Maryland Spring Tournament 2012 - Packet 7

“Does Anybody Have a Question Set We Can Use?”

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Tossups

1. **The exposure of phosphatidyl serine in one part of this structure is one signal of apoptosis, another of which is the formation of blebs. Flippases allow components to move throughout this structure, and integral proteins such as G-protein coupled receptors are found in this structure. In one model, this consists of rafts floating in a two-dimensional liquid; that is the** fluid mosaic model of this organelle. Parts of this organelle break off during endocytosis. This organelle is composed of a selectively permeable phosopholipid bilayer that encloses the cytoplasm. For 10 points, name this organelle that surrounds the cell.

ANSWER: Cell **Membrane** [accept Plasma **Membrane**]

2. **One pope of this name warned that the world faced “the Suicide of Civilized Europe” at the dawn of World War I, and along with Leo XIII was the only non-Pius in office from 1846 to 1958. A saint with this name miraculously detonated a poisoned chalice and differentiated between gyrovagues, anchorites, and cenobites in his most famous work, which advocates the motto “*ora et labora*.” The exorcism classic “step back, Satan” is featured on the evil-resistant** medals of that saint, who spent years living in a cave before taking over Monte Cassino. The most recent pope of this name quoted *Romans* in a tract on hope, *Spe Salvi*, and authored *Deus Caritas Est*, or *God is Love*. For 10 points, identify this name shared by a saint with an eponymous “rule” governing monastic life and a man born Joseph Ratzinger, the current pope.

ANSWER: **Benedict**

3. **The narrator of this novel changes his shoes and socks after witnessing a death, and his predecessor was killed in a fight over some hens. The Russian declares he would have shot another character's mistress, and leaves on a canoe before he can be hung. After finding an abandoned hut with stacked firewood, the narrator's boat is attacked in the fog. The narrator is sent to look for a rogue** ivory trader who dies saying "The Horror! The Horror!" and who has set himself up as a god among the natives. For 10 points, name this novel by Joseph Conrad in which Charles Marlow sails up the Congo in search of Kurtz.

ANSWER: ***Heart of Darkness***

4. **In one campaign, this man’s staffers changed the title of a Roy Acuff song to “Ruthless Cannonball” after this man’s campaigning style. He was succeeded by Nicholas Katzenbach in one post and defeated Kenneth Keating for another after which he became part of the first pair of** brothers to ever serve in the Senate simultaneously. According to conspiracy theories, this man’s attempts to go after Santo Trafficante, Carlos Marcello, and the mafia as Attorney General may have led to his brother’s death. For ten points, name this man assassinated by Sirhan Sirhan the brother of longtime Massachusetts Senator Edward and U.S. President, John.

ANSWER: **R**obert F. Kennedy [Accept **RFK**, prompt on “Kennedy”]

5. **In one painting by this artist, Joseph sits next to a lake holding up some sheet music next for an angel who faces away from the viewer while playing a violin. In another painting by this artist, Mary Magdalene is curled up and weeping at the side of the bed of the red-clad corpse of Mary. This artist of *Rest on the Flight into Egypt* and that controversial *Death of the Virgin* also painted Jesus reaching down towards a seemingly glowing** St. Paul about to be trampled by a horse. In this artist’s most famous painting, Jesus’ halo is made barely visible by the divine light that stretches out of the top left corner. For ten points, name this tenebrism-loving Italian artist who painted *The Card Sharps* and Jesus effortlessly pointing at the titular tax collector in *The Calling of St. Matthew*.

ANSWER: Michelangelo Merisi da **Caravaggio**

6. **Along with various rare earth elements, this element is extracted commercially from the mineral apatite. This element lends its name to a type of photoluminescence associated with forbidden quantum transitions. This element is reacted with sulfuric acid and then neutralized for use in** fertilizer, and in the most common plus five oxidation state this element's strong acid is triprotic. This element is found in the major acid used in soda, while its highly flammable red allotrope is used to coat the heads of matches. Along with calcium, this is the major constituent mineral of bones. For 10 points, name this element in the same period as nitrogen, which has atomic number fifteen and symbol P.

