Spring Undergraduate Novice 2020

“Neo-Tournament Arrives from the Future”

Edited by: Harris Bunker, Taylor Harvey, Chris Sims, Mike Cheyne

Written by: The Editors and Lalit Maharjan, William Grossman, James Zhou, Bradley Kirksey,

Zachary Knecht, Montagu James, Roman Madoerin, Vishal Puppala, Eve Fleisig,

Rebecca Thomas, Spencer Oung, Charles Dees, Abhinav Karthikeyan, Jack Edmondson,

Karsten Rynearson, Jason Lewis, Zach Foster and Chandler West

Packet 4

Tossups:

1. **In a medical application, this general type of particle is used with a radioactive tracer that can be labeled with Oxygen-15 or Fluorine-18. On a Feynman diagram, these particles are shown moving backwards through time. The existence of positive and negative solutions to the Dirac equation hypothesized these particles. In beta decay, one of these particles is (\*)** emitted in addition to an electron or electron neutrino. The baryon asymmetry problem concerns why there are fewer of these particles compared to their counterparts in the visible universe. PET (“**pet**”) scans use a type of these particles called the positron. For 10 points, name these particles that annihilate when combined with regular matter.  
ANSWER: **antiparticle** [or **antimatter**, or **anti-baryonic matter**, accept **positron** before mentioned, accept specific antiparticles like the **antiproton** or **antineutrino**] <Maharjan, Physics>

2. **A contemporary chronicler claimed that only a single soldier was killed during a major victory for this city that was depicted in a now-lost painting. A popular republic was declared in this city after an invasion by Charles VIII of France seemed to fulfill earlier prophecies. A failed plot to assassinate a ruler of this city during High Mass was carried out by the (\*)** Pazzi family. Two members of this city's most prominent family became queens of France, while another member nicknamed "the Magnificent" was a major patron of Sandro Botticelli. The "bonfire of the vanities" occurred while this city was under the influence of Girolamo Savonarola. For 10 points, name this Italian city that was led by rulers like Lorenzo de'Medici.  
ANSWER: **Florence** [accept **Firenze**] <Sims, European History>

3. **Jean Baudrillard's ("Bow-dree-are") *Simulacra and Simulation* begins by discussing a map that grows to the size of a country, taken from this author's "On Exactitude in Science." This author's namesake conundrum is "whether the writer writes the story, or it writes him," an idea taken from his short "fable" called "[*this author*] and I." A story by this author is framed as a review of a line-by-line "recreation" of *Don Quixote* by this fictional French author (\*)** Pierre Menard. Another story by this author is set in an infinite series of hexagonal chambers containing books mostly full of nonsense. For 10 points, name this blind Argentine author who wrote the story "The Library of Babel."  
ANSWER: Jorge Luis **Borges** <Kirksey, World/Other Literature>

4. **An African slave who unusually joined this profession was initially fully scrubbed down to ensure he wasn't dyed in ink. In addition to time as a monk, the author of *The Book of Five Rings* spent most of his life in this profession. English sailor William Adams was "reborn" as a man in this profession so he could permanently serve a leader. The Seinen war was an 1877 (\*)** rebellion of these people in the Satsuma Domain. Asago Naganori’s death was legendarily avenged by 47 of these people. Kendo is based on the practices of these people, who usually served a daimyo. For 10 points, bushido was a code followed by what Japanese equivalents to English knights?  
ANSWER: **samurai** [accept **ronin**, prompt on knight before mentioned, prompt on answers like swordsman or warrior, prompt on answers like teacher or sensei] (The first clue is about Yasuke)   
<Maharjan, World History>

