**ACF Nationals 2010**

**Packet by VCU**

1. While on a trip to the beach, this fictional character sees a seal that she mistakes for a mermaid, and during a later excursion she witnesses seven sailors pulled from a wrecked ship. The first time this character enters her husband’s home, she notices a stuffed crocodile and shark hanging in the hall. The work in which she appears opens by describing her idyllic childhood with Herta, Berta, and Hulda. This character fears that her home is haunted by a ghost she calls the Chinaman, and discusses this situation with a hunchbacked chemist named Gieshubler. She has an awkward meeting with her daughter Annie, years after her carelessly hidden letters reveal a relationship with a dashing Major. That affair is what caused her husband, the Prussian politician Innstetten, to immediately divorce her. For 10 points, name this tragic lover of Crampas, the title character of a novel by Theodor Fontane.

ANSWER: ***Effi Briest***

2. In one election, this politician contradicted his opponent’s Sheffield Rally by standing on an actual soapbox and shouting through a megaphone in Luton. He appointed the Nolan Committee to investigate the Cash-for-Questions affair, which involved Harrod's owner Mohamed Al-Fayed bribing members of his party. He defeated Neil Kinnock in general election before signing the Downing Street Declaration with Albert Reynolds. This man withdrew the pound from the European Exchange Rate Mechanism after its value fell on Black Wednesday. He was opposed by the Maastricht Rebels, members of his own party who opposed that treaty. He also governed during the First Gulf War before being defeated by the New Labour party. For 10 points, name this successor of Margaret Thatcher, a conservative Prime Minister of the UK for much of the 1990s.

ANSWER: Sir John **Major**

3. This work’s prologue analyzes Boethius’ claim, in the *Topics*, that accident and substance were the two “primary kinds of things,” to make a general point about the prevalence of “opinion.” It included a prefix that sought to demonstrate the authenticity of its sources by noting that all were approved by Pope Gelasius’ decree. It criticized poetical, figurative language as “obscure and vague,” though it made special exception for the Scriptures by noting that if anything in them strikes a reader as absurd that it must be the fault of the scribe. This work centers on a series of 158 propositions and offers citations from other works by Church fathers and theologians that either support or contradict a certain position in order to suggest that, even, ecclesiastical, truth is up for debate. For 10 points, identify this religious treatise, with a Latin title that translates as *Yes and No*, a work by Peter Abelard.

ANSWER: ***Sic et Non***

4. Derived from precursor cells adjacent to somites 1-7, this structure upregulates receptors for cannabinoid and melanin concentration hormone receptors in response to low levels of cholescystokinin. In response to baroreceptor signaling from the carotid sinus, this structure induces bradycardia through a muscarinic receptor-mediated response. Damage to this structure can cause a contralateral deviation in the palatine uvula, as well as hoarseness. A namesake reflex involving this structure involves crosstalk between its nodose ganglia and its dorsal motor nucleus. Along with the esophagus, this structure passes through the esophageal hiatus at T10. For 10 points, name this structure of the central nervous system that functions as the major source of the parasympathetic innervation in the body and is known as the tenth cranial nerve.ANSWER: **vagus** nerve

5. This poem’s central action occurs as “Malignant Fate sat by, and smil'd.” This poem’s final line quotes a note read by the Prince of Morocco in *The Merchant of Venice*, while its first stanza describes a “lofty vase” where “China’s gayest art had dyed the azure flowers that blow.” Two figures in this poem are described as having armor of a “Tyrian hue” that is “richest purple to the view.” The narrator notes that neither “cruel Tom nor Susan heard” the title character’s pleas to “every watery God.” This poem was dedicated to Horace Walpole and concludes that “Not all that tempts your wandering eyes, And heedless hearts, is lawful prize; Nor all, that glisters, gold.” For 10 points, name this Thomas Gray poem that describes the drowning of the feline Selima.

ANSWER: “Ode **on the Death of a Favourite Cat** Drowned in a Tub of Goldfishes”

6. This economist developed a theory suggesting that bond investors have a preference for a maturity length that can only be overturned if there is a risk premium, called “preferred habitat theory.” Along with Duesenberry he names a consumption function that postulates that current consumption is determined not just by current income, but also by its previous highest peak. He designed a large scale model of the US economy for the Federal Reserve, the MPS. He also partially names a theorem that demonstrated that under certain assumptions, the value of a firm is not affected by whether it is financed by equity or debt. With Robert Brumberg, he postulated that young and old households have a higher propensity to consume while middle aged households have a higher propensity to save, the “Life Cycle Hypothesis of Saving.” For 10 points, name this 1985 Nobel winner, who formulated a capital structure theorem with Merton Miller.