ANSWER: **Phosphorus** [accept "P" before end]

7. **One song by this man declares, “I’m gone, high like fructose, fructose,” and is titled “The Watchers.” Another song by this man describes how, “regardless of the things in the past that I’ve done, most of it really was for the hell of the** **fun,” and the title track from his newest album features Lil Wayne and is titled *Strange*** *Clouds*. Another song by this artist proclaims, “I break all the rules like Evel Knievel,” and that song features Rivers Cuomo. For 10 points, name this rapper who also collaborated with Hayley Williams on “Airplanes” and Bruno Mars on “Nothin’ on You,” and whose stage name is an abbreviation of his birth name, Bobby Ray.

ANSWER: **B.o.B** or **Bob** or Bobby Ray **Simmons**, Jr. or **Bobby Ray** before read

8. **One character in this novel makes up lies about Ernest Morrow and had earlier accompanied Mal Brossard into Agerstown for a movie but only got hamburgers. The protagonist of this novel writes an essay about his brother Allie's green baseball mitt for his roommate Stradlater, a "sexy bastard" who is going on a date with Jane Gallagher. At the end of the novel, the protagonist's sister Phoebe returns his** red hunting hat and convinces him not to run away, but a more famous anecdote involves the elevator operator Maurice who sends the prostitute Sunny to the protagonist's room at the Edmont. For 10 points, name this novel about Holden Caulfield, written by J. D. Salinger.

ANSWER: *The* ***Catcher in the Rye***

9. **One historical figure known by this adjective was invoked to support ethnic unity during the Xinhai Revolution and was chosen by Sima Qian as the starting point for the *Records of the Grand Historian.* That figure known by this adjective ruled during the Three Sovereigns and Five Emperors period before the Xia and Shang dynasties. A group whose name features this adjective was opposed by Dong Zhuo and led by Daoist sorcerer Zhang Jue during a revolt that triggered the** Warring States period. The Ordos Loop is created by a famously flood-prone waterway known by this adjective due to the presence of silt from the Loess Plateau south of Mongolia. For 10 points, identify this adjective that names the “turbans” worn by Han dynasty rebels and the major river of Northern China, a primary color.

ANSWER: **Yellow** [or **Huáng**]

10. **IBNS is a system that attempts to prevent crime involving this construct. Georg Simmel's work on the philosophy of this construct explains that it helps individuals understand the totality of life. This construct avoids the problem of the "double coincidence of wants" an economy without it encounters. Measurements of the supply of this construct differ depending on the** liquidity of its various types. In modern times, this construct's value may be due to fiat; but in general this must be a store of value and a medium of exchange. For 10 points, name this term used to measure wealth, commonly expressed with dollar bills.

ANSWER: **Money** [accept currency, prompt on "dollars," "legal tender," or "cash"]

11. **This composer marked his first prelude “Allegro ben rimato e deciso” in his set of three piano preludes, and accompanied a solo trumpet with a trio of clarinets in the second movement of his *Concerto in F*. A two-week holiday in Havana inspired this man's *Cuban Overture* and in another work, a transition to twelve-bar blues symbolizes homesickness for the title man,** *An American in Paris*. The dope dealer Sportin Life' interacts with the inhabitants of Catfish Row in his opera *Porgy and Bess*,but his best known work was inspired by the rhythms of a train journey to Boston and opens with a famous clarinet glissando. For 10 points, name this composer of *Rhapsody in Blue*, the brother of Ira.

