a ticking time bomb that will go off soon, so the authorities have to decide if that justifies performing these type of acts on the prisoner to make him talk.

ANSWER: **torture** [prompt on **coercive** acts]

[10] This man supported the use of torture in such a scenario in his 2001 article “Want to Torture? Get a Warrant.”

This author of *Chutzpah* wrote the book *Reversal of Fortune* about his defense of Claus von Bulow for the attempted murder of his wife.

ANSWER: Alan **Dershowitz**

[10] Dershowitz has also been called an apologist for this faction said to have too much power in U.S. foreign policy. It was notoriously discussed in a namesake paper by John Mearsheimer and Stephen Walt, the conclusions of which Dershowitz strongly disputed.

ANSWER: The **Israel** lobby

6. A conspiracy theorist made the homemade film *7/7 Ripple Effect* about events in this city. For 10 points each:

[10] Name this city hit by the 7/7 (SEVEN-SEVEN) terrorist attacks, which were carried out by four Islamic suicide bombers using homemade organic peroxide-based devices.

ANSWER: **London**

[10] The 7/7 bombings occurred during the ministry of this man, a Labour Party leader also criticized for leading Britain into the Iraq War. He was succeeded by Gordon Brown.

ANSWER: Tony **Blair** [or Anthony **Blair**]

[10] In 2004, Blair allowed for certain members of this ethnic group primarily from Nepal to be able to settle in the United Kingdom. This group formed a namesake brigade within the British army, and actress Joanna Lumley has fought for this group to have full UK civil rights.

ANSWER: **Gurkhas**

7. This author of the essay collection *Hawai'i One Summer* wrote a memoir divided into such sections as “No Name Woman”, “At the Western Gate”, and “A Song for a Barbarian Reed Pipe”. For 10 points each:

[10] Name this Chinese-American author whose most famous works are the novel *Tripmaster Monkey: His Fake Book* and the aforementioned *The Woman Warrior*.

ANSWER: Maxine Hong **Kingston** [or Maxine Ashley **Hong**]

[10] Wittman Ah Sing, the protagonist of Kingston’s *Tripmaster Monkey*, is based in part on the Monkey King Sun Wukong, who appears in this classical Chinese novel about a pilgrimage undertaken by Xuanzang and friends.

ANSWER: *The **Journey to the West*** [or ***Xi You Ji***; prompt on “*Monkey*”]

[10] An entirely unrelated monkey is trapped in a carriage and burns to death with his owner Yuzuki at the climax of this Japanese author’s story “Hell Screen”. This author of *Kappa* committed suicide in 1927.

ANSWER: Ryunosuke **Akutagawa** [accept names in either order]

8. Howard K. Smith produced a controversial report on this man’s “political obituary.” For 10 points each:

[10] Name this politician who angrily proclaimed the press wouldn’t have him to kick around anymore after losing the governorship of California in a close election.

ANSWER: Richard Milhous **Nixon**

[10] That election occurred two years after Nixon lost the presidency to this Massachusetts congressman, possibly because this man looked more handsome in televised debates.

ANSWER: John Fitzgerald **Kennedy** [or **JFK**]

[10] In his later resignation speech, Nixon quoted this other politician’s “Citizenship in a Republic” speech. That speech includes the line “it is not the critic who counts” and “the credit belongs to the man who is actually in the arena.”

ANSWER: Theodore “Teddy” **Roosevelt** [or **TR**]

9. This artist outlined his aesthetic theories in *Concerning the Spiritual in Art* and *Point and Line to Plane*. For 10 points each:

[10] Identify this Russian painter who did much of his groundbreaking work in Munich, where he split with the NKV to found his own movement after the jury for its third exhibition rejected his abstract painting *Composition V*.

ANSWER: Wassily Wassilyevich Kandinsky

[10] Kandinsky and several associates, including August Macke and Gabriele Münter, founded this radical Expressionist movement, named for a Kandinsky painting of a man on horseback.

ANSWER: *The Blue Rider* [or *Der Blaue Reiter*]

[10] This co-founder of Der Blaue Reiter painted an adorable kitten snuggling up to a yellow pillow in 1912's *Kitten*, though he's more famous for paintings like *The Large Blue Horses*, *Yellow Cow*, and *The Fate of the Animals*.

ANSWER: Franz Marc

10. Answer the following about the poem "Wild Nights! Wild Nights!", for 10 points each.

[10] It was written by this dash-loving Amherst-dwelling recluse, whose other poems include "I'm Nobody! Who are you?", "I Heard a Fly Buzz When I Died", and "Because I could not stop for Death".