5. **A mirror box can be used to alleviate one of this procedure's unusual effects. The Krunkenberg operation gives extra functionality to people who have undergone this procedure. This procedure can be trans-tibial or trans-femoral depending on whether it happens above or below the knee joint. One disease that can eventually require this procedure can be caused by Raynaud's phenomenon due to poor (\*)** circulation. Some ulcers developed by diabetics may eventually require this procedure. Over 80% of people that undergo this procedure feel a "phantom limb." Severe frostbite may require the need for this action to be performed on gangrenous tissue. For 10 points, name this act of cutting off a body part, usually the limbs.  
ANSWER: **amputation** [prompt on answers like cutting off limbs before mention, prompt on vague answers like losing a limb with "what medical procedure specifically does that?"] <Maharjan, Biology>

6. [*NOTE TO MODERATOR (not to be read aloud): read the answerline carefully before reading this tossup.*] **A contemporary variety of this practice in the United Kingdom was analyzed by anthropologist Susan Greenwood, who argued that Tanya Lurhmann's earlier analysis over-utilizes a Western rationalist perspective. A contagious type of this practice is based on the idea that people and things can influence each other once they come into contact. A description of how this practice was used to grow (\*)** yams is included in a book on *Coral Gardens* and this practice by Bronisław (**"Brawn"-i-sloff**) Malinowski. In the *Golden Bough*, James Frazer suggested that the age of this practice preceded the age of religion. For 10 points, identify this practice emphasized in wicca where supposed spells might be used.  
ANSWER: **magic** [anti-prompt on wicca early by asking "what practice does wicca engage in?"; prompt on shamanistic rituals or other imprecise answers; accept **witchcraft** until “contagious” is read; accept ***Coral Gardens and Their Magic***; accept forms like **contagious magic** or **sympathetic magic** do NOT accept or prompt on any answer mentioning religious practice]

<Bunker, Anthropology>

7. **A painting whose subject is engaged in this general activity was recreated by Tim Jenison with the aid of optical devices in a test of the Hockney-Falco hypothesis. A work now attributed to Titian that depicted its three main figures engaging in this activity inspired Édouard Manet to paint his *Luncheon on the Grass*. A broken object associated with this activity is on the bottom shelf in (\*)** Hans Holbein's *The Ambassadors*. Johannes Vermeer painted many interiors of people engaged in this activity on a virginal, the best-known of which depicts a woman receiving a lesson in this activity. For 10 points, name this activity, which, in the Renaissance era, might involve playing the harpsichord or lute.  
ANSWER: playing **music** [accept performing **music**, accept **playing or performing any specific instrument**]   
<Sims, Visual Arts>

8. **This symbol is paired with a switchblade in the title of a David Wilkerson book about proselytizing to urban gang members. A 2011 book by James H. Cone analyzing African-American religous movements is titled for this symbol and the lynching tree. A Carmelite church doctor usually named for this object mentored Teresa of Avila and wrote the spiritual poem (\*)** *Dark Night of the Soul*. On a feast day named for the exaltation of this object, Saint Francis of Assisi received the stigmata. St. Helena is credited with finding the remains of this relic, usually referred to as its “true” form. A gesture named for this object involves touching the forehead, the chest and then both shoulders. For 10 points, name this wooden object on which Jesus Christ died.  
ANSWER: the **cross** [accept the **crucifix**; accept St. John of the **Cross**; accept Sign of the **cross**; accept *The* ***Cross*** *and the Switchblade*; accept *The* ***Cross*** *and the Lynching Tree*] <Harvey, Religion>

9. **The narrator of this novel decides against moving to South America after being offered to live with the McCoo family in a fictional New England town, only to find their house burned down upon his arrival. This novel is framed as a memoir titled "The Confession of a White Widowed Male" edited by the psychologist Dr. John Ray Jr. In this novel, the narrator has a relationship with a girl named (\*)** Annabel Leigh, who later dies of typhus. The title character of this novel falls ill in the Colorado mountains and is checked into a hospital by the narrator, from where she is taken by the playwright Clare Quilty. For 10 points, name this 1955 novel about Humbert Humbert's obsession with the title girl, by Vladimir Nabokov.  
ANSWER: ***Lolita*** <Grossman, European Literature>