ANSWER: George **Gershwin**

12. **According to one source, the losing commander at this battle had a nightmare where he was surrounded by demons and that man stayed at the Blue Boar Inn the night before this battle. Lord Strange was held captive at this battle and Rhys ap Thomas deserted to the winning side. Probably fought on Ambien Hill,** John de Vere essentially commanded the winning troops and the winning commander’s life was most likely saved by swift intervention by Thomas Stanley’s forces. Also called the Battle of Redmore, for ten points, name this victory for Henry VII Tudor over Richard III, an overwhelming victory for the Lancastrian forces over the Yorkists in the War of the Roses in 1485.

ANSWER: Battle of **Bosworth** Field [Accept “Battle of Redmore” before mentioned]

13. **De Moivre’s equation allows one to simplify high powers of trigonometric functions with these numbers as arguments. In second order linear differential equations, eigenvalues of this type imply sinusoidal solutions.** Quaternions are an extension of these with two more members, and Cardano introduced them in the sixteenth century to solve cubic equations. The fundamental theorem of algebra guarantees that all polynomials can be uniquely factored over this field, the set of which is denoted by a blackboard C. For ten points, name this type of number with form A plus B I, the sum of a real and an imaginary part.

ANSWER: **Complex** Numbers (prompt on imaginary numbers)

14. **In one poem by this author, he claims that the lips of an acquaintance always appear to be white when he comes back from lunch because he is blowing Virro. In another poem, this poet describes a fire slowly travelling down to his groin after he sees his paramour with a man that seems to be a god. This poet declares that he hates and he loves that same paramour, who he earlier requested to give him** kisses beyond counting. In his most famous poem, this poet described travelling through many lands and countries to deliver a funeral gift for his dead brother. Another elegy he wrote was about the death of his lover’s sparrow. For ten points, name this Roman poet whose Carmina is filled with poems about Lesbia.

ANSWER: Gaius Velerius **Catullus**

15. **This work describes how, as a curious child, James Clerk Maxwell would chase people around demanding “tell me the PARTICULAR GO of it!” This work opens by describing the age-old “clash of temperaments” that has produced the tension between moral philosophy and empiricism, constituting the “Present Dilemma in Philosophy.” Perhaps the most famous passage in this work offers contrasting definitions of “going round” to resolve a dispute about a** squirrel that circles a tree. This work by the author of *The Will to Believe* is subtitled “A New Name for Some Old Ways of Thinking” and builds on the thought of C.S. Pierce, the major proponent of the titular system. For 10 points, identify this work published in 1907, a collection of lectures delivered by William James espousing the titular philosophy.

ANSWER: ***Pragmatism***

16. **The Gibbs-Duhem equation describes the change in chemical potential as P D V and this quantity times D T change. In black holes, this quantity is the area of the event horizon divided by four times the Planck Length. The Gibbs paradox shows that particles must be indistinguishable because otherwise this quantity would decrease in one step. This quantity may be given by** Boltzmann’s constant times the natural log of the multiplicity. Exothermic reactions may fail to be spontaneous if they also decrease this quantity, whose universal decrease is prohibited by the second law of thermodynamics. For 10 points, name this physical quantity that always increases and roughly is the “disorder” of the system.

ANSWER: **Entropy**

17. **One work by this author includes a story that sees Santosh follow his employer and move to Washington D.C., only to run away and get a job in Priya’s restaurant. That story, “One Out of Many,” was collected with “Tell Me Who To Kill” and a story that sees the homosexual Bobby seek refuge in Africa in this man’s *In a Free State*. In another novel by this author, the shopkeeper** Salim settles in an African country ruled by the Big Man. The author of *A Bend in the River* and *Miguel Street* is, for ten points, what man who wrote about Mohun’s obsession with escaping his in-laws and building the title structure for himself in *A House for Mr. Biswas*?

ANSWER: Vidiadhar Surajprasad **Naipaul**

18. **An endangered mammal that lives in this body of water is rendered effectively blind by the lack of a lens. This river flows from a glacier which has recently increased its rate of recession to over 35 meters per year. While it is not uncommon for ashes to be thrown into this river year round, it is on Kumbh** Mela that thousands make a pilgrimage to this river in order to bathe in its waters. The town next to the Gangotri glacier that feeds this river is also a frequent pilgrimage site. Home to a subspecies of dolphin that shares its species with dolphins from the Indus river, for ten points, name this Indian river that holds special significance to people of the Hindu faith.