ANSWER: Emily Elizabeth Dickinson

[10] It lent its title to *Wild Nights!*, a collection of stories about the last days of Dickinson and other authors by this incredibly prolific female author of "Where Are You Going, Where Have You Been?", *them*, and *We Were the Mulvaney*s.

ANSWER: Joyce Carol Oates

[10] It speaks of being "done with" both "the chart" and one of these objects. John Donne spends the last three stanzas of "A Valediction: Forbidding Mourning" comparing himself and his wife to one of them.

ANSWER: a compass [or a pair of compasses]

11. Plato claimed that she was the mother of Poros, or expediency, but most stories assert that she was only able to have one child, due to a prophecy that the second would be extremely powerful. For 10 points each:

[10] Identify this Titaness representing wisdom, who was turned into a fly and swallowed by Zeus.

ANSWER: Metis

[10] Nevertheless, this daughter of Metis sprang from Zeus's forehead, fully-formed and fully armed. This virgin goddess advised many heroes and was identified with the Roman Minerva.

ANSWER: Pallas Athena [or Athene]

[10] Athena won a competition against Poseidon to become the patron deity of Athens by offering the Athenians this botanical gift, which was judged superior to Poseidon's creation of a saltwater spring.

ANSWER: an olive tree [prompt on partial answer; accept *Olea europaea*, I guess]

12. Answer the following questions about objects in the Local Group for 10 points each:

[10] Designated M33, this galaxy is the third largest member of the Local Group after the Andromeda and the Milky Way. Approximately 3 million light-years away from the earth, some sources conflate it with the Pinwheel Galaxy, although Wikipedia informs me that those are two different things.

ANSWER: Triangulum Galaxy

[10] These two dwarf galaxies which are named "Large" and "Small" are easily visible from the naked eye in the Southern Hemisphere. They're satellite galaxies of the Milky Way, and they lie approximately 160,000 and 200,000 light-years away from Earth.

ANSWER: (Large and Small) Magellanic Clouds

[10] The Local Group is part of this galactic supercluster, which is well over 100 million light-years in diameter. The Maffei and Sculptor groups are located in this supercluster.

ANSWER: Virgo supercluster



13. Answer the following about important jazz bassists, for 10 points each.

[10] When he wasn't training his cats to use the toilet, this man was busy composing albums like *Black Saint and Sinner Lady* and *Pithecanthropus Erectus* and songs like "Goodbye Pork Pie Hat".

ANSWER: Charles Mingus Jr.

[10] Before being beaten to death by a club bouncer, this long-haired fretless bass pioneer played on the albums *Black Market* and *Heavy Weather* after Joe Zawinul recruited him to join Weather Report.

ANSWER: Jaco Pastorius [or John Francis Anthony Pastorius III]

[10] A duet between pianist Bill Evans and bassist Paul Chambers opens "So What", the first track on *Kind of Blue*, an album by this trumpeter's quintet.

ANSWER: Miles Dewey Davis III

14. It was prefaced with a Ben Jonson poem describing its author as "not of an age, but for all time", and it was compiled by John Heminges and Henry Condell. For 10 points each:

[10] Identify this 1623 volume which contains 36 of its author's 38 plays.

ANSWER: the First Folio of William Shakespeare's plays [prompt on "Folio"]

[10] The first play in the First Folio is this one, one of Shakespeare's last. Its characters include the deformed monster Caliban, the spirit Ariel, and Prospero, a sorcerer who is actually the exiled Duke of Milan.

ANSWER: *The* Tempest

[10] One of the two plays missing from the First Folio is *The Two Noble Kinsmen*, a collaboration between Shakespeare and this author of *The Woman's Prize*, who also worked on many plays with Francis Beaumont.

ANSWER: John Fletcher

15. This composer used a farce by Johan Tyl as the basis for his opera *The Devil and Kate* and wrote the "Song to the Moon" for the title character of his opera about a daughter of Vodnik the Water Goblin. For 10 points each:

[10] Name this Czech composer of *Rusalka* whose 1893 trip to Spillville, Iowa inspired both his *American String Quartet* and his ninth symphony, *From the New World*.

ANSWER: Antonin Leopold Dvorak

[10] Dvorak's first commission from the publisher Fritz Simrock was this Brahms-inspired collection of orchestral pieces, which are based on the polka, the furiant, the dumka, the sousedska, and other Bohemian folk forms.

ANSWER: the Slavonic Dances [or Opus 46 and Opus 72]

[10] Dvorak's other popular works include the G-flat major seventh of the eight works he wrote in this fanciful romantic genre. Robert Schumann's Opus 20 is a B-flat major work of this type.