10. **Along with a Brazilian singer, an American musician who played this instrument popularized Bossa Nova with a recording of the song "The Girl From Ipanema". The standards "Blue 7" and "St. Thomas" were written by a player nicknamed the “colossus” of this instrument. "Cannonball" Adderley played this instrument on *Kind of Blue*. Stan (\*)** Getz and Sonny Rollins both play this instrument, as does a musician who implemented his namesake "changes" in his recording of "Giant Steps." The jazz standard "Ornithology" was written by a player of this instrument in reference to his nickname "The Bird". For 10 points, Charlie Parker and John Coltrane played what single-reed brass woodwind instrument with alto and tenor varieties?  
ANSWER: **sax**ophone [accept alto, tenor, or soprano **sax**ophone] <Maharjan, Other Auditory>

11. **In 1914, over 300 people traveling to this country from India on the steamship *Komagata Maru* were forcibly denied entry. During the Conscription Crisis of 1917, Henri Bourassa led an opposition group in this country. A corps of troops from this country pioneered the tactic of creeping barrage during the Battle of Vimy Ridge. A collision between the** **(\*)** SS *Mont Blanc* andSS *Imo* in this country resulted in the largest man-made explosion up to that point in history. Feeling little allegiance to Britain, this country's French-speaking population largely opposed the draft during the First World War. For 10 points, the Halifax explosion occurred in what North American country?  
ANSWER: **Canada** <Maharjan, Other History>

12. **A probabilistic version of this property holds for sums and products of random variables if it holds for each element and results in either another random variable or a constant by Slutsky’s theorem. The Weierstrass (“Vai-er-strauss”) M-test can test if a series of functions possess a stronger form of this property which does not hold for 1 over x on the open interval 0 comma 2. The harmonic series does (\*)** not possess this property, but the alternating harmonic series does. The definition of continuity requires that a function have a corresponding sequence that has this property at a point *c*. If the limit as "*n* approaches infinity" of the ratio of the next term to the current term is less than one, then the series possesses this property by the ratio test. For 10 points, name this property of a sequence contrasted with divergence.  
ANSWER: **convergence** [accept word forms like piecewise **convergence** or uniform **convergence** or **convergence in probability**; accept absolute **convergence** or conditional **convergence**; or **convergent**] <Maharjan, Mathematics>

13. **One character in this novel is described as "screwing his face up … flushing with anger" in response to a poet asking for a second serving of soup. That poet in this novel is the opium addict Augustus Carmichael, who sees his work become popular during World War I. Another character in this novel listens for the footsteps of William Bankes after a man runs out of a house shouting lines from (\*)** Tennyson's "Charge of the Light Brigade," knocking her easel over in the process. The painter Lily Briscoe appears in this novel's first part, "The Window," which opens with James being told that the trip to the title structure will be taken on the next day. For 10 points, name this novel about the Ramsay family, by Virginia Woolf.  
ANSWER: ***To The Lighthouse*** <Grossman, British Literature>

14. **The largest temple at Teotihuacan is named for one of these creatures. A god who is the “cloud” form of this creature fathered 400 sons representing the southern stars. A deity that resembles one of these creatures mixed his own blood to create the humans of the fifth world. Huitzilopotchli (“Hoo-etz-il-pockt-lee”) uses a fiery one of these creatures as a weapon. A** **(\*)** ball of feathers caused Coatlicue to give birth to a canine deity and a deity who is represented as this creature. The Aztecs built their capital city at a spot where an eagle was seen eating this creature on top of a cactus, a scene that appears on the flag of Mexico. For 10 points, Quetzalcoatl is usually depicted as a feathered example of what reptile?  
ANSWER: **serpent** [accept feathered **serpent** or cloud **serpent**, accept **snake**, accept **Xuihcoatl**, accept **Mixcoatl**, accept **Quetzalcoatl** until read] <Maharjan, Mythology>