ANSWER: the **Ganges** river

19. **Seven hundred pounds of silver and the rights to plunder the country of Sens were given to stop one siege of this city that was described by Abbo. This city was captured by the provost of merchants under John the Good, and after the murder of one notable figure in this city, a group from the court of miracles took that corpse to the Montfaucon Gibbet. One noble refused to take a certain crown after organizing an uprising in this city known as the Day of the** Barricades. Another uprising here saw the murder of Admiral Gaspard de Coligny and other Huguenots in the St. Bartholomew’s Day massacre. Adolphe Thiers led the destruction of a Commune in this city and Henry IV declared that this city was “well worth a mass.” For ten points, name this capital of France.

ANSWER: **Paris**

20. **This man's future throne was secured after his father supplanted Eurystheus, who died while trying to storm into Athens and slaughter the Heracleidae. A dispute between his father and uncle prior to this man's accession saw Zeus reverse the course of the sun and Thyestes tricked into cannibalizing his own children before impregnating his daughter with this man's eventual murderer. This king's willingness to sacrifice** Iphigenia rekindled the family curse of his father Atreus, eventually leading to his son's pursuit by the Erinyes for the death of Aegisthus. This man was the father of Elektra and Orestes. For 10 points, identify this brother of Menalaus and king of Mycenae, who was murdered with the help of his wife Clytemnestra and led the Greeks in the Trojan War.

ANSWER: **Agamemnon**

Bonuses

1. Answer some questions about plant reproductive organs for 10 points each.

[10] These parts of the flower, closely related to sepals, are specialized leaves. Dicots typically have four or five of these brightly colored structures, while monocots more commonly have three or six.

ANSWER: **Petal**s [prompt on "perianth"]

[10] This the male reproductive organ of the flower, which produces pollen. It is located in the center of the flower, and consists of the filament and the anther.

ANSWER: **Stamen** [prompt on "androecium"]

[10] The pollen grain represents this part of the life cycle of plants. This is the haploid stage of the alternating generations, which is dominant in liverworts and mosses but wholly dependent on the flower in seed plants.

ANSWER: **Gametophyte** [accept micro**gametophyte** or mega**gametophyte**]

2. Since you’ve already had enough of cats, answer some questions about literary dogs, for ten points each:

[10] When a mad dog appears in Maycomb, Heck Tate hands his gun to Atticus Finch, who promptly kills it, in this only novel of Harper Lee.

ANSWER: ***To Kill A Mockingbird***

[10] This Jack London canine was owned by Judge Miller before being sold to pay off a gardener’s gambling debt. He later comes into the possession of John Thornton, who rescues him from his previous owner.

ANSWER: **Buck**

[10] The Chatterji family owns a dog named Cuddles in this massive Vikram Seth novel, which focuses on Rupa Mehra’s attempts to find the title partner for her daughter Lata.

ANSWER: *A* ***Suitable Boy***

3. This country’s current prime minister is John Key, the leader of its National Party. For ten points each:

[10] Name this nation whose third largest city, Christchurch lies on the Avon River.

ANSWER: **New Zealand**

[10] This ethnic group makes up about 15 percent of New Zealand. They perform the Kapa haka and turned over sovereignty of the island in the Treaty of Waitangi.

ANSWER: **Maori**

[10] Te Raupahara was an influential chieftain during this series of wars fought among the Maori in the early 19th century.

ANSWER: **Musket** Wars

4. A group of soldiers comment on the people passing by in this opera first aria “Sur la place chacun passe”. For 10 points:

[10] Name this opera where the title gypsy is eventually stabbed by Don Jose after she leaves him for the toreador Escamillo.

