**ACF Nationals 2010**

**Packet by Minnesota A and Chicago B**

1. Nine years after it was quashed, affiliates of its fomenters captured Hua during the Eight Trigrams Uprising. Several years before it, Wang Lun led a precursor to this revolt. Internal strife during it stemmed from the massive corruption of the Qianlong Emperor’s favorite, Heshen, whose ouster at the hands of the Jiaqing Emperor helped put this rebellion down. The agitators of this uprising believed in the coming of the Maitreya and led a secret organization. It was centered in mountains between Hubei, Shaanxi, and Sichuan provinces. For 10 points, name this uprising against the Qing Dynasty, a rebellion that occurred from 1796 to 1804 and is named for a Buddhist society.

ANSWER: the Second **White Lotus** Rebellion [or Chuān chŭ **bái lián jiào** qǐ yì; or **Pai-lien chiao**]

2. A speaker in one of this author’s works predicts that “You shall be true to them who are false to you.” In addition to “The Indifferent,” this author penned a work that compares the bravery of passion to that of the nine worthies in “The Undertaking.” This author responded to Marlowe’s *Passionate Shepherd to His Love* with “The Bait,” and celebrated “full nakedness” in an Elegy subtitled “To His Mistress Going to Bed.” He wrote a set of five *Satires*, as well astwo poems on the death of his patron, Robert Drury’s daughter: the *Anniversaries*, one of which includes the oft anthologized “An Anatomy of the World.” A 1633 collection by this man, the *Songs and Sonnets*, included a work that compared a pair of souls to “stiff twin compasses.” For 10 points, name this author of the line “Death, be not proud,” a Metaphysical poet whose works include the *Holy Sonnets* and “A Valediction: Forbidding Mourning.”

ANSWER: John **Donne**

3. It is an example of linear response theory, analogous to Fourier’s law of heat transport, and thus there is a Kubo formula relating the proportionality constant in it to a two-point correlation function of electric currents. Diodes are prominent examples of materials that do not satisfy it, because they permit a flow of current in only one direction. This law can be derived from the Lorentz force with the assumption that there is a drag on charge carriers that is proportional to their velocity. Kirchoff formulated a continuum version of it equating current density to electric field times conductivity of a material. Its most familiar form states that the current through a conductor is proportional to the voltage across it and inversely proportional to resistance. For 10 points, name this law that shares its name with the SI unit of electrical impedance.

ANSWER: **Ohm’s** law

4. In this polity, the Gedong Kirtya museum houses an important collection of Lontar manuscripts which were used to record its history. The Klungkung monarchs, who once ruled over this polity, were weakened in a 1908 conflict that spared the Kertha Gosa pavilion in its city of Semarapura. Galungan is a 10-day festival analogous to Dasara that is celebrated by the majority Hindu population of this island. The highest point on this island is the active volcano Mount Agung, and the Lombok strait separates this island from an eastern neighbor. The difference in the Fauna between Lombok and this island was observed by Alfred Wallace, and its seaside city of Kuta was the target of two bombings in 2002 and 2005. For 10 points, identify this member of the Lesser Sunda Islands which lies to the east of Java.   
ANSWER: **Bali**[prompt early on Indonesia]

5. One character in this work is knocked out by a barrage of apples thrown by the protagonist. Its protagonist pretends to be “the Destroyer” while sitting among a ring of statues and, while there, listens to a metaphysical theory laid out by the priest Ork. Near the beginning of this novel, the main character is wounded by a bull after passing through a pool of fire-snakes and becoming stuck in a tree. At its end, its protagonist tells a crowd of animals that he’s “had an accident” and adds “*So may you all*.” The nature of the songs sung by a blind harpist called “the Shaper” is explained to its protagonist by the omniscient, philosophizing Dragon; that protagonist spends most of this novel launching attacks against Hart. For 10 points, identify this novel whose titular protagonist has his arm ripped off by an unnamed Geat hero, a retelling of *Beowulf* written by John Gardner.

ANSWER: ***Grendel***

6. Only one page survives of a work by this man subtitled “A Pedagogic Overture” and written to accompany a planned ballet co-written by Percy Wyndham Lewis. This composer of *Dr. Syntax* scored the film *The First of the Few*, from which he extracted his *Spitfire Prelude and Fugue*.His second and last opera was billed as an “Extravaganza in One Act” and was composed to a libretto written by Paul Dehn based on a Chekhov play. This composer of the coronation marches, *Orb and Sceptre* and *Crown Imperial* wrote the operas *The Bear* and *Troilus and Cressida*. He gained early fame for his orchestral setting of Edith Sitwell’s *Façade* poems, but is best-known for setting texts from *Psalms*, *Revelation*, and *Daniel* to music. For 10 points, identify this twentieth-century British composer of the oratorio *Belshazzar’s Feast*.