15. **For a murder committed in this city, New Orleans businessman Clay Shaw was fruitlessly put on trial by Jim Garrison. On United Nations Day in this city, Adlai Stevenson was stuck with a placard by a jeering protester. Louie Witt was filmed in this city opening an umbrella on a sunny day, while Clint Hill was filmed desperately running towards an (\*)** automobile. After killing police officer J.D. Tippit in this city, a man ended up in amovie theater. In a famous clip, Walter Cronkite repeatedly puts his glasses on as he announces a death in this city. Nightclub owner Jack Ruby murdered a man in this city who is suspected of carrying out an assassination in Dealey Plaza. For 10 points, name this Texas city where John F. Kennedy was assassinated.  
ANSWER: **Dallas**, Texas <Cheyne, American History>

16. **The phrase "Kennywood's open" references an amusement park in this state located in West Mifflin. The derogatory slang term "jagoff" originates from a dialect of English spoken in this US state, while a different dialect spoken in the southeast portion of this state uses the word "yet" to mean "still" and the phrase "so I do" to end declarative sentences. The use of the word (\*)** "hoagie" to describe sub sandwiches is most common in this state. The second person pronoun "yinz" is used by speakers of the unique dialect of the Western portion of this state. Mennonite and Amish people in this state speak a variety of German sometimes called this state's "Dutch." For 10 points, name this U.S. state that contains the linguistically unique city of Pittsburgh.   
ANSWER: **Pennsylvania** <Harvey, Geography>

17. **When degeneracy is broken in these specific entities, the Jahn-Teller effect occurs. High and low spins affect energy differences in these entities that increase when moving to the right of a spectrochemical series. Ligand interactions cause an effect in these entities that most commonly occurs in octahedral structures. The energy levels of these entities are split in a phenomenon central to (\*)** crystal field theory. This orbital can have one of five magnetic quantum numbers, and is typically shaped like a four-leaf clover. This orbital with an azimuthal quantum number of two is associated with the block of the periodic table that contains the transition metals. For 10 points, name this atomic orbital in between p and f.  
ANSWER: **d-orbital** [accept just **d** after “orbital” is read, prompt on just atomic orbital by asking "which orbital?"; prompt on “octahedral complexes” before mention; do NOT accept or prompt on anything mentioning “molecular orbitals”]   
<Maharjan, Chemistry>

18. **In one film, this woman plays a character who does a handstand while debating whether another character sent her a text about "Patch." In that 2012 black-and-white film, this woman's character takes an uneventful trip to Paris for only two days so she can return in time for a meeting with a dance company. In addition to co-writing and starring in (\*)** *Frances Ha,* this woman directed a film in which the protagonist buys cigarettes, a lottery ticket, and a copy of Playgirl magazine on her 18th birthday. The title character of that film by this director leaves Sacramento to attend a New York college against her mother's wishes and is played by Saoirse (**"Sur-schuh"**) Ronan. For 10 points, name this American director of *Lady Bird*.  
ANSWER: Greta **Gerwig** [or Greta Celeste **Gerwig**] <Grossman, Trash>

19. **This author created the fictional Beatles parody band The Paranoids, who perform in a novel that also describes a performance of a parody of Jacobean Revenge plays called *The Courier's Tragedy*. A novel by this author focuses on the many exploits of "the human yo-yo," Benny Profane, and a group of artists known as The Whole Sick Crew. In a conspiracy-laden novel, this author wrote about the attempts of (\*)** Oedipa Maas to uncover the secrets of an ancient, underground mail service symbolized a muted post horn called Trystero. For 10 points, name this postmodern American author of *V* and *The Crying of Lot 49*.  
ANSWER: Thomas Ruggles **Pynchon** Jr. <Grossman, American Literature>

20. **A D minor piece of this type begins with strings playing a syncopated melody almost entirely on off-beats, while the "Romanze" second movement of that piece contains a stormy G minor episode. A piece of this type received a nickname that means "young man" because of a misspelling of the original performer's name. Ludwig van Beethoven's fourth piece of this type begins with soft G major chords, while his fifth and final piece of this type was premiered by Carl (\*)** Czerny (“**Share-nee**”). Wolfgang Amadeus Mozart's pieces in this genre all contain three movements and include ones nicknamed *Coronation, Jeunehomme,* and *Elvira Madigan*. For 10 points, name these pieces such as Beethoven's *Emperor*, which are written for piano soloist and orchestra.  
ANSWER: **piano concerto** [prompt on concerto] <Sims, Music>

