**2010 ACF National Championship**

**Editor’s Round (Finals)**

1. At one point the speaker describes jewels originally designed to give joy that “lie lightless, all their sparkles bleared and black and blind.” In another section, this work poses the question, “What does this vaingloriousness down here?” before asserting that everything is stirred along and urged by the “Immanent Will.” First published in its author’s collection *Satires of Circumstance*, this work’s seventh stanza depicts the preparation of a “sinister mate” in the “shadowy silent distance.” Its opening line reads “In a solitude of the sea” and depicts the aftermath of the titular meeting between “the smart ship” and “a shape of ice.” For10 points, identify this work subtitled “Lines on the Loss of the “Titanic,”” a poem by Thomas Hardy.

ANSWER: **“Convergence of the Twain”**

2. In Hindu tradition, the goddess Sitala was ejected from Shiva’s paradise of Kailasa for throwing one of these at Shiva and giving him ulcers. Members of spiritual houses in Umbanda tradition are given one of these called an *ileke*, which are each associated with certain orishas. Another one of these was stolen by the tyrant Phayllus during the Sacred Wars, after it had been sent away to a shrine by the sons of king Phegeus. Earlier, that example of one of these objects had persuaded Eriphyle to betray her husband Amphiaraus, after it had been given to her by Polynices. Another example of one of these was obtained by sleeping with four dwarves on consecutive nights. For 10 points, name these objects which include the Brisingamen possessed by Freya and the cursed one of Harmonia.

ANSWER: **necklace**s (accept **bracelet** until Eriphyle)

3. According to tradition, it must be 12 lines and must fill the margins exactly. Additionally, the letter “lamed” [lahm-ed] must appear in every line, and other specific letters must be enlarged. It is always written with a quill or a reed, and must be composed under the observation of two witnesses. According to commentator Shiltei Giborim [Shill-tay gibb-or-im], the word for it comes from a type of quartz said to have anti-magnetic properties. The actions of the paranoid Isaac Neiberg resulted in one example which was immortalized as the Cleves version. Due to its Orthodox requirements, missing persons and the mentally ill create a class of persons known as an “agunah.” For 10 points, identify this document which requires the consent of the man and facilitates the Jewish ritual of divorce.

ANSWER: **get** , also accept **gittin**

4. The effect of proteins like OXA-18 on these agents can be mitigated by the co-administration of clavulanic acid, which counteracts resistance to these chemicals. Another mechanism of resistance to these agents is mutation of serine 403 in the enzyme they target. Members of this class are structural analogues of the NAG/NAM peptide of the protein whose transpeptidation they inhibit. The variable binding of PBP subtypes to members of this class of drugs, which includes the cephalosporins, affects the relative abilities of these drugs to inhibit the crosslinking of the bacterial cell wall component peptidoglycan. For 10 points, name this class of antibiotics with a namesake central ring structure, a class that includes penicillin.  
ANSWER: **beta-lactam**s

5. This author wrote a collection of 32 poems that ends with an elegy on his adopted son. That work “A Lament for his Boy” is preceded by an ode to the god of slumber entitled “Sleep.” That collection also featured a title that would later be adapted by Poliziano to characterize an entire genre of occasional verse. Another work by author, though left unfinished at his death, gives an account of a hero’s childhood in Thessaly and concealment on the island of Scyros, it is called the *Achilleid*. In the *Purgatorio* Dante has the shade of this man explain that he secretly embraced Christianity after reading his fellow poet, Virgil’s *Eclogues*. His greatest work, divided into twelve books depicts the institution of the Nemean Games and focuses on the brothers, Eteocles and Polynices, who hail from the title city. For 10 point, identify this court poet under the Domitian, the author of the *Silvae* and the *Thebaid*.

ANSWER: Publius Papinius **Statius**

6. Among the nine main reasons its formulator laid supporting it were the observations that tax collection was disorganized and lending money at interest was prohibited. Its formulator also argued on behalf of the significant achievements of Cassiodorus and particularly Boethius. Britain was exempted from it as was Venice due to their isolation and multiple trade routes respectively. It was introduced in the book *Medieval Cities* and became crystallized in its formulator’s follow-up *Mohammed and Charlemagne*. Arguing that the break with antiquity and the decline of Western civilization was due not to Germanic invasions but the advance of Islam, for 10 points, identify this theory of European development named for the Belgian historian who proposed it.