ANSWER: Franco **Modigliani**

7. Thomas Jefferson had a bust of this figure in Monticello on the first floor in the Entrance Hall. A notable sculpture of him was inspired by a Roman statue entitled *Old Fisherman* depicting a dying Seneca. That statue shows him with emaciated flesh and engorged veins and prompted an offer from King Gustavus III of Sweden to pay for clothes as a result of the scandal over this figure being sculpted nude. In response, another sculpture of this man was done clothing him in fine drapery and based on several posing sessions he did upon his return to Paris in 1778. That sculpture of him “seated” initially proved more popular than the nude done by Jean Pigalle. For 10 points, name this writer sculpted several times by Jean-Antoine Houdon.

ANSWER: **Voltaire** (or Francois-Marie **Arouet**)

8. This group outlined its beliefs in documents known as the "Fundamental Spirit" and the "Iron Discipline." Their members included the female warrior Felipa Culala, while their political branch was spearheaded by Jose Lava. Targeted by the so-called "mailed fist" policies, many members of this group were sent to Iwahig Prison after being pursued by USAFFE groups. They supported the candidacy of Sergio Osmeña in his run against Manuel Roxas, who prosecuted them and their leader Luis Taruc. For 10 points, name this group that led a Marxist rebellion after the Japanese invasion of the Philippines, and took their name from a Tagalog phrase.

ANSWER: **Hukbalahap**s or the **Huk**s (or, certainly, the "Hukbo ng Bayan Laban sa mga Hapon")

9. The Hughes-Drever experiment ruled out a second light tensor field in general relativity by noting that if not proportional to the metric, it would induce this. A spectrophotometric method named for this property evaluates the polarization of fluorescent probes to generate a binding curve; in this method, the G-factor relates differently oriented light sources. The magnetocrystalline form of this property represents the energy needed to deflect the magnetic moment of a single crystal based on the spin-orbit coupling that occurs within the crystal lattice. An object that possesses this property can undergo birefringence due to orientation-dependent differences in its index of refraction. For 10 points, name this characteristic of substances like graphite with direction-dependent properties.

ANSWER: **anisotropy**

10. Sources on this event include a journal by Joseph Hargrave and Alexander Begg, as well as the "Eight Letters" to the "Honorable Joseph Howe in Reply to an Official Pamphlet," in which Howe is accused of being its chief instigator. A nationalist group led by the doctor John Christian Schultz created the impetus for this event, despite the attempts of Adams Archibald to put forth a conciliatory plan. One of that group's members, Thomas Scott, was executed on trumped-up treason charges and violence continued until a supposed peace expedition under Garnet Wolseley was dispatched to Fort Garry. Also sparked by appointment of William McDougall as governor of Rupert's Land, its leader would reprise his role fifteen years later in the Northwest Rebellion. For 10 points, name this rebellion led by Louis Riel and named for a region in Manitoba.

ANSWER: **Red River** Rebellion (or **Red River** Resistance)

11. Part four of this work asserts that a society based on production is “only productive, not creative.” In the section “The Deicides” it criticizes Hegel for having rationalized to the point of being irrational. This work also chastised Marx for his argument that history has a definitive end and lamented the rise of bureaucrats and doctrinaires in a chapter entitled “State Terrorism and Irrational Terror.” This work ultimately rejects the “adolescent furies” represented by such thinkers as De Sade and proposes a moderate approach to opposing suppression. Opening with the aphorism “Man is the only creature who refuses to be what he is,” this work warned against the titular individual’s potential to descend into nihilism. Published nine years after its author’s *The Myth of Sisyphus*,for 10 points, identify this philosophical work subtitled “An Essay on Man in Revolt,” a book by Albert Camus.