Bonuses:

1. This critic borrowed the phrase "sweetness and light" to describe the two elements that he insisted were needed for proper culture: beauty and intelligence. For 10 points each:  
[10]Name this Victorian critic who called culture a "study of perfection" in his book *Culture and Anarchy*. He also wrote "The Forsaken Merman."  
ANSWER: Matthew **Arnold**  
[10]Arnold's best known poem is this one, which describes a place "Where ignorant armies clash at night." This pessimistic poem describes "Sophocles long ago" who "heard the eternal note of sadness."  
ANSWER: "**Dover Beach**"  
[10]Arnold borrowed the phrase "sweetness and light" from "The Battle of the Books" a satirical piece of literary criticism by this author who suggested cannibalism to reduce the number of papists in an essay.  
ANSWER: Jonathan **Swift** <Harvey, British Literature>

2. This work had a profound impact on Bertrand's Russel theory of logical atomism as seen in his supposition that atomic propositions are logically independent of each other. For 10 points each:  
[10] Identify this philosophical text which had some of its seven propositions criticized in its author's posthumously-published *Philosophical Investigations*.  
ANSWER: ***Tractatus Logico-Philosophicus*** [accept **TLP**; accept but do NOT otherwise reveal **Wittgenstein's Tractatus**]  
[10] This author of Philosophical Investigations criticized the positivist readings of his *Tractatus*. This Austrian-born philosopher also developed the "beetle in a box" thought experiment about private languages.  
ANSWER: Ludwig **Wittgenstein**  
[10] The *Tractatus* opens with the proposition that "the world is everything that is" this term. The second proposition says that these terms are the existence of different states of affairs.  
ANSWER: **case** [accept logical (heh) equivalents such "**the case**" or "**cases**"] <Bunker, Philosophy>

3. This country’s immigration policy was known as “White” *this country* until 1966. For 10 points each:

[10] Name this country where non-white immigration was entirely banned until the Harold Holt administration allowed people of any race to immigrate.

ANSWER: Commonwealth of **Australia**

[10] Non-white immigration to Australia exploded during an era of these events in the late 19th century, leading to White Australia. Forty-niners in California ethnically cleaned indigenous people in another of these events.

ANSWER: **gold rush**

[10] Opposition to immigration did not end after this party also led by Harold Holt reversed itself in 1988 and called for an end to Asian immigration. This party rules in coalition with the National Party.

ANSWER: **Liberal** Party of Australia <Knecht, Other History>

4. This element should only be used as a fuel in conjunction with a fissile material such as recycled plutonium. For 10 points each:  
[10] Name this element that produces Uranium-233 after being bombarded with neutrons. This more abundant element is also well-suited for molten salt reactors.  
ANSWER: **Thorium** [accept **Th**]  
[10] Like all extent reactors, thorium reactors would produce energy through this general process where the nucleus of an atom splits into two lighter parts.  
ANSWER: nuclear **fission** [do NOT accept or prompt on anything mentioning "fusion"]  
[10] This specific isotope of Uranium is most commonly used in fission reactors today. Despite Uranium-238 being the most abundant, this isotope can sustain a better fission chain reaction.  
ANSWER: Uranium-**235** <Maharjan, Physics>

5. A flying eagle symbolizes this character in one film originally intended to be part of a six-part sequence. For 10 points each:   
[10] Name this historical figure depicted in a 5.5-hour silent film which ends with a triptych of three reels of film played simultaneously, each showing different soldiers marching towards Italy.   
ANSWER: **Napoleon** Bonaparte  
[10] This director made *Napoleon*. In the film, he used many innovative techniques such as multi-camera setups, underwater cameras, and the famous triptych.   
ANSWER: Abel **Gance**  
[10] Napoleon also features in this most expensive Soviet film ever made. In one scene in this film adaptation of a Tolstoy novel, Pierre Bezukhov tries to assassinate Napoleon while in Moscow.  
ANSWER: ***War and Peace*** <James, Other Visual>