ANSWER: **Carmen**

[10] Carmen was composed by this man, whose other operas include *The Pearl Fishers* and *The Fair Maid of Perth*.

ANSWER: Georges **Bizet**

[10] After the factory bell rings signalling the end of the cigarette factory workers’ shift, Carmen enters and sings this aria which declares love is a rebellious bird.

ANSWER: “**Habanera**”

5. To raise funds for a Beethoven statue in Bonn this man would compose his Opus 54 called *Variations sérieuses.* For 10 points each:

[10] Name this composer who may be better known for the *Lobesgang Symphony* and the *Reformation Symphony*.

ANSWER: Felix **Mendelssohn**

[10] This other symphony by Mendelssohn was composed on the same trip that inspired his *Hebrides* overture and its nickname comes from the country from where it gets its folk music themes.

ANSWER: **Scottish** Symphony or Symphony **No. 3** in A minor

[10] Mendelssohn also famously composed incidental music for this Shakespeare play featuring the trickster Puck.

ANSWER: A **Midsummer Night's Dream**

6. Daisy covers for the protagonist of this play when he arrives late to work. For ten points each:

[10] Name this play that sees Berenger frantically attempts to avoid turning into the title horned animal.

ANSWER: ***Rhinoceros***

[10] *Rhinoceros* is a play by this Romanian Absurdist playwright of *The Bald Soprano* and *The Killer*.

ANSWER: Eugene **Ionesco**

[10] This other Ionesco play features Berenger as an old monarch who can’t bear to face death. While Marguerite reminds him of his impending demise, Marie tries to hide the knowledge of his coming death.

ANSWER: ***Exit the King***

7. A Violence Prevention Act passed in 1993 was about these objects and named after James Brady. For ten points each,

[10] Name this type of weapon that is exemplified by the Glock and Magnum .357.

ANSWER: **Handgun** [Accept: **Pistol**, accept: **Revolver**, prompt on gun]

[10] The right to own a handgun was contested in this 2008 case in which a District of Columbia statute was struck down in a 5-4 decision, ending a handgun ban.

ANSWER: **Heller** v. District of Columbia (ACCEPT: District of Columbia v **Heller**)

[10] Another important recent Second Amendment decision is Mcdonald v this city. It is currently led by mayor Rahm Emmanuel who took over for its longest serving mayor, Richard M. Daley.

ANSWER: **Chicago**

8. George Miller's research into this phenomenon resulted in the discovery of the magic number seven, plus or minus two. For 10 points each:

[10] Name this faculty tested extensively by quizbowl which can be divided into short term and long term types.

ANSWER: **Memory** [prompt on "recall"]

[10] This German psychologist used nonsense syllables to developed an exponential forgetting curve. His work on memory included how the serial position effects of recency and primacy improved recall.

ANSWER: Hermann **Ebbinghaus**

[10] One method to improve short term memory is this technique, in which two smaller pieces of information are combined. An example would be remembering a phone number as two groups of three digits and one group of four digits.

ANSWER: **Chunking**

9. They are organized with one root node that has no parent and a number of leaf nodes that have no children. For 10 points

[10] Name this type of data structure named for its resemblance to a type of organism.

ANSWER: **Tree**

[10] One way to find a particular node in a tree is to perform this type of search. In this type of search, one branch of each node is examined completely before the others, and it contrasts with a type that searches each "tier" as it goes.

ANSWER: **Depth-First** Search [accept **DFS**]

[10] This type of tree is the shortest set of edges of a graph that connects all of the vertices. It is not necessarily unique, and can one can be constructed by following Prim's algorithm or Kruskal's algorithm.

ANSWER: **Minimum Spanning** Tree [accept **MST**]

10. You might like him best as Tim Riggins in *Friday Night Lights*, but answer some questions about the movie roles of Taylor Kitsch for 10 points each:

[10] This recent Disney flop sees Kitsch as the titular character transported to an alien planet of Barsoom where he allies with a four armed martian known as Jeddak played by Willem Dafoe.