ANSWER: ***The Rebel***

12. The Smirnov metrization theorem asserts that a locally metrizable space must be a paracompact one of these in order to be metrizable. The real numbers in a topology with basis open intervals and open intervals minus the set of inverse positive integers is not regular, but it is this. Every simply ordered set is one of these spaces in the ordered topology. A space X is this if and only if the diagonal is closed in the product space X times X. In a space of this type, a sequence of points converges to at most one point. This class of topological space has the property that any two points have disjoint neighborhoods and thus possess finite subsets that are closed by the T2 separation axiom. For 10 points, what is this type of topological space, named for a mathematician also known for a concept of dimension often used for fractals?

ANSWER: **Hausdorff** space [or **T2** space before mentioned]

13. In one story by this author, a beautiful, sought-after woman baffles a small town by marrying a one-legged man. In another story, a boy soprano goes to see a fortune teller and is forced to grow up, while in another work the servant Bruce informs Clarisse that Alcee is attending the title event, where he meets the ravishing Calixta. This author of “Juanita”, and “A Vocation and a Voice” wrote a novel in which a widowed planter convinces David Hosmer to try to remarry his ex-wife Fanny. This author also wrote about a woman who chooses to move to the “pigeon house” and is comforted by Doctor Mandelet about her love for Robert Lebrun before drowning herself. For 10 points, name this author of At Fault and “A Ball at Acadie,” who wrote about Edna Pontellier in *The Awakening*.

ANSWER: Kate **Chopin**

14. It was the first of a series painted for a sodality of which the artist’s future father-in-law, Marco Episcopi, was Grand Guardian, though it currently rests in an art museum opposite Titian’s *Assumption*.  Despite the large crowd, there is only one woman – on the left side in an orange dress holding an infant.  There are two armored figures among the onlookers, though the titular figure, supposedly a knight of Provence according to this painting’s source material, lies naked at the bottom.  Next to his head are a few broken axes and hammers, and also notable are the numerous turbaned figures in the crowd, including the assumed executioner in the center.  Most noticeable are the halo, pink robe, and orange cape of the upside down figure descending from the sky at the top.  For 10 points, name this painting of St. Mark rescuing one of his devoted followers, an early masterpiece of Tintoretto’s.

ANSWER: *The* ***Miracle of the Slave*** or *The* ***Miracle of St. Mark Freeing the Slave*** (accept equivalents that don’t have the word miracle, e.g. ***St. Mark Freeing the Slave***, before St. Mark is mentioned)

15. This man's attempt to break the blockade of Long Island Sound was turned back on the “Inglorious First of June.” Later, he was sent as a prisoner to Bermuda after running aground on a sandbar. His most successful action involved the redeployment of the captured ketch *Mastico* at Edward Preble's direction. This man who seized the frigate *Macedonian* and brought it to Newport served as a second in the “triple duel” of Richard Somers. He died of a gunshot wound in his own duel at Bladensburg with James Barron, the captain of the *Chesapeake* whose case he had decided while serving on a court-martial. He led a raid to burn the captured USS *Philadelphia* in the harbor of Tripoli. For 10 points, name this U.S. naval officer, who gave the toast “our country, right or wrong.”

ANSWER: Stephen **Decatur**

16. One series of works by this composer features such titles as “Versatility” and “The New Classicism,” those *Satires* were written four years before this composer’s *Folksongs for Chorus*. A series of trills on one of the title instruments ends this composer’s *Fantasy for Violin and Piano*.This man used a series of ascending fourths and descending minor seconds to symbolize the severity of the title figure in his *Ode to Napoleon*, while his final works, including *A Survivor from Warsaw* and *Kol Nidre*, reflected his Jewish heritage. This man, who composed a huge cantata for 140 players based on poems by Jens Peter Jacobsen, the *Gurrelieder*, discussed his ideas in such volumes as *Theory of Harmony* and used “Sprechstimme” in his song cycle about a clown. For 10 points, identify this creator of the 12 tone technique, the composer of *Transfigured Night* and *Pierrot Lunaire*.

ANSWER: Arnold **Schoenberg**

17. According to one legend, a statue of this figure makes a sound like a broken harp string when it is struck by the first rays of the sun. He had a brother named Emathion who was killed by Heracles. After his death, this figure’s ashes from his funeral pyre were transformed into two flocks of birds which fought each other. He attacked Nestor when that king’s chariot was stopped by the arrows of Paris, and ended up killing his son Antilochus. After killing Antilochus, this man managed to wound Achilles in the arm before being killed by him. His death is often given as the reason for the dew, as it caused by the ceaseless tears of his mother. This son of Eos and Tithonus conquered Egypt en route to bringing a huge army to reinforce Troy. For 10 points, name this king of Ethiopia who fought against the Greeks during the Trojan War.