ANSWER: William Turner **Walton**

7. This work claims that primitive man’s trouble planning a board is the origin of “regulating lines,” to which its author advocates a return. It discusses disastrous human attempts at bird-like flight before the development of the airfoil, before laying out several “fundamental axioms” amidst repeated claims that we must face either the title discipline “or revolution.” It also discusses the “problem of perfection” before turning to examples of clean and modern aesthetics, like automobiles and ocean liners, in its section “Eyes That Do Not See.” This book was made up of articles published in the magazine *L’Esprit Nouveau* and echoed its author’s “five points,” as exemplified by his Villa Savoye. For 10 points, name this book, which proposed that a “house is a machine for living in,” a tract by Le Corbusier.

ANSWER: ***Toward****s* ***a New Architecture*** [or ***Toward****s* ***an Architecture***; or ***Vers une architecture***]

8. A late king of this empire was defeated at the Battle of the Ulai River, shortly after which its king Khumma-Khaldash was captured. This kingdom apparently achieved great power under Shutruk-Nakhkhunte, who killed king Zababa-shuma-iddina and replaced him with his son Kutir-Nakhkhunte. A prominent architectural remnant of this kingdom is the Chogha Zanbil temple at its site of Dur Untash. Its early dynasties like the Avan and the Simash ruled from its capital at Anshan, though later kings of this empire frequently occupied Susa, up until it was brutally sacked by Ashurbanipal in 640 BC, reducing it to fragments. For 10 points, name this ancient kingdom to the east of Akkadia and Sumeria, which is represented by modern-day southwestern Iran.

ANSWER: **Elam** (or the **Elamite** Kingdom or **Haltamti**)

9. The protagonist of this story is disgusted when he learns that people from a bigger town call a “long bench” a “straight bench”, and also refuses to say the words “ringworm”, “bright”, or “light”. Its protagonist harasses a nun from the Convent of Quiet Self-Improvement after losing a fight to Whiskers Wang; later, he shouts “Sleep with me!” at the maid Amah Wu, causing him to be kicked out of the Chao household. At the end of this story, its title character is too preoccupied drawing a perfect circle to realize he’s being executed. Its title character also hates on the “Imitation Foreign Devil” and attempts to join the Xinhai revolution. For 10 points, identify this story about an idler from Weichuang who rationalizes defeats as “spiritual victories”, a work of Lu Xun.

ANSWER: “The **True Story of Ah Q**”

10. FLG 29.1 is an immortalized line of precursors of this type of cell. These cells lie in a hollow cavity called the Howship's lacuna and have a characteristic homogenous cytoplasm with a foamy appearance. They express the cysteine protease cathepsin K, which catabolizes elastin, collagen, and gelatin. They are regulated by parathyroid hormone, which activates them, and calcitonin and OPG, which repress them. They are also stimulated by interleukin-6, a protein that is overexpressed in osteoporosis. Their ruffled border contains a proton pump that plays a key role in these cells’ dissolution of hydroxyapatite. For 10 points, what is this type of cell that is responsible for releasing calcium from bones into the blood, a process known as bone resorption?

ANSWER: **osteoclasts**

11. It argues that much confusion originated with the idea that some supersensible property exists and ends with a chapter celebrating the importance of “personal affection” entitled “The Ideal.” This work, which stressed the importance of historical context in predicting what results would follow certain types of action, dismissed Herbert Spencer’s ideas by declaring that his Darwinian outlook degenerated into “hedonism.” In another section it posited that an evaluative term cannot be entirely defined by the way it is applied, a demonstration known as its author’s “open question argument.” This work argued that previous thinkers, like J.S. Mill, committed the “naturalistic fallacy” and it posited intuition as the solution to identifying what is bad and what is good. Published in 1903, it built on the ideas of its author’s mentor Henry Sidgwick, for 10 points, identify this work by G.E. Moore.

ANSWER: ***Principia Ethica***

12. In the proto-Indo-European dialogue “The King and the God”, the title king is told to pray to this figure in order to receive a child. The Sindhi festival of Cheti Chand is held in honor of the birth of Jhulelal, a reincarnation of this deity. This guardian of the west shares his mount with the goddess Ganga and is generally depicted as part-alligator or part-dolphin. This figure is known to wield a snake as a lasso, and, along with his brother Mitra, he is considered a god of *rta* and oaths. In the *Ramayana*, Rama angrily attempts to destroy the oceans when this god fails to respond to his prayers after three days. For 10 points, identify this chief of the Adityas who watches over the world with his thousand eyes, a Vedic deity of the sea.