ANSWER: **Pirenne** thesis

7. In an early scene in this film a group of drunk men crowd around a phone booth as the hero tells off his employer. Not long after we meet an annoying character named Shapely who talks incessantly and is fooled into thinking he’s become embroiled in a kidnapping plot. In a memorable sequence the hero teaches the heroine the art of dunking a doughnut after a night spent at Dyke’s Auto Camp. During that night the so-called “Walls of Jericho” scene takes place when the two leads share a room. The majority of this film focuses on the heroine’s attempts to reunite with her gold-digging husband King Wesley by traveling from Miami to New York. Newspaperman Peter Warren’s attempts to help heiress Ellie Andrews on said journey lead to them falling in love. For 10 points, name this Frank Capra film starring Claudette Colbert and Clark Gable.

ANSWER: ***It Happened One Night***

8. In the A-model of topological string theory, this type of submanifold can be wrapped by a brane. For a symplectic manifold of dimension 2n, a dimension n submanifold on which the symplectic form restricts to zero is said to be this. The submanifold of positions inside a phase space of positions and momenta is of this type, and is related to the object of the same name that is a function of positions and velocities. The one that characterizes general relativity is proportional to the Ricci scalar times a volume form. Equations of motion can be derived by the variational principle from one. The action is the integral of this quantity over time. It is a Legendre transform of the Hamiltonian. For 10 points, what is this difference of kinetic and potential energy, named for an Italian-born mathematician?

ANSWER: **Lagrangian**

9. This man’s no-longer extant writings include works entitled *On the Preparation of Kyphi*, *On Festivals*, and *Digest of Physics* which discussed the symbolism of various animals. His writing is often grouped with his contemporary Berossos, as in a recent translation by Verbrugghe and Wickersham. His hometown is well attested as Sebennytos and he bore a name translating as “keeper of the horses.” The first external reference to him comes in Josephus’ work *Against Apion*, and he probably served as a priest at the temple of Onuris-Shu in the 3rd-century BC. His best-known work describes the origin of the Hyksos and says that Menes ruled for 62 years before being eaten by a hippo. For 10 points, name this great historian who divided Egyptian pharaohs into 30 dynasties.

ANSWER: **Manetho** (or **Manetho**n)

10. In one of this writer’s works, a clerk named Dandeker embarks on a journey to heal “the growth on his wife’s womb.” Another of this author’s works focuses on the divergent paths of two peasant girls, one of whom chooses to remain in her home village while the other runs off to the city. That work, *Two Virgins*,was preceded by another work depicting how Richard’s ethnicity leads to tension with his love Mira. In addition to *Some Inner Fury*,this author explored the perils of modernization in a novel about the newly arrived British engineer Clinton, who loses his young wife Helen, to a man named Bashiam, as he builds the title structure in *The Coffer Dams*. This writer created such characters as Ravi who struggles to interact with his wife Nalini and his son Raju, after moving to Madras, as well as the long suffering couple Nathan and Rukmani in the 1954 novel that made her name. For 10 points, identify this Indian author of *A Handful of Rice* and *Nectar in a Sieve*.

ANSWER: Kamala **Markandaya**

11. This work posited a distinction between “the satisfying and the satisfactory” and discusses Bergson’s comparison of the Parthenon’s frieze with the models it depicts to assertthat the Greeks privileged the climactic moment of change. In “The Play of Ideas” it asserts the limitations of an aesthetic stance by providing the example of a visitor to a foreign country who cannot understand why beautifully designed articles are used for instrumental purposes, thus degrading their inherent nature. It ends with a chapter titled “The Copernican Revolution,” which explores how the scientific method has resolved the opposition between theory and practice. Subtitled, “A Study of the Relation Between Knowledge and Action,” it was based on its author’s 1929 Gifford Lectures and argues for a pragmatic approach to philosophy’s titular search for truth. For 10 points, identify this epistemological work by John Dewey.