6. In one poem, this author described "there are more things important beyond all this fiddle," referring to the title genre. For 10 points each:  
[10] Name this poet who ironically opened her poem "Poetry" by stating "I, too, dislike it." This modernist also wrote poems such as "The Pangolin" and "The Steeple Jack."  
ANSWER: Marianne **Moore**  
[10] This other American modernist poet wrote the introduction to Moore's *Collected Poems*. His own poems include "Portrait of a Lady" and "Rhapsody on a Windy Night."  
ANSWER: T. S. **Eliot** [accept Thomas Stearns **Eliot**]  
[10] Moore was an avid fan of this sport, which is played by the title character in the Ernest Thayer poem "Casey at the Bat."  
ANSWER: **baseball** <Karthikeyan, American Literature>

7. This woman burns herself alive along with her lover's possessions and finally ends up stabbing herself. For 10 points each:  
[10] Name this queen of Carthage who carries on a relationship with Aeneas. Hermes eventually urges Aeneas to leave her and continue on his journey, causing her intense grief.  
ANSWER: Queen **Dido**  
[10] After Aeneas leaves Dido, she curses him and the Trojans to be endlessly at war with Carthage. This foreshadows the real-life Punic Wars between Carthage and this city that Aeneas' descendants would found.  
ANSWER: **Rome**  
[10] Queen Dido was originally born in this city, but left following the death of her lover Sychaeus. She fled the city during the reign of King Pygmalion.  
ANSWER: **Tyre** <Maharjan, Mythology>

8. A proof that this problem is undecidable involves assuming that a machine A can solve this problem, creating a machine B that produces the opposite of A's output, and running B on itself. For 10 points each:  
[10] Name this problem proven undecidable by a British computer scientist, which asks whether or not a program will continue running forever on a given input.  
ANSWER: **Halting** problem  
[10] By using his namesake machines, this British computer scientist created the proof that the halting problem is undecidable. He also names a "test" about strong AI.  
ANSWER: Alan (Mathison) **Turing**  
[10] The halting problem has this property, which describes problems that are at least as difficult as all problems in NP but, unlike NP-complete problems, are not necessarily in NP.  
ANSWER: **NP-hard** <Fleisig, Computer Science>

9. A featured artist in a remix of a song in this musical genre mentions how "A little mezcal got [her] feelin' naughty." For 10 points each:  
[10] Name this genre of "Con Calma!" which blends Latin American music and hip hop. Contemporary artists in this pop music genre include Bad Bunny and the Colombian singer-songwriter Karol G.  
ANSWER: **reggaeton**  
[10] This Puerto Rican rapper of "Con Calma" coined the term reggaeton. This artist of "Gasolina" collaborated with Janet Jackson on "Made For Now" and was also featured on Luis Fonsi's hit "Despacito".  
ANSWER: **Daddy Yankee** [or Ramón Luis Ayala **Rodríguez**]  
[10] This pop star appeared with Daddy Yankee in the remixed version of "Con Calma." She is better known for her solo album *Teenage Dream* which contained such bops as "Firework" and "California Gurls."  
ANSWER: Katy **Perry** <Bunker, Trash>

10. John Burge oversaw the torture of hundreds of individuals between 1972 and 1991 as a commander in this city's police department. For 10 points each:  
[10] Name this city where the 2015 murder of 17-year-old Laquan McDonald prompted calls for Rahm Emanuel to resign.  
ANSWER: **Chicago**  
[10] This political organizer united multiracial groups in Chicago under the Rainbow Coalition, inspiring Jesse Jackson's coalitions of the same name. This man was targeted by the FBI's COINTELPRO before being assassinated by Chicago police in 1969 at age 21.  
ANSWER: Fred **Hampton**  
[10] Hampton chaired the Illinois chapter of this revolutionary group founded by Bobby Seale and Huey Newton in Oakland. Richard Aoki, a leader of this group, was an FBI informant.  
ANSWER: **Black Panther** Party [accept **Black Panthers** or **BPP**] <Zhou, American History>