ANSWER: **Varuna** [or **Waruna**; prompt on **Jhulelal** before mentioned]

13. The measurements for it use a nondispersive infrared gas analyzer. Short-term measurements preceding it were taken in Pasadena and Big Sur, but this curve gives continuous observations since 1958. It shows a dip each year in summer, due to drawdown by photosynthesis, with annual variation of about 5 parts per million by volume. Observations for it are taken at the Mauna Loa Observatory in Hawaii. Initially it showed a concentration of about 315 ppmv, but the newest points on the curve are above 390 ppmv. The main cause of this rising trend is the burning of fossil fuels. It is discussed in An Inconvenient Truth as evidence for global warming. For 10 points, what is this graph, named for a scientist from the Scripps Institution of Oceanography, that shows atmospheric concentration of carbon dioxide?

ANSWER: the **Keeling** curve [prompt on “CO2 concentration” or similar]

14. In Lionel Gossman’s essay about this group he confusingly terms them the “Unwilling Moderns.” An early member of this group imitated an earlier Ingres painting with his *The Entry of Rudolf of Hapsburg into Basel*, and typified this group’s style with his diptych of two contrasting women *Shulamit and Maria*. Another member executed a series of frescoes showing Dante, Ariosto, and Tasso as part of their communal decoration of the Villa Massimo. By then they had already taken up quarters at the monastery of San Isidro and their founder, in Assisi’s Portiuncula Chapel, painted his major fresco on the *Rose Miracle of St. Francis*. As seen in their founder’s *The Triumph of Religion in the Arts*, they sought to renew the style of the Renaissance through the Christian faith. For 10 points, name this group of German artists that included Peter Cornelius, Franz Pforr, and Johann Overbeck.

ANSWER: **Nazarene**s (or **Nazarene**r or **Brotherhood of St. Luke** or **Lukesbund**)

15. This event marked the end of the political career of the founder of Studley Gardens Royal Park, John Aislabie. A jesting parliamentary resolution in the wake of it called for a certain group to be “tied up in a sack of snakes and tipped into the Thames.” A parliamentary act preceding it created the Royal Exchange Assurance Corporation. This event coincided with a scandal in France and centered on an entity that was given exclusive rights to supply Spanish colonies with slaves in the *Asiento* of the Treaty of Utrecht. The shares of that company were used as equity for buying Britain’s national debt. For 10 points, name this event surrounding a Robert Harley-founded joint-stock company, speculation in which drove an 1720 economic bubble.

ANSWER: the **South Sea** Bubble

16. One of this man’s books opens with a discussion of *Price Waterhouse vs. Hopkins* and outlines the ways that identity features in norms and utility. That work, *Identity Economics*, was co-written with Rachel Kranton. He also argued that a “marriage shock” contributed to increased rates of crime and drug use in the United States in his, “Men Without Children.” In his 2007 presidential address to the AEA, published as “The Missing Motivation in Macroeconomics,” he suggested that assuming decision-makers have “natural norms” would eliminate five “neutralities,” a theme he also expounded on in a book co-written with Robert Shiller. In his most famous work, he argued that concerns over quality uncertainty would result in prices that result in “the bad driving out the good” and cause market failure. For 10 points, identify this economist, who illustrated asymmetric information through used cars in his 1970 paper “The Market for Lemons.”

ANSWER:George **Akerlof** accept ***Identity Economics*** before “that work”

17. Proteins such as Swi5 and tramtrack possess examples of these which have a third beta strand, and the FYVE/PHD is a class of these which are named for their resemblance to those found in homeodomains. A related structure is found in the retroviral gag nucleoprotein and contains a CPXCG structure, which forms the "knuckle" variant of these structures. The C4 type is especially prevalent in steroid hormone receptors. These structures were first identified in the TFIIIA transcription factor, and the most common types of these structures contain two cysteine and two histidine residues, whose side chains coordinate this domain’s namesake element. For 10 points, identify these DNA binding domains which contain a transition metal atom.ANSWER: **zinc finger** domains

18. The memoir *The Forger* is dedicated in part to one member of this group, Helene Jacobs, and describes its author being sheltered by another prominent member, Franz Kaufmann. It grew out of an earlier organization that was formed to oppose the introduction of a certain paragraph into the statutes of the 28 regional churches; that earlier organization was the Emergency Covenant of Pastors. The founding document of this group asserts that the Church is “solely [the] property” of Christ and denies the “false doctrine” that considers it an organ of the State, a position held by the Reichskirche. That document is the Barmen Declaration. For 10 points, identify this splinter group that resisted the Nazification of the German Protestant Church, founded in part by and associated with Dietrich Bonhöffer and Karl Barth.