ANSWER: ***John Carter*** *of Mars*

[10] *John Carter* was adapted from a series of pulpy science-fiction adventure novels by this author who also wrote *Tarzan*.

ANSWER: Edgar Rice **Burroughs**

[10] Kitsch had a minor part as this Cajun mutant, also known as Remy LeBeau, in X-Men Origins: Wolverine

ANSWER: **Gambit**

11. This country's Revolutionary Command Council began a massive land reform campaign under Gamal Salem shortly after coming to power in the 1950s. For 10 points each:

[10] Identify this North African country where King Farouk was overthrown by the Free Officer Movement of men like Gamal Abdel Nasser, who later nationalized its Suez Canal.

ANSWER: **Egypt**

[10] Nasser's predecessor as President of Egypt was this leader of the Free Officers, who espoused the Nationalist ideals of Ahmed Orabi and Saad Zaghloul.

ANSWER: Muhammad **Naguib**

[10] Nasser was himself succeeded by this third Egyptian president, who launched the Infitah movement to open Eygpt's economy and was assassinated after signing the Camp David Accords with Menachem Begin.

ANSWER: Anwar al-**Sadat**

12. A British parliamentary committee has recently determined that Rupert Murdoch is “...not a fit person” to run a major international company following a probe due to a certain scandal. For 10 points each:

[10] Rupert and his son, James Murdoch, were investigated as to their role in a phone hacking scheme of this British tabloid. Former editor Rebekah Brooks was also questioned.

ANSWER: **News of the World**

[10]This man was editor of News of the World back in 1994 though he might be better known for being a judge on *America’s Got Talent* and for replacing Larry King on CNN.

ANSWER: Piers **Morgan**

[10] The News of the World scandal clouds a takeover by NewsCorp of this satellite company which has attempted to distance themselves from Murdoch following the snafu.

ANSWER: **British Sky Broadcasting** or **BSkyB**

13. Reagents for this type of a reaction include hydrazine and lithium aluminum hydride. For 10 points each:

[10] Name this type of chemical reaction in which electrons are added to the target molecule.

ANSWER: **Reduction**

[10] In contrast to reduction reactions, these compounds can be formed in oxidation reactions in which iron reacts with ambient oxygen and water to form these compounds. Galvanization and bluing are two methods of avoid the production of these compounds.

ANSWER: **Rust** [prompt on "iron oxides"]

[10] This anion, which is purple in solution, contains a central metal atom in the plus seven oxidation state and therefore is a strong oxidizing agent. It has many uses in organic chemistry, such as reducing an alkene to a diol.

ANSWER: **Permanganate** Ion [accept Potassium Permanganate]

14. This poem describes “Some boy too far from town to learn baseball, Whose only play was what he found himself.” For ten points each:

[10] Name this poem which ends with the claim, “One could do worse than be a swinger of” the title objects.

ANSWER: “**Birches”**

[10] “Birches” is by this poet who also wrote “Nothing Gold Can Stay,” “Mending Wall,” and “The Road Less Traveled.”

ANSWER: Robert **Frost**

[10] This other Frost poem sees a man in horseback deciding not to commit suicide, stating “I have miles to go before I sleep.”

ANSWER: “**Stopping by Woods on a Snowy Evening”**

15. His trip to North Africa yielded a painting of an exotic woman inhaling the title substance called *Smoke of Ambergris.* For 10 points each:

[10] Name this American painter who created many portraits of famous people like Robert Louis Stevenson and Teddy Roosevelt as well as paintings like *El Jaleo* and *The Daughters of Edward Darley Boit.* His most famous work may be a portrait of the Parisian socialite Virginie Gautreau.