11. This piece's opening chromatic solo begins by descending a tritone and is followed by a harp glissando. For 10 points each:  
[10] Name this tone poem based on a Stéphane Mallarmé poem, by Claude Debussy.  
ANSWER: ***Prelude to the Afternoon of a Faun***[or***Prélude à l'après-midi d'un faune***]  
[10] This woodwind instrument just lower than the piccolo plays the opening solo of *Prelude to the Afternoon of a Faun*.  
ANSWER: **flute**  
[10] This other French composer's Flute Concertino in D Major is another staple of the flute repertoire. She was the first female composer to win the French Légion d'Honneur.  
ANSWER: Cécile (Louise Stéphanie) **Chaminade** <Fleisig, Music>

12. A poem that describes a lover's dead sparrow is presumed to refer to this woman. For 10 points each:  
[10] Give this pseudonym that likely refers to Clodia, wife of the consul Quintus Celler.   
ANSWER: **Lesbia**  
[10] Lesbia was the lover of this Roman poet of *Ave Ataque Vale* who threatened to "sodomize and face-fuck" two men in his 16th poem.  
ANSWER: Gaius Valerius **Catullus**  
[10] Catullus 64, his longest and most renowned poem, mostly centers on the wedding of Peleus and Thetis, but also extensively covers Adriadne's desertion of this Greek hero who slew the Minotaur.  
ANSWER: **Theseus** <Maharjan, World/Other Literature>

13. Walter Gilbert coined this molecule namesake “world” for a hypothetical stage in evolutionary history. For 10 points each:  
[10] Identify this molecule whose messenger version is produced during transcription.  
ANSWER: **RNA** [accept subtypes such as **mRNA**, **tRNA**, **rRNA**; accept word forms like **RNA World Hypothesis**]  
[10] The "alternative" forms of this process can code for multiple protein products by skipping exons. In this post-transcriptional modification, snRNPs **(“snurps”)** help remove introns from pre-RNA.  
ANSWER: RNA **splicing**  
[10] Alternative splicing is likely regulated by this process which represses gene transcription. This process's namesake functional group is attached to the fifth carbon atom clockwise from the amine group on cytosine.  
ANSWER: **methylation** <Oung, Biology>

14. This civilization's soldiers wore armor consisting of several layers of cotton hardened with brine. For 10 points each:  
[10] Name this Mesoamerican civilization whose military would secure captives for human sacrifices. It was centered at the city of Tenochtitlan.   
ANSWER: **Aztec**  
[10] Aztec weapons like the Tepoztopilli and the Macuahuitl used razor-sharp blades made from this black, volcanic glass material.  
ANSWER: **obsidian**  
[10] Elite warriors in the Aztec military were named for these fierce large cats, and would often go into battle wearing the skin of these animals.  
ANSWER: **jaguar** <Maharjan, World History>

15. Answer some questions about the linguistics of African-American Vernacular English, or AAVE, for 10 points each:  
[10] Some linguists argue that AAVE originated from languages of this type that form from the contact of two languages and evolve beyond pidgins. The most popular language of this type is spoken in Haiti.  
ANSWER: **creole**s  
[10] Researchers in this subfield of linguistics study the cultural norms, prestige, and stigmas of speech communities such as speakers of AAVE.  
ANSWER: **sociolinguistics**  
[10] Speakers who communicate in AAVE and "standard" American English may engage in code-switching or this behavior, which describes a single community that uses two dialects or languages in different situations.  
ANSWER: **diglossia** <Fleisig, Other Social Science>