ANSWER: the **Confessing** Church [accept the **Confessional** Church or **Bekennende** Kirche]

19. One of them discusses Antonia’s efforts at making the narrator comfortable and is entitled “The Household,” another recounts the story of a Church’s reconstruction by “A Mason.” Still another opens with the consideration of a priest’s sealed burial chamber within the great pyramid of Giza which contained a book of all knowledge that enabled a monarch to disperse the many invaders who threatened his city by destroying their effigies on a chessboard in the tower. That story, “Legend of the Arabian Astrologer,” as well as the rest of the collection, was written during its authors’ time serving in a diplomatic position on behalf of the US government. Several other works are concerned with the exploits of Boabdil and it takes its name from a citadel in Granada. For 10 points, name this volume of sketches, a work by Washington Irving.  
ANSWER: ***Tales of the Alhambra*** or ***Legends of the Alhambra*** or ***The Alhambra***

20. This man earned a Vice Presidential nomination after Indiana senator Benjamin Shively downplayed his interest. As Assistant Postmaster General, he conducted an 1885 purge of Republicans. If an operation to replace the sitting president’s upper jaw due to mouth cancer had gone sour, this man would have become president. In 1900, Minnesotan Charles Towne was nominated for Vice President on the Populist ticket with William Jennings Bryan, but the Democrats nominated this man as Bryan’s VP candidate. He was thus the first man to serve as VP and be nominated for VP with a different running mate. For 10 points, name this VP during Grover Cleveland’s second term, an Illinois governor and grandfather of a same-named “egghead” who lost to Dwight Eisenhower twice.

ANSWER: Adlai Ewing **Stevenson** I or Adlai Ewing **Stevenson**, Sr. [do not accept “Adlai Stevenson II”; “Adlai Stevenson III”; etc.]

21. Adolph Deschamps wrote a book titled after this agreement that Count Golz said, “puts us permanently on the path of trickery, force, and violation of law.” A dispatch published in the Independence Belge from the British Prime Minister at the time refers to this agreement as having been trodden under foot. This agreement was negotiated after one of the parties had defeated Christian of Glucksburg in a war that saw battles at Lundby and Heligoland, and it divided two neighboring polities, which were soon admitted into the Zollverein. The Seven Weeks War was fought in part due to breach in this agreement that was negotiated by Otto von Bismarck, and affected the makeup of a prominent German customs union. For 10 points, name this August 1865 agreement that resolved the dispute over the governance of Schleswig-Holstein, a convention named for a resort town in Austria.

ANSWER: Convention of **Gastein**

22. If one parameter from this theory is considered to be temperature dependent, then the miscibility gaps in the G-phi diagrams are easily characterized. In this theory, molecules are said to become unperturbed at the theta temperature as they cannot feel the presence of other segments. Staverman's name is sometimes appended to this theory, and central to this theory is a quantity that approaches 1/2 for large molecules. That quantity is a function of the coordination number times lattice exchange energy. It assumes that the free energy of mixing can be completely described in entropic terms, as large molecules undergo ideal mixing. It is based on a lattice model in which each spacing is occupied by individual monomers and uses volume fractions rather than mole fractions. For 10 points, identify this theory which gives the thermodynamic properties of polymer solutions, that was developed by two American polymer chemists.ANSWER: **Flory**-**Huggins** theory

23. A medieval poet from this nation developed a nine line stanza that is given his name and was used in his collection of *Flower Songs*. A playwright from this country wrote about a man who spends sixteen years in purgatory but is given a chance to visit his daughter, after he commits suicide when he is caught stealing money to help his family. That author of *Liliom* hails from this nation, whose epic describes the heroics of Nicholas Zrinski defending Sziget during a siege by the forces of Suleyman the Magnificent. A modern author from this country wrote about a man who refuses to have a child in a world full of atrocities in his *Kaddish for a Child not Born*, and wrote a semi-autobiographical work about his experiences during the Holocaust in *Fatelessness*. For 10 points, identify this country home to such authors as Valentin Balassi, Ferenc Molnar, Miklos Zrinyi, and Imre Kertesz.