ANSWER: **Memnon**

18. They are employed in vector coupling for the three dimensional rotation group SO(3) where they have a high degree of symmetry since SO(3) is a simply reducible group. In representation theory, they can be defined as the elements of the matrix reducing the direct product of two irreducible representations of compact Lie groups. Generalizations include Racah coefficients or Wigner 6j and 9j symbols, for cases in which the integral product of greater than three spherical harmonics are desired. They can be computed by expressing a product of two spherical harmonics as a sum of individual spherical harmonics. For 10 points, name these numbers that are commonly employed to obtain the coupling amplitude between uncoupled and coupled representations of angular momenta in quantum mechanics.

ANSWER: **Clebsch-Gordan** coefficients [or **Wigner 3j** coefficient]

19. The “Third Episode” of this work is written as a series of exchanges between a young girl and an advice columnist for *Feminine World* magazine. Its minor characters include the adulterous Dr. Nastini as well as Captain Gnorostiaga, whose police report detailing a servant’s murder of her boyfriend “Pancho” in her mistress’ bed takes up much of the “Twelfth Episode.” The “First Episode” opens with a quote from the lyricist Homero Manzi and introduces the protagonist’s lost love Nene via a letter. Like its author’s previous novel, its narrative makes frequent references to the American cinema to illustrate events in Buenos Aires Province, this time with a focus on the tubercular Juan Carlos. First published in Spanish with a title that translates as *Little Painted Mouths*, for 10 points, identify this novel,partially named for Argentina’s national dance, a work by Manuel Puig.

ANSWER: ***Heartbreak Tango*** or ***Boquitas Pintadas***

20. One member of this dynasty had a son named Grifo who rebelled against the infant Tassilo III. Another suppressed the rebellion of the Stellinga and regulated ecclesiastical services with the *Admonitio Generalis*. One ruler of this line commissioned the Swan Sequence and another commissioned the *Historia Langobardorum* from Paul the Deacon. Another king standardized succession rules with his *Ordinatio imperii*. This line created and maintained buffer zones known as the Neustrian and Spanish Marches, and two kings of this dynasty strengthened their alliance with the Oath of Strasbourg after defeating their brother at the battle of Fontenoy. Its lands were divided between Charles the Bald, Lothair I, and Louis the German with the Treaty of Verdun. For 10 points, name these successors of the Merovingians whose rulers include Charlemagne.

ANSWER: **Carolingian**s

21. Miller, Dykes, and Polesky developed a cheaper “salting-out” alternative to this process, while Chelex and FTA paper are more recent alternatives. Impurities generated by this process can lead to artificially inflated 260/280 ratios in spectrophotometric quantification. In cesium chloride purification protocols, this step is performed iteratively until the sample is no longer pink. The reagent used for this process may be used at a pH of 4.7 or 7.9, depending on whether the sample contains RNA or DNA, and it is usually followed by ethanol or isopropanol precipitation. For 10 points, name this technique used to purify nucleic acids by transferring contaminating proteins and lipids into an organic phase consisting in part of hydroxylated benzene.

ANSWER: **phenol-chloroform extraction** [prompt on **extraction** or **phenol extraction**, accept **TRIzol** extraction or **PCIA** extraction or **phenol-chloroform-isoamyl** alcohol extraction, accept **organic extraction** before the word “organic”]

22. This work, along with Ovid’s *Ibis*, was notably translated by Thomas Underdowne. In *Twelfth Night*, Duke Orsino makes a reference to this work’s character of Thyamis, who locks a central character in a cave and kills a woman he mistakes for her when he is attacked by a band of thieves. The central characters of this novel survive being subjected to a device that burns all who are unchaste. In this work’s tenth and final book, the ruler Hydaspes receives a gigantic wrestler and a giraffe from ambassadors, both of whom are tamed by the male lead. This novel opens in medias res, as a band of robbers discover a scene of carnage and see Chariclea nursing the wounded Theagenes aboard a ship. For 10 points, name this only novel of Heliodorus, a third century work set in a title African country.