ANSWER: the Humoresques [or Humoresky; or Humoreske]

16. This element is bonded to an n-butyl group to form a notable strong base useful in organic chemistry. For 10 points each:

[10] Name this element which along with aluminum and four hydrogen atoms comprises a strong reducing agent.

ANSWER: lithium [or Li]

[10] Organolithium reagents have similar reactivity to these strong nucleophiles useful in creating carbon-carbon bonds, since the presence of a magnesium atom induces a partial negative charge on the adjacent carbon.

ANSWER: Grignard reagents

[10] Grignard reagents can be synthesized by reacting magnesium with a compound containing a carbon bonded to one of these elements, which serve as excellent leaving groups. These elements possess 7 valence electrons, and all of them are diatomic except for astatine.

ANSWER: halogens [or group 17]

17. Answer the following about tea, for the stated number of points each.

[10] Oil extracted from the bergamot orange provides the characteristic flavor of this black tea blend, which takes its name from the British Prime Minister who authored the Reform Act of 1832.

ANSWER: Earl Grey tea

[5] Green tea ice cream is usually made using powdered green tea known by this Japanese term. It is contrasted with the un-ground leaves of sencha.

ANSWER: matcha [or maccha]

[10] While its name sounds Tibetan, this tea actually originates from the Wuyi mountains in China's Fujian province. Its claim to fame, other than possibly being the first recorded tea in history, is that its leaves are smoked while drying.

ANSWER: lapsang souchong [or zhengshan xiaozhong; or seisanshoshu]

[5] This oxidized, sun-dried type of tea takes its name from a Chinese word meaning "black dragon".

ANSWER: oolong tea [or wulong tea]

18. According to Wikipedia, Chinese folk religion is the fourth largest faith in the world. Name some things about it, for 10 points each.

[10] Despite their differences, most varieties of Chinese folk religions incorporate Daoist traditions and believe in this universal life force that flows through every being.

ANSWER: qi [or ch'i]

[10] This Daoist thinker argued that wind was nature's qi. This skeptical relativist is best remembered in the West for wondering if he were a man dreaming he were a butterfly or vice versa.

ANSWER: Zhuangzi [or Zhuang Zhou; or Master Zhuang; or Chuang Tzu]

[10] Many religious sects incorporate principles from this traditional practice of ensuring harmony between nature and humans. The Compass school of this uses the luopan to help determine proper orientation.

ANSWER: feng shui

19. This man was said to be "the most competent human being who ever lived." For 10 points each.

[10] The Hundred Days marked the period where this diminutive Frenchman retook power. It ended when this man lost at Waterloo.

ANSWER: Napoleon Bonaparte [or Napoleon I]

[10] Napoleon was returning from this Mediterranean island where he had been exiled to in 1814. It should not be confused with St. Helena, where he ended up after Waterloo.

ANSWER: Elba

[10] This 1814 treaty, named for a French location, ended Napoleon's initial reign as emperor and sent him to Elba. Another treaty named for this place was a 1762 treaty where France gave Louisiana to Spain, and Francis I built an elaborate palace here.

ANSWER: Treaty of Fontainebleau

20. Electron waves in these substances can be classified as O, X, L, or R, depending on the dispersion relation they follow. For 10 points each:

[10] Name this phase of matter in which external electric field sources are screened out by moving charges. Often called the "fourth" stage of matter, it consists of ionized gas.

ANSWER: plasma

[10] Tokamaks are a promising future technology that use plasmas to accomplish this process. The energy barrier to this process can theoretically be lowered by replacing the electrons in hydrogen with muons, and versions of this process include the triple alpha process and the CNO cycle.

ANSWER: nuclear fusion

[10] This equation used to characterize plasmas gives the fraction of ionized atoms in the plasma as a function of temperature and pressure.

ANSWER: Saha-Langmuir equation

Extra. In this novel, it is revealed that the human race was created solely to provide a replacement part for the spaceship of the Tralfamadorian explorer Salo, who befriends the space explorer Rumfoord. For 10 points each:  
[10] Name this 1959 novel starring the incredibly lucky Malachi Constant. It was written seven years after its author's first novel, *Player Piano*.

ANSWER: *The Sirens of Titan*

[10] *The Sirens of Titan* was written by this American author, whose experiences as a POW surviving the firebombing of Dresden inspired his novel *Slaughterhouse-Five*.

ANSWER: Kurt Vonnegut Jr.

[10] The 211th, 212th, and 213th Amendments to the Constitution mandate the enforced "equality" of all American in this Vonnegut story, whose extraordinary title character is shot by the Handicapper General Diana Moon Glampers.

ANSWER: "Harrison Bergeron"