ANSWER: **Hungary** [or **Magyarország**]

In an 1862 essay, Richard Pohl observed five motifs in this musical work, which he designated as conveying “Passion”, “Pride”, “Longing”, “Triumph”, and “Love” respectively. A melody played on oboe and clarinet expresses the “painful joys” of the central figure in the first movement, while the image of a woman picking petals from a flower is evoked by violins and clarinets in the second movement. A male chorus was eventually added to its third movement, the “Chorus Mysticus”, singing that “everything transitory is but a semblance” in praise of that which “draws us ever onward” called the “Eternal Feminine”. The second of the three “character sketches” that comprise the work centers on the figure of Gretchen, while the third centers on the demon Mephistopheles. For 10 points, identify this work by Franz Liszt.

ANSWER: ***Faust Symphony***

**Minnesota A and Chicago B Bonuses**:

1. It was intended to answer the question: “can the people of a territory exclude slavery from their limits prior to the formation of a state constitution?” For 10 points each:

[10] Name this doctrine, which drew a response at Jonesboro dealing with the question of “police regulations.”

ANSWER: **Freeport** Doctrine

[10] The Freeport Doctrine was proposed by this Democrat known as the “Little Giant.”

ANSWER: Stephen (Arnold) **Douglas**

[10] Lincoln's reply to Douglas cited an 1856 speech by this man, who held the other Illinois senate seat at the time. He supported two Confiscation Acts during the Civil War, but was one of seven Republicans to vote against the conviction of Andrew Johnson.

ANSWER: Lyman **Trumbull**

2. He created a black chalk drawing of Tragedy holding a screaming mask for an 1897 luxury book named *Allegories and Emblems*, for 10 points each:

[10] Identify this man who was responsible for a series of Faculty Paintings, including *Philosophy* and *Medicine*, as well as a portrait of Adele Bloch Bauer based on his study of an Egyptian Coffin.

ANSWER: Gustav **Klimt**

[10] In this 1907 work Klimt uses a series of rectangles to decorate the golden robe of a man embracing a woman and performing the title action.

ANSWER: ***The Kiss***

[10] This work which won the gold medal at the 1911 International Exhibition in Rome features a black background and shows a little girl held by her mother, as an old crone stands with a bowed head.

ANSWER: ***The Three Ages of Woman***

3. Name some things about a genus of bacteria, for 10 points each:

[10] Frederick Southwick discovered an unusual form of locomotion in members of this bacterial genus, whose species include monocytogenes. This beta-hemolytic anaerobe is responsible for a particularly lethal type of food-borne illness.

ANSWER: **Listeria**

[10] Southwick discovered that Listeria could travel through host cell cytoplasm by inducing the polymerization of this molecule, whose G-monomers polymerize to form microfilaments consisting of its F- form.

ANSWER: **actin**

[10] Actin polymerization by Listeria appears to rely upon the binding of profilin to this protein, which in turn binds to a proline-rich region of the Listeria protein ActA. With Ena, this protein names a family of actin regulatory proteins.

ANSWER: **VASP** [accept **vasodilator-stimulated phosphoprotein**]

4. The search for this fictional entity, purportedly found “near Cathay in upper India,” is set in motion by the question of whether or not a certain character should get married, for 10 points each:

[10] Identify this truth teller that is administered by the Pontiff Bacbuc and is said to be located inside a temple over the gates of which the inscription reads “In vino veritas.”

ANSWER: the **“Oracle of the Holy Bottle”**

[10] The episode of the Oracle of the Holy Bottle appears in Books 4 and 5 of this work by Francois Rabelais.

ANSWER: ***Gargantua and Pantagruel***

[10] In another episode of *Gargantua and Pantagruel* this despot of Lerne declares war on the Kingdom of Grandgousier but is ultimately defeated when the Gargantua returns from Paris.

ANSWER: **Picrochole**

5. These objects were imbued with a sense of awe that stemmed from their authenticity and ritualization in primitive, feudal, and bourgeois societies. For 10 points each:

[10] Name these creations that are liberated from ritualization and are based solely on politics in “the age of mechanical reproduction,” according to Walter Benjamin.

ANSWER: the **work of art** [or Das **Kunstwerk**; accept equivalents involving **art**]

[10] This thinker examined van Gogh’s *A Pair of Shoes* in arguing that art presents a hermeneutic circle in his *The Origin of the Work of Art*.

ANSWER: Martin **Heidegger**

[10] This other thinker subsequently took Heidegger’s understanding of the Van Gogh painting to task in his own work *Restitutions of the Truth in Pointing*.