ANSWER: ***The Quest for Certainty***

12. Proving the namesake property in one of these data structures relies on the Dynamic Finger Conjecture, and data structures without their characteristic property can obtain it by running an algorithm named for Day, Stout and Warren.  In one of these data structures, their characteristic property is maintained through operations like a zig-zag during searches.  Because they are often difficult to implement, skip lists are sometimes used instead.  Data structures without this property are called degenerate and approximate linked lists.  Some of these data structures impose requirements that all nodes and leaves be the same color.  Exemplified by AVL and Red-Black Trees, for 10 points, name these special types of binary search trees that often perform tree rotations to guarantee tree heights of at most log n.

ANSWER: Self-**Balanced** Binary Search Tree (or Self-**Balancing** Binary Search Tree orHeight-**Balanced** Binary Search Tree; prompt on “Tree”, “Binary Tree” or “Binary Search Tree”)

13. In one section it scolds those who abandon their mother to go sport in “decadent lands.” It asserts that “the prize in literary contests should not go to the best ode, but for the best study of political factors,” after noting that the struggle is not between civilization and barbarism, as posited by Sarmiento’s *Facundo*, but “between false erudition and Nature.” This work admonishes leaders that the words of Sieyes or Hamilton will not quicken the blood of the Indian, while its declaration that “there are no races” reflects its author’s fight against bigotry during his homeland’s struggle for independence. Published in 1891, this work presents the danger of residual colonial influence as a tiger and ends with an image of the Taino deity, Semi, astride a condor, as he sows the seeds of a new utopia from the Rio Grande to the Straits of Magellan. For 10 points, identify this nationalistic essay by Jose Marti.

ANSWER: “**Our America**” or “**Nuestra America**”

14. The artist drew on a sketch of the subject from seven years earlier for this painting, whose fame at exhibition led the artist to send his *Young Lady with a Bird and Dog* to the same exhibition the next year. Atypical of the artist was the choice of painting in profile rather than head-on and the dreamy quality of the subject, who was the artist’s half-brother Henry Pelham. Of particular note are the luxurious red drapery in the background and the rich mahogany table at which the subject sits. Upon the table are a glass of water and part of the gold chain which links the subject with the other title figure. Praised by Reynolds and West upon its London exhibition, it would be surpassed four years later by the artist’s portrait of Paul Revere. For 10 points, name this painting by John Singleton Copley depicting an adolescent and a rodent.

ANSWER: ***Boy With*** *a* ***Squirrel*** (accept early buzz of ***Henry Pelham***)

15. James Van Zandt and Hugh Johnson were lesser known figures that were asked to lead this action, which was partly inspired by the French group Croix de Feu. Men that were interviewed in the aftermath of this incident included Albert Christmas and Frank Belgrano, while Grayson Murphy, the treasurer of the American Liberty League, was notably not asked to testify. Robert Clark employed one man involved in this incident, the only conspirator to testify before the McCormack-Dickstein committee. That man, Gerald MacGuire, requested that the author of *War is a Racket* march 500,000 troops on Washington and become America's “Secretary of General Affairs”. Smedley Butler exposed, for ten points, what alleged plot to install a fascist goverrnment and overthrow Franklin Roosevelt, hatched by some captains of industry?

ANSWER: **Business Plot**

16. At one point in this work, a third melody, initially played by the clarinet, appears, but is soon ended with a single harp arpeggio. The first section, which is carried along by a three-note dotted figure that moves down by a semitone and then moves back up again, opens with a chromatic Lento introduction in cellos and basses that is eventually joined by another melody, sometimes known as the “faith” motif.” Marked “Allegretto,” its second section, particularly the portion which contrasts plucked strings with the main melody in the English horn, initially disturbed many reviewers, who panned its 1889 premiere in Paris. Composed in three rather than the usual four movements, this piece, its composer’s Opus 48, is his only work in a particular format. For 10 points, identify this long orchestral work in a certain key by Cesar Franck.

ANSWER: ***Symphony in D minor*** [accept **Franck’s Symphony** before his name is read]

17. His doctorate examined the concept of capitalism in German scholarship, while during World War II he wrote a series of important monographs on the sociology of Nazism, arguing that they sought to overthrow the enlightenment. He called the gratification of emotions “affectivity”, which he contrasted with a state of “affective neutrality.” He differentiated between societies that valued action in the correct context versus advancement per se, a distinction he dubbed ascription and achievement. His educational theories emphasized people finding their appropriate occupation in society, an idea that with his students Davis and Moore became the theory of role allocation. His explication of the nature of illness in chapter 10 of *The Social System* was one of the founding texts of medical sociology. For 10 points, identify this popularizer of Max Weber who analyzed the “unit act” to understand *The Structure of Social Action*.