16. Answer these questions about a class of New religious movements known as UFO religions. For 10 points each:  
[10]This UFO religion founded by Claude Virilhon teaches that a race of extraterrestrials called Elohim created humans through genetic engineering. They also teach that past phrophets like Jesus, Muhammad and the Budha were mediator between the Elohim and mankind.  
ANSWER: **Raëlism** [accept **Raëlianism**; accept **Raëlian** movement]  
[10] This faith is considered a UFO religion because of its Xenu cosmogony and space opera-like doctrine. This religion founded by L. Ron Hubbard includes many celebrity adherents like Beck and Tom Cruise.  
ANSWER: **Scientology**  
[10] 39 members of this UFO religion committed mass suicide while attempting to reach the spacecraft following the Hale-Bopp comet, as encouraged by this cult's founder, Marshall Applewhite.   
ANSWER: **Heaven's Gate** [accept **Human Individual Metamorphosis** ] <Thomas, Religio>n

17. This functional group is synthesized in a reaction named for Williamson. For 10 points each:  
[10] Name this functional group that consists of an oxygen atom bonded to two alkyl or aryl groups.  
ANSWER: **ether**  
[10] Ethers can serve as the Lewis type of these chemical species, which is defined as a compound that can serve as an electron pair donor. These chemical species have higher pH values than their counterparts.  
ANSWER: Lewis **base**  
[10] In the Williamson synthesis, one of these strong bases reacts with an alkyl halide. These conjugate results when a hydrogen is removed from an alcohol in the presence of a metal and are written (**read "R-O-minus"**) RO-.  
ANSWER: **alkoxide** <Madoerin, Chemistry>

18. The speaker of Patrica Lockwood's poem "Rape Joke" gives a copy of this author's book *My Century* to her rapist after mistaking his shelf of paperbacks about serial killers as an indication of an interest in history. For 10 points each:  
[10] Name this Nobel Prize-winning author who discussed the rise of Nazism in his country in the memoir *Peeling the Onion*.  
ANSWER: Günter Wilhelm **Grass**  
[10] Grass is best known for this novel, the first of his Danzig trilogy. It focuses on the diminutive Oskar Matzerath.  
ANSWER: *The* ***Tin Drum***  
[10] Grass's poem "What Must Be Said" criticizes the government of this nation. This country's own poets include Yehuda Amichai and Amos Oz, who both wrote in Hebrew.  
ANSWER: State of **Israel** <Harvey, European Literature>

19. This sculptor was accused by Pericles' enemies of embezzling money to fund one of his projects. For 10 points each:  
[10] Name this ancient Greek sculptor who created a 41-foot tall statue of Zeus for the temple dedicated to the deity at Olympia.  
ANSWER: **Phidias**  
[10] The statue of Zeus created by Phidias was a member of this group of notable ancient landmarks that included the Colossus of Rhodes and the Pyramids of Giza.  
ANSWER: **Seven Wonders of the Ancient World** [prompt on partial answers]  
[10] Phidias created three massive statues of one Greek deity, including one in bronze and one in gold and ivory, for this elevated location, which was also the site of the massive Propylaea Gate.  
ANSWER: **Acropolis** of Athens [prompt on Parthenon or Athens] <Maharjan, Visual Arts>

20. For 10 points each, answer these questions about things you may find in a 16th century Russian village.   
[10] At communal gatherings, Russian peasants drank large quantities of this potato and cereal grain-derived liquor. It is disputed whether this drink was first distilled in Russian or Poland.  
ANSWER: **vodka**  
[10] Many Russian villages contained a communal facility of this type called a *banya*. Roman examples of these were called *thermae* and featured rooms like the *tepidarium* and the *caldarium*.  
ANSWER: public **bath**s [accept **sauna**s; accept **bathing** facilities or similar answers; accept **spa**]  
[10] Many peasant homes featured one of these traditional Russian containers used for boiling water for tea. Russian writers like Pushkin and Gogol often waxed lyrical about these decorated containers, often nostalgic symbols of rural Russian community.  
ANSWER: **samovar**s [accept **self-brewer**] <Harvey, European History>