ANSWER: Jacques **Derrida**

6. This equation describes scalar, spin-0 particles, and it can broken down into a d'Alembertian and a mass-squared operator acting on a wavefunction. For 10 points each:

[10] Identify this relativistic version of the Schrödinger equation.

ANSWER: **Klein**-**Gordon**-Fock equation

[10] The similarly named sine-Gordon equations have the kink and anti-kink forms of these particles as their solutions. They are localized waves that maintain their shape, and also arise in solutions to the Korteweg-de Vries equation.ANSWER: **solitons**

[10] The quantum sine-Gordon and Thirring models were shown to be equivalent by this Harvard field theorist, known for his work on vacuum decay with de Luccia and a theorem he proved with Mandula, as well as his Erice lectures.

ANSWER: Sidney **Coleman**

7. After escaping a marriage to the alcoholic Ellen, this character inherits the seventy thousand pounds his aunt Alethea had left in the care of Overton. For 10 points each:

[10] Identify this character whose oppressive parents Theobald and Christina send him to Roughborough to learn to be a clergyman.

ANSWER: **Ernest** Pontifex [prompt on “Pontifex”; accept **E**rnest **Pontifex**]

[10] Ernest Pontifex appears in this 1903 novel, which covers four generations of his family and is narrated by the aforementioned Overton.

ANSWER: *The* ***Way of All Flesh***

[10] *The Way of All Flesh* was written by this author of the utopian satire *Erewhon*.

ANSWER: Samuel **Butler**

8. This man founded the Berlin School of experimental psychology, in which capacity he taught the Gestalt psychologists. For 10 points each:

[10] Name this German psychologist, a student of Franz Brentano who supervised Edmund Husserl’s dissertation work and wrote the two-volume *Psychology of Sound*.

ANSWER: Carl **Stumpf**

[10] Carl Stumpf headed up a committee of thirteen scientists who studied the claims that a “Clever” horse of this name could count. Freud psychoanalyzed a “Little” boy with this name who was, coincidentally, afraid of horses.

ANSWER: **Hans**

[10] Stumpf had a falling out with this German founder of experimental psychology and teacher of Edward Tichener. He wrote *Contributions to a Theory of Sense Perception*.

ANSWER: Wilhelm Maximilian **Wundt**

9. While with the Ballets Russes, this man choreographed Stravinsky’s *The Firebird* and *Petrushka*. For 10 points each:

[10] Name this Russian choreographer who also used the cello solo in Saint-Saens’s *Carnival of the Animals* as the basis for his solo dance for Anna Pavlova, *The Dying Swan*.

ANSWER: Michel **Fokine** [or Mikhail Mikhailovich **Fokin**]

[10] Fokine also used Glazunov’s orchestration of Chopin, the *Chopiniana*, as the basis for this ballet, in which the dreamer looks on while a bunch of the title mythological fairy-like creatures cavort about in the moonlight.

ANSWER: *Les* ***Sylphides***

[10] This Fokine-choreographed ballet takes its music from Carl Maria von Weber’s *Invitation to the Dance* and its inspiration from a Theophile Gautier poem. It concerns the dreams of a young woman who falls asleep after a ball and imagines dancing with the title flower.

ANSWER: *Le* ***Spectre de la Rose*** [or *The* ***Specter of the Rose***]

10. This brother of Yuri III made Moscow his capital. For 10 points each:  
[10] Identify this first Grand Prince who got his name because of the vast amount of wealth he amassed by collecting tributes from the various principalities of Russia.  
ANSWER: **Ivan I** [or **Ivan moneybags**; or **Ivan Kalita**]

[10] Ivan Kalita had one-upped Alexander of this polity in his quest for the title of Grand Prince. It was frequently attacked by a Tatar-Mongol coalition in the 13th and 14th Century, and the alliances of Dmitri "the terrible eyed" led to Ivan Kalita attacking this polity.  
ANSWER: **Tver**[10] Ivan's Mongol allies included Ozbeg Khan, who ruled over this Khanate that had its capital at Sarai. It was briefly reunited by Tokhtamysh in the late 1300s.  
ANSWER: **Golden Horde** [or **Kipchak** khanate; or **Ulus of Jochi**]

11. This theory proposes an additional dependence of gravity on a function of acceleration, which approaches 1 for acceleration much larger than a critical value a-nought. For 10 points each:[10] Identify this theory proposed by Mordehai Milgrom which alters the gravitational law proposed by a British scientist.ANSWER: **MOND** [or **Modified Newtonian Dynamics**][10] MOND was proposed to account for a problem with these curves for galaxies, in which the orbital velocity of gas molecules or stars in a galaxy stays fairly constant even with increasing distance from the center of the galaxy. ANSWER: galaxy **rotation** curves[10] MOND is conclusively disfavored by 2006 observations of this astronomical object, involving colliding galaxy clusters in which the total center of mass is far from any baryonic matter. It is strong evidence for dark matter.