ANSWER: Talcott **Parsons**

18. Tris(*o*-phenylenedioxy)cyclotriphosphazine can induce a shift to this structure in other molecules by promoting clathration. Martensitic transitions to this structure occur in shape metal alloys, and coarse-grained metals with this structure are prone to deformation twinning. Compression along the C-axis in iron and zinc causes them to deviate more severely from the ideal form of this structure than magnesium, which has a nearly perfect c/a ratio of 1.624. Because their axes are not orthogonal, these crystal structures are conventionally described by a four-axis system, Bravais-Miller indices. Like the cubic system, this system has a close-packing crystal structure with a packing factor of 0.74. For 10 points, name this crystal system used by hematite and graphite in which each atom has twelve equidistant neighbors.

ANSWER: **hexagonal** crystal system

19. In a historical oddity he was raised by a cousin named John Steinbeck. He went on to serve as a squire to the one-eyed Portuguese knight Vaz da Cunha after having come to the country in the service of Lady Brampton. Within five years he was married to a Miss Gordon, one year after commanding an expedition provided with ships from Maximilian I. His early supporters included Kildare and Desmond, the latter with whom he spent some time in Munster after having aborted his planned invasion at Kent. His wife would end up in the service of Elizabeth of York but he would, after recanting at Westminister and Cheapside, be hung. For 10 points, name this Frenchman who was falsely proclaimed to be Richard, duke of York, the youngest of Edward IV’s sons and was a pretender to the throne of Henry VII.

ANSWER: Perkin **Warbeck** (or Perkin de **Werbecque**)

20. In one scene, the shifting fortunes of the real estate market cost Samuel Ross’ partner 50 thousand dollars. Earlier, the reading of a will by Mr. O’Brien prompts one of the main characters to abandon his post as director of the family carriage company and take a trip to Cairo, where he encounters his one-time flame Letty Pace. Chapter 38 describes a meeting between Mrs. Sommerville and Mrs. Craig who speculate about the peculiar relationship of a newly arrived couple in Hyde Park. Earlier the discovery of a toy lamb allows the protagonist to ascertain the existence of Vesta, a child fathered by his partner in Columbus with the deceased Senator Brander. Ultimately, Lester Kane cannot overcome the social strictures placed upon his relationship with the title figure in, for 10 points, what 1911 novel named for a poor though pretty girl from an immigrant German family and written by Theodore Dreiser.

ANSWER: ***Jennie Gerhardt***

21. Recently the low-energy theory on a stack of M2 branes has been shown to be a doubled parity-invariant version of it. The Jones polynomial for a knot in a 3-manifold is given by a path integral in this theory of the holonomy of a connection around the knot, as shown by Edward Witten. The topological nature of the theory implies that it is associated with an integer level, and has been used to explain the exactness of the fractional quantum Hall effect. One of its namesakes is a Chinese differential geometer also known for a type of characteristic class for complex vector bundles. Its action is the integral of a three form and its equation of motion says the field strength is zero. For 10 points, what is this theory also named for an American mathematician who founded Renaissance Technologies?

ANSWER: **Chern-Simons** theory

22. In a flashback in this work, a woman calls Ike an idiot for losing his money during the Great Depression, while another scene introduces a woman who is grateful to the main character for helping her secure a divorce. A key moment occurs when the protagonist recalls the moment his friend Mickey agreed to testify against his client Lou, after the latter has been subpoenaed by Congress. The opening instruction calls for a single chair to be set in front of a three level tower meant to evoke a concentration camp, which symbolizes a past the prospective third wife, Holga, struggles against. Much of the play centers on the protagonist’s relationship with his second wife, a famous singer named Maggie, who was thought to have been based on the author’s ex-wife, Marilyn Monroe. For 10 points, identify this play with a religious title that traces Quentin’s relationships with women, a play by Arthur Miller.