ANSWER: ***Aethiopica*** [or *The* ***Ethipian Story***; or *An* ***Ethiopian Romance***]

23. This legislation was the target of the Morse-Everett Amendment, which proposed to delay its effects for a period of six months. The passage of this law was foreshadowed by the court case *In Re Tiburcio Parrott* and supported in an influential speech by governor John Bigler. Also supported by Dennis Kearney and his Workingman's Party, this legislation was extended by the Scott Act, before finally being repealed by the Magnuson Act. Despite being loudly opposed by senator George Frisbie Hoar, it resulted in numerous incidents at Angel Island after it was renewed by the Geary Act in 1892. For 10 points, identify this act which aimed to prevent immigration of so-called "coolies", a group of people from the namesake nation, to the U.S.

ANSWER: **Chinese Exclusion** Act of 1882

**VCU Bonuses**:

1. This philosophical concept is often discussed alongside *chih*, or the native substance a man is made of,for 10 points each:

[10] Identify this ethical term that centers on the ideal standard of moral and religious conduct; it defines a code that is carried out vis-à-vis the observation of traditional rites.

ANSWER: ***li***

[10] This work posited the centrality of the concept of *li* to the creation of the “ideal gentleman” and the triumph of the Way. It is a collection of sayings that was compiled in 479 BCE, after the passing of the sage Confucius.

ANSWER: ***The Analects*** or ***Lun Yu***

[10] In *The Analects*, Confucius notes that although *li* provides the structure for social interaction, it is only by cultivating this important principle of benevolence, which is summarized in the statement “Do not do to others what you would not like them to do to you,” that persons are able to lead a virtuous life.

ANSWER: ***jen***

2. A double-action one of these was developed in the 19th century by Sebastien Erard and it is responsible for signaling the hour of midnight in Saint-Saens’ *Danse Macabre*, for 10 points each:

[10] Identify this stringed instrument that can produce a *glissando* effect and was notably played by Carlos Salzedo.

ANSWER: the **harp**

[10] This Richard Strauss tone poem, which is based on a work by Alexander Ritter, uses harps and a tam-tam to depict a sick man’s struggle before he succumbs to illness and is subsequently delivered from the world.

ANSWER: ***Death and Transfiguration*** or ***Tod und Verklaerung***

[10] This Russian composer wrote an important Concerto for harp and orchestra, but may be better known for his 3 symphonies and the ballet, *The Red Poppy*.

ANSWER: Reinhold **Gliere**

3. The setup for this procedure often involves a column packed with Raschig rings or steel wool being connected to a round-bottom flask, which sits atop a heat source. For 10 points:

[10] Name this lab technique, which separates mixed chemicals on the basis of their boiling points.

ANSWER: **fractional distillation**

[10] In lieu of packing a straight column to use as a condensing column, one may use one of these columns, which have downward-facing glass indentations on their inner wall to increase their surface area.

ANSWER: **Vigreux** column

[10] The increase in surface area created by packing material or the plates and crowns of a Vigreux column serves to increase the number of these entities, each of which corresponds to one vaporization/condensation cycle. Efficiencies of fractionating columns are measured in terms of height equivalents to these.

ANSWER: **theoretical plates** [accept **theoretical stages**]

4. It features a chorus of Mr. and Mrs. A, who represent the viewpoint of the suburban everyman, for 10 points each:

[10] Identify this work about “scholar and man of action” Michael Ransom who accedes to his mother’s wishes and leads a doomed mountaineering expedition.

ANSWER: ***The Ascent of F6***

[10] *The Ascent of F6* was written by this pair of writers: one, a poet whose works include “In Praise of Limestone” and “Spain 1937,” while the other wrote *Mr. Norris Changes Trains* and *The Berlin Stories*. Name both for the 10 points.

ANSWER: Wynstan Hugh **Auden** and Christopher William Bradshaw **Isherwood**

[10] Auden and Isherwood also wrote this play subtitled, *or Where is Francis?* It focuses on an English villager named Alan Norman’s quest to find a missing son and heir to an estate in Pressan Ambo.

ANSWER: ***The Dog Beneath the Skin***

5. This end for this party in presidential elections was spelled by the failures of Darlington Hoopes. For 10 points each:

[10] Name this political party which boasted Victor Berger and Meyer London as its only two members elected to Congress.

ANSWER: **Socialist** Party

[10] In addition to authoring "What's Wrong with New York: A National Problem," this pacifist showed he did not know when to quit, by running as Socialist Party Candidate for President six times, the final time in 1948.