ANSWER: **Bullet** cluster [or **1E 0657-56**]

12. The central character of this work becomes despondent when the *Topaze* is converted into the “Only Floating Gift Shoppe in New England,” and leaves his sons a note in a volume of Shakespeare. For 10 points each:

[10] Name this novel in which Honora controls the purse strings of the titular family, whose patriarch is Leander.

ANSWER: *The* ***Wapshot Chronicle***

[10] This American author wrote *The Wapshot Chronicle* and its sequel, *The Wapshot Scandal*.

ANSWER: John William **Cheever**

[10] This son of Leander is the Wapshot who works at the Talifer Missile Site, under Dr. Lemuel Cameron. He marries Betsey in *The Wapshot Chronicle*.

ANSWER: **Coverly** Wapshot

13. This city rose to prominence as a trade center around 1400 BCE. For 10 points each:

[10] Name this site in Veracruz, which also encompasses the ruins at the second-most-famous Tenochtitlán, as well as Potrero Nuevo. This city is home to some giant stone heads, and was later superseded in importance by its culture’s second capital, La Venta.

ANSWER: **San Lorenzo**

[10] San Lorenzo was the first great cultural center of this Mesoamerican civilization of southern Mexico that existed until around 400 BCE. Aside from giant stone heads, this culture enjoyed carving stone were-jaguars.

ANSWER: the **Olmec**s

[10] This third important Olmec city was the westernmost. It is located at the base of the Tuxtla Mountains, and an important artifact that contains one of the oldest surviving Long Count calendars, the Stela C, was found here.

ANSWER: **Tres Zapotes**

14. After meditating, deceased souls proceed to this location, where they encounter three judges; if they were virtuous, their consciousness or *daena* guides them safely across to the House of Song. For 10 points each:

[10] Identify this bridge from Zoroastrianism which narrows for evil souls, allowing the demon Visaresh to drag them into the House of Lies.

ANSWER: the **Chinvat** Bridge [accept **Cinvatô** Peretûm, **Chinvat** Puhl, **Chinwad**, **Cinvat**, **Chinvar**, or **Chinavat**]

[10] A soul’s worthiness is dependent on this concept of truth and righteousness, which is contrasted with *druj*. Appropriately, it shares its name with the Amesha Spenta representing it.

ANSWER: **asha** [accept **arta**]

[10] Souls which successfully cross the Chinvat bridge are assigned to this benevolent and supreme Zoroastrian deity.

ANSWER: **Ahura Mazda** [accept H**ormuzd**, **Aramazd**, or H**ormazd**]

15. This work was dedicated to Wilhelm Middelschulte. For 10 points each:

[10] Identify this piece of music that opens with a “Preludio corale” that quotes much of its composer’s Third Elegy, a twelve-part work for solo piano.

ANSWER: ***Fantasia Contrappuntistica***

[10] The *Fantasia Contrappuntistica* was composed by this man whose other works include a notable *Sonatina Seconda* and the opera *Doktor Faust*.

ANSWER: Ferrucio **Busoni**

[10] Busoni’s *Fantasia Contrappuntistica* concludes with a massive fugue built out of this man’s 1751 work *The Art of Fugue*.

ANSWER: Johann Sebastian **Bach**

16. This author’s *Natives of My Person* is an allegorical account of a slave ship’s trip to San Cristobal, for 10 points each:

[10] Identify this Barbadian author of *Water with Berries* and *In the Castle of My Skin*.

ANSWER: George **Lamming**

[10] In Lamming’s essay *The Pleasures of Exile* he identifies his own experience with that of this literary character who serves his master Prospero in *The Tempest*.

ANSWER: **Caliban**

[10] This fellow Barbadian author was also inspired by the character of Caliban. In fact, “Caliban” names a militant 1969 poem published in the volume *Islands*, the last book of his *The Arrivants: A New World Trilogy*.

ANSWER: Edward Kamau **Brathwaite**

17. Identify the following from hydrological biogeochemistry, for 10 points each.

[10] Günter Wächtershäuser suggested that the synthesis of this mineral provided the energy for the synthesis of early bio-organic compounds, and that this mineral provided the surface upon which many reactions could occur. This iron-sulfide mineral is commonly called "fool's gold."