ANSWER: John Singer **Sargent**

[10] That aforementioned work was this one, which depicts a woman in a black dress with her head turned to the side. The ensuing scandal at its premiere led Sargent to repaint Gautreau’s shoulder strap to appear more securely fastened.

ANSWER: Portrait of **Madame X**

[10] This other painting by Sargent depicts two little girls in a garden lighting paper lanterns. Its name comes from the lyrics of a popular song at the time.

ANSWER: **Carnation, Lily, Lily, Rose**

[easy part needed]

16. Orkhon scriptures identify the Turkic sky god Tengri as the source of this phenomenon. For 10 points each:

[10] Identify this weather phenomenon perhaps most famously associated with the Norse god Thor.

ANSWER: **Thunder** [or **lightning**, **storm**s, other equivalents, etc.]

[10] Shango, who presides over both thunder *and* fire, is one of these intermediary deities that serve to connect the world of man to the divine manifestations of Olorun in a set of related myth systems.

ANSWER: **Orisha**s [or **orisa**s; grudgingly accept **loa** since he's also worshiped in Vodou]

[10] This major Vedic deity in Hindu mythology slew the great dragon Vritra and rides the many-headed elephant Airavata. He is rarely without his trusty thunderbolt, Vajra.

ANSWER: **Indra**

17. After an Allied victory this man said, “This is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning.” For 10 points each,

[10] Name this British Prime Minister and Literature Nobel Laureate who served during World War II and helped establish the Special Relationship with the United States through his close relationship with Franklin Roosevelt.

ANSWER: Winston **Churchill**

[10] Churchill’s Tories were overwhelming defeated in the 1945 election, which led to this Labour leader becoming Prime Minister. He oversaw the independence and partition of India and many other members of the commonwealth became independent under his government.

ANSWER: Clement **Atlee**

[10] Atlee’s government was heavily influenced by this document that proposed the idea of a National Health Service and many other Welfare State policies.

ANSWER: **Beveridge** Report

18. His first law states that objects will remain at rest or in motion unless acted on by an outside force. For ten points each:

[10] Name this English physicist and mathematician who lends his name to three laws of motion, including one that says that for every action there is an equal and opposite reaction.

ANSWER: Isaac **Newton**

[10] Newton’s second law states that force is the product of mass and acceleration, but a more useful form of that statement uses this quantity. Force is the derivative of this with respect to time.

ANSWER: **Momentum**

[10] Another useful concept in mechanics is this operator, which is equal to the sum of the potential and kinetic energy of a system. It can be turned into the Lagrangian with the Legendre transform.

ANSWER: **Hamiltonian**

19. This story ends with one character stuck in a tub with a broken arm. For 10 points each:

[10] Name this story about two devious young men’s attempts to sleep with John’s wife, one of whom succeeded by fooling John into thinking a biblical flood will occur.

ANSWER: The **Miller**’s Tale

[10] The Miller’s Tale appears in *The Canterbury Tales*, which were written by this English author.

ANSWER: Geoffrey **Chaucer**

[10] Another character who tells a tale in *The Canterbury Tales* is this oft-married woman, who tells a story about a knight being asked what women most desire.
ANSWER: The **Wife** of Bath

20. Max Weber created a portmanteau of this title and “justice,” reflecting his inability to discern a consistent basis for the rulings made by its holders. For 10 points each:

[10] Identify this common term for the judges responsible for ruling on disputes under Islamic law. They may sometimes seek a supporting opinion from a *mufti* or other scholar.

ANSWER: **Qadi**

[10] This term denotes the legal doctrine derived from the Quran, and is generally known as “Islamic law.” Critical jurisprudence within this system is known as *fiqh*, and Herman Cain believes it is coming soon to a courtroom near you.

ANSWER: **Sharia**

[10] Legal or any other manifestations of *Bid'ah*, or innovation, are decried by this Salafi offshoot movement named for an eighteenth-century Arabian theologian. It is is famously prevalent in Saudi Arabia.

ANSWER: **Wahhab**ism