ANSWER: Norman **Thomas**

[10] Morris Hillquit derided the Socialist movement in America by using this phrase, a reference to Socialists boasting of the excellence of the namesake public service in Milwaukee.

ANSWER: **Sewer Socialism** ("sewer socialists")

6. This phenomenon occurs when the magnetic moment that arises from the motion of an orbiting electron is placed in a magnetic field and experiences a torque. For 10 points each:[10] Name this type of motion that arises when the torque produced by the magnetic field exerts a perpendicular change in the angular momentum and causes the magnetic moment to rotate in the direction of the magnetic field.ANSWER: **Larmor precession** [prompt on “precession”][10] The angular frequency of the precession is given by the magnetic field times this other value, denoted gamma, which is the ratio of the magnetic dipole moment to the mechanical angular momentum of a system. ANSWER: **gyromagnetic** ratio[10] Equal to e hbar over 2 m c, it is the intrinsic magnetic moment of a ground state electron. The Landé g-factor multiplies this and the total angular momentum to give an electron’s magnetic moment.ANSWER: **Bohr magneton**

7. The Olt river divided its "greater" and "Lesser" sections, and Stephen the Great declared the border between it and Moldavia to be at the Milcov River. For 10 points each:

[10] Name this region of modern day Romania, traditionally held to be between the Danube River and the Carpathian Mountains.

ANSWER: **Wallachia**

[10] This former capital of the Wallachian voivodship is on the right bank of the Ialomita River in the Dambovita County of modern Romania. It was also the site of execution of Nicolae Ceausescu and his wife in 1989.

ANSWER: **Targoviste**

[10] Targoviste underwent a sharp decline after Constantin Brancoveanu moved the capital to this city, on the banks of the Dambovita River. and the Memorial of Rebirth can be found in this city as a monument to the dead of the 1989 Revolution.

ANSWER: **Bucharest**

8. The first study of this place was subtitled “A Study in Modern American Culture” and it was followed by a book which studied it “in transition” during the Great Depression. For 10 points each:

[10] Name this town which was revealed to be Muncie, Indiana after serving as the object of a pair of landmark sociological studies.

ANSWER: ***Middletown***

[10] The Middletown studies were conducted by a husband and wife team with this surname.

ANSWER: **Lynd**

[10] The Lynds’ study of Middletown was followed up a team led by this University of Virginia sociologist, who wrote *Middletown Families,* and *All Faithful People*.

ANSWER: Theodore **Caplow**

9. One member was for a time painter to Mehmed II, of whom he did several portraits. For 10 points each:

[10] Name this family of artists whose most famous member painted the *San Zaccaria Altarpiece* as well as the vibrant 1514 *Feast of the Gods*

ANSWER: **Bellini** Family

[10] The patriarch of the Bellinis was this artist of the *Madonna dell’Umilta* who trained his future son-in-law Andrea Mantegna in Padua.

ANSWER: **Jacopo** Bellini

[10] William Beckford was once an owner of this early Giovanni Bellini painting, the first of his series of Venetian landscapes. It depicts Christ and some of his disciples praying on the Mount of Olives.

ANSWER: *The* ***Agony in the Garden***

10. Framed by a series of letters to the main character’s daughter in the US, it features such supporting characters as the vagrant Mr. Vercueil, for 10 points each:

[10] Identify this 1990 novel that tells the story of Elizabeth Curren, a dying Classics Professor, who is forced to confront the horrors of Apartheid.

ANSWER: ***The Age of Iron***

[10] *The Age of Iron* was written by this author of *The Master of Petersburg* and *Disgrace*.

ANSWER: John Maxwell **Coetzee**

[10] This Coetzee book centers on the newly disabled protagonist’s relationship with his Croatian nurse’s son, Drago. It also features an appearance by a character from a previous novel named Elizabeth Costello.

ANSWER: ***Slow Man***

11. It proceeded shortly after one group set up camp at Sepphoris. For 10 points each:

[10] Name this July 1187 battle in which the forces of Guy of Lusignan were completely annihilated.

ANSWER: Battle of **Hattin**

[10] The victor at Hattin was this Muslim sultan, who founded the Ayyubid dynasty.