ANSWER: **pyrite**[10] This reaction, rather than denitrification, is responsible for a the synthesis of a majority of diatomic nitrogen in the oceans. An ammonium ion and a nitrite ion react to produce a nitrogen molecule and two water molecules in this reaction.ANSWER: **anammox** [or **an**aerobic **amm**onium **ox**idation][10] The CLAW hypothesis proposes that these dimethyl sulfide producing organisms participate in a negative feedback loop that regulates temperature changes. They mostly inhabit the pelagic zone of seas and oceans.ANSWER: phyto**plankton**

18. This story of this title character of a fragmentary play by Euripides is often compared to that of Potiphar’s wife. For 10 points each:

[10] Identify this queen of Tiryns whose husband Proetus asked her father Iobates to kill Bellerophon.

ANSWER: **Stheneboia** [accept **Sthenboea** or **Antea** or **Anteia**]

[10] Iobates was reluctant to incur the punishment attached to murdering a guest, so he instead sent Bellerophon to kill this two-headed snake-tailed beast, a task which he accomplished with the help of Pegasus.

ANSWER: the **Chimera** [or **Chimaira**]

[10] In a minor exploit, Bellerophon slew a group of these people led by Cheirmarrhus. In another story, a group of dolphins saved the poet Arion from a group of these figures who’d kidnapped him.

ANSWER: **pirate**s [accept equivalents, prompt on **sailors**]

19. This character loses an arm after being pushed from a car by Reinhold while fleeing a robbery with Fatty Pums’s gang. For 10 points each:

[10] Name this man who is released from Tegel Prison at the beginning of *Berlin Alexanderplatz*,the Alfred Döblin novel of which he is the protagonist.

ANSWER: **Franz** Karl **Biberkopf** [accept either underlined portion]

[10] *Berlin Alexanderplatz* was adapted into a 15-hour-long movie by this German director whose films include *The Bitter Tears of Petra von Kant* and *The Marriage of Maria Braun*.

ANSWER: Rainer Werner **Fassbinder**

[10] Fassbinder used Josef von Sternberg’s *The Blue Angel* as the basis for a 1981 movie of this title. A 1998 movie stars Franka Potente as a character of this name who must perform the movie’s title action many times while attempting to acquire 100,000 marks in 20 minutes.

ANSWER: ***Lola*** [accept *Run* ***Lola*** *Run* or ***Lola*** *Rennt*]

20. One powerful figure in this alliance was Charles, Duke of Berry. For 10 points each:

[10] Name this fifteenth-century alliance of French nobles, led by Charles the Bold, who demanded Normandy for himself from the sitting French king before foolishly warring with Switzerland and dying at the Battle of Nancy.

ANSWER: the League of the **Public Weal**

[10] The League of the Public Weal intrigued against this French king, known as the Spider King.

ANSWER: **Louis XI** [prompt on **Louis**]

[10] In August 1475 Louis XI signed this treaty and agreed to pay off his royal British counterpart to leave and not pursue his claim to the French throne.

ANSWER: Treaty of **Picquigny**

Name some things about a useful molecule. For 10 points each:

[10] This secondary amine with molecular formula (CH2)5NH resembles a molecule of cyclohexane with one carbon replaced by nitrogen.

ANSWER: **piperidine**

[10] Like cyclohexane, piperidine is most stable in this type of conformation. Because of nitrogen inversion, piperidine has two of these conformations, along with boat and skew-boat conformations.

ANSWER: **chair**

[10] Because of its basicity, piperidine is used to cleave this common protecting group, a chloroformate ester. Like t-Boc, it is used as a protecting group in solid-phase peptide synthesis.

ANSWER: **FMOC** or **fluorenylmethyloxycarbonyl chloride**

In an early English version of his story, this character is called Cartaphilus, while a 16th Century Italian text identified him as Salathiel ben Sadi, for 10 points each:

[10] Identify this legendary figure who was the subject of Caroline Norton’s poem *The Undying One* and Lew Wallace’s *Prince of India*.

ANSWER: **the Wandering Jew**

[10] This French author adapted the story of the wandering jew for one of his novels. His other works include *Plik and Plok* and *The Mysteries of Paris*.

ANSWER: Marie Joseph, Eugene, **Sue**

[10] The character of the wandering jew also appears in this 1795 work, which focuses on the diabolical Matilda’s seduction of the title figure, a Capuchin abbot named Ambrosio.

ANSWER: ***The Monk***