ANSWER: **Saladin** (or **Salah al-Din**)

[10] Saladin signed this treaty with Richard the Lionheart acknowledging that Jerusalem would remain under Muslim control but be open to Christian pilgrims.

ANSWER: Treaty of **Ramla**

12. In this work James Marvyn returns after being reported dead in a shipwreck, for 10 points each:

[10] Identify this 1859 novel centering on Mary Scudder whose hand in marriage is sought by the title figure, the orthodox Samuel Hopkins.

ANSWER: ***The Minister’s Wooing***

[10] *The Minister’s Wooing* was written by this author of *Dred* and *Uncle Tom’s Cabin*.

ANSWER: Harriet Beecher **Stowe**

[10] This 1869 work, whose title actually refers to South Natick, Massachusetts, takes place shortly after the Revolution and features such characters as the spiritual Horace Holyoke, and the comic commentator Sam Lawson.

ANSWER: ***Oldtown Folks***

13. A 2008 reanalysis of samples from this experiment by the Bara group showed that one volcanic spark apparatus may have produced as much as four times its original believed output. For 10 points each:

[10] Name this 1953 experiment in which a mixture of gases thought to represent the primordial atmosphere was electrified, producing amino acids and other biomolecules.

ANSWER: **Miller-Urey**Experiment

[10] Bar-Nun and Hartman's studies showed that the UV version of this effect could cause water vapor to react with carbon monoxide to create organic acids.

ANSWER: **photolysis**

[10] One minor species found in the Miller-Urey experiment was this amino acid, which participates in an electron shuttle with malate in glycolysis. Along with serine and histidine, it forms the catalytic triad of trypsin.

ANSWER: **aspartic** acid [accept **aspartate**]

14. Name the following more or less real people or events that figure in opera plots, for 10 points each:

[10] The action of *Tosca* is briefly interrupted by the announcement of Napoleon's victory at this 1800 battle, at which he defeated Melas and the Austrians, gained control of Italy south of the Po, and precipitated the end of the Second Coalition

ANSWER: **Marengo**

[10] Verdi's *Simon Boccanegra* deals with the coronation in 1339 of the first Doge of this Ligurian city, which is not Venice but which became a republic after Andrea Doria's rule in the 1500s.

Answer: **Genoa**

[10] Verdi's *Attila* features a baritone role for this so-called "last of the Romans," a fifth-century general who allied himself with the Huns to defeat his rival Boniface, but later formed the coalition that defeated them at Chalons.

Answer: **Aetius** or **Ezio**

15.These include Nebiru the brilliant star, Gibil who keeps weapons sharp, Zulummar who no other god can match in strength, and four different ones under the heading Shuzu. For 10 points each:

[10] Name these aspects of a Babylonian deity which are listed in the *Enuma Elish*.

ANSWER: **fifty names of Marduk** [prompt on incomplete answer]

[10] In addition to Kingu, Marduk also kills this primeval mother who takes the form of a dragon.

ANSWER: **Tiamat**

[10] After Marduk kills Qingu he takes this artifact which Qingu had used as a breastplate, legitimizing his rule over the gods, but eventually gives this object to Anu as a gift.

ANSWER: **tablet of destinies** [accept **tablets of fate**, **tablets of destiny**, **tablet of fate** or or **dup shimati**

16. Its author’s first work in nearly twenty years, this poem begins with the lines: “Who’s weeping there? Or could it simply be/ The Wind that weeps, so very close to me,” for 10 points each:

[10] Identify this 1917 work, a dramatic monologue written in Alexandrine couplets about a maiden’s recognition of her burgeoning adolescence and the ensuing battle between the body and the spirit.

ANSWER: **“La Jeune Parque”**

[10] *La Jeune Parque* was written by this French author whose other works include a series of sketches collected as *Monsieur Geste* as well as the poem “The Fragments of Narcissus” and the collection

ANSWER: Paul **Valery**

[10] In this Valery poem set at the title location on the Mediterranean Coast, the speaker reflects on the immortality of ideas in light of the inevitable decay of the human body.

ANSWER: **“Le Cimitiere Marin”** or **“The Graveyard by the Sea”**

16. They relate the stress-energy tensor to the metric tensor and its corresponding Ricci tensor. For 10 points each:[10] Name this set of 16 coupled hyperbolic-elliptic nonlinear partial differential equations that are used to model the gravitational effects generated by a mass in general relativity.ANSWER: **Einstein** equations [or “Einstein field equations”][10] This solution to the Einstein field equations coupled to electromagnetism describes the exterior gravitational and electromagnetic fields that are associated with a charged, non-rotating spherically symmetric object.ANSWER: **R**eissner-**N**ordström metric [or **R**eissner-**N**ordström black hole][10] An extremal RN black hole, with the smallest mass compatible with its charge, has zero temperature and does not emit this radiation, which can be thought of as arising from particle-antiparticle pair creation near the horizon.ANSWER: **Hawking** radiation

17. They believe that women cannot achieve liberation until they are first reborn as a man and that all of the Agamas were lost during the great famine of 350 B.C.E., for 10 points each:

[10] Identify this religious group whose major communities include Parwar in Madhya Pradesh, a sect of “sky clad” worshippers.

ANSWER: **Digambara**(s)

[10] In keeping with their name, Digamabara images of these figures are depicted with no clothes. According to Jain belief each age produces 24 of these “ford makers” whose ranks include Parsvanatha and Mahavira.

ANSWER: **Tirthankara** or **Jina**

[10] This is the Sanskrit word meaning “ether;” it identifies the primal source that nourishes and creates all other elements and is associated with space in the Jain conception of the cosmos.

ANSWER: **akasha** or **akash** or **akasa**

18. Their activity can be mimicked by vitamin E and helminthosporol, and unlike auxins, these compounds trigger elongation without cell wall acidification. For 10 points each:

[10] Name this class of plant hormones that were first discovered due to their ability to produce foolish seedling disease in rice.

ANSWER: **gibberellins** [or **gibberellic acid** or **GA**]

[10] Gibberellin triggers seed germination by stimulating cells of the aleurone layer to secrete alpha-amylase into this starch-rich region of the seed, which surrounds the embryo.

ANSWER: **endosperm**

[10] This hormone, whose synthetic pathway begins with allene oxide synthase, participates in pathogen-defense and wound-healing responses. With ethylene, it is required for resistance to necrotrophic pathogens, and it is similar in structure to prostaglandins.

ANSWER: **jasmonic acid** [accept **JA** or **jasmonate**]

19. The title runaway contessa helps Dick Warrington capture the pirate Bras Prique in 18th century New Orleans in this man’s operetta *Naughty Marietta*. For 10 points each:

[10] Name this composer known for light operettas like *The Fortune Teller* and *Sweethearts*.

ANSWER: Victor August **Herbert**

[10] One of Herbert’s greatest successes was this nursery rhyme themed operetta, in which the machinations of their uncle Barnaby lead to Jane and Alan’s exile in the title place.

ANSWER: ***Babes in Toyland***

[10] In this Herbert operetta, Con Kidder and Kid Connor try to help Gretchen elope with Captain Doris van Damm after incurring a debt to the owner of the title inn.

ANSWER: *The* ***Red Mill***

20. Plutarch claims that the kings Polydorus and Theopompus inserted a clause into this document saying it shall be lawful for the leaders to dissolve if the people are crooked. For 10 points each:

[10] Name this questionably-historical document which laid down the laws of Sparta after Lycurgus obtained its instructions from an oracle.

ANSWER: Great **Rhetra**

[10] The Rhetra may date to roughly the first of these wars in 740 or 720, which saw the expansion of Spartan power into the western Peloponnese and the enslavement of the helots.

ANSWER: (First) **Messenian** War

[10] Lycurgus also may have created this Spartan political office. Five of these officials were elected annually to mediate the powers of the dual kings, and they repeatedly declared war on the helots.

ANSWER: **ephor**s (ephorate)

The speaker of this work notes that “Law stands mute in the midst of arms” and suggests that Publius Clodius Pulcher had actually set a trap for its namesake. For 10 points each:

[10] Name this speech which was written to acquit its title politician of the murder of Clodius.

ANSWER: ***Pro Milone***

[10] *Pro Milone* was written by this Roman orator. He suppressed Catiline’s rebellionas consul and who was proscribed and killed after opposing Mark Antony.

ANSWER: Marcus Tullius **Cicero**

[10] This friend of Cicero is usually considered the first Latin biographer. He compared Romans to foreigners in his *De viris illustribus*, which includes a noteworthy biography of Atticus.

ANSWER: Cornelius **Nepos**