ANSWER: ***After the Fall***

23. This ruler required all subjects under his command to tattoo their wrists, classifying them as soldiers of the king, fresh recruits, or provincial officials. He minted royal coins depicting the trident of the god Issawara and his military successes include resisting the rebellion of Maha Da, and launching an invasion in which his army carried the Emerald Buddha back to his capital. This son of a Chinese farmer is best remembered for establishing the Thonburi Kingdom by bringing together rival factions after the fall of Ayutthaya. He remained in power until the ascendancy of the Chakri Dynasty under Rama I in 1782. For 10 points, name this powerful king of Thailand known as “the Great.”

ANSWER: Phraya **Taksin** the Great (or just **Sin** or “Somdet Phra Chao Taksin Maharat/Krung Thonburi” or Boromraja IV)

**Editors Round 11 Bonuses**:

1. The second volume of his masterwork, *Mythical Thought*, elaborated on his idea that art is not an imitation but a discovery of reality, for 10 points each:

[10] Identify this German philosopher who notably debated Heidegger at Davos in 1929 and wrote *The Individual and the Cosmos in Renaissance Philosophy* and *The Philosophy of Symbolic Forms*.

ANSWER: Ernst **Cassirer**

[10] This American philosopher adapted several of Cassirer’s key ideas regarding the interpretation of works of art as iconic symbols of emotions in her masterwork *Philosophy in a New Key*.

ANSWER: Susanne Knauth **Langer**

[10] Langer’s *The Practice of Philosophy* contained a prefatory note written by this British thinker who wrote *Process and Reality* and co-authored *Principia Mathematica*.

ANSWER: Alfred North **Whitehead**

2. His early works include a *Fantasie Pastorale* for orchestra and a Suite for Piano, in G minor, more popularly known as “Suite in the Ancient Style,” for 10 points:

[10] Identify this composer and violinist who completed 3 symphonies, one opera, *Oedipus*, and a pair of notable rhapsodies that interpolated the folk music of his homeland, Romania.

ANSWER: George **Enescu** or Georges **Enesco**

[10] Enescu’s *Romanian Rhapsodies* premiered in 1908, when they were conducted by this Catalonian master of the cello and composer of the oratorio *The Manger*.

ANSWER: Pablo **Casals**

[10] Enescu’s greatest student may have been this Jewish-American prodigy and violin virtuoso who recorded Elgar’s Violin Concerto with the composer conducting at the age of 16.

ANSWER: Yehudi **Menuhin**

3. For 10 points each, answer these questions related to the behavior of electromagnetic fields in materials.

[10] Following from Fermat’s principle of least time, this law of optics relates the ratio of the sines of angles of incidence and refraction at an interface to the ratio of indices of refraction on either side of the interface.

ANSWER: **Snell’s** law

[10] These dispersion relations, independently derived by their namesakes in 1926, relate anomalous dispersion of light with absorption lines and encapsulate the analytic properties demanded by causality.

ANSWER: **Kramers-Kronig** relations

[10] In a paramagnetic material or other linear medium, the magnetization M is proportional to the magnetic field H multiplied by this dimensionless quantity denoted chi sub m.

ANSWER: magnetic **susceptibility**

4. They called their rulers by the honorific “oba” and they established a namesake capital that was also called Katunga, for 10 points each:

[10] Identify this Yoruban kingdom led by such men as Ajaka and known for its elite cavalry corps, also known as the *Eso*, who helped allow it to rise to prominence in what is now Southwestern Nigeria during the 18th century.

ANSWER: **Oyo**-Ile

[10] Oyo fought a series of wars with this neighboring Kingdom who were led by King Agadja. Widely known for its “female soldiers” it gave its name to a country that is now called Benin.

ANSWER: **Dahomey**

[10] The Oyo frequently used cavalry like this neighboring empire that compiled the *Kano Chronicle*. Their name identifies a modern day people of northern Nigeria and southeastern Nigeria.

ANSWER: **Hausa**

5. Name some things about an alkali metal. For 10 points each:

[10] The 133-isotope of this least electronegative element is used in an atomic clock.

ANSWER: **cesium**

[10] Cesium chloride or, less commonly, cesium sulfate are used to separate molecules by size in this type of centrifugation. It is commonly used to distinguish between nicked and supercoiled forms of DNA.

ANSWER: density **gradient** or **isopycnic** centrifugation

[10] Excited cesium atoms behave like one of these substances, which are excited atoms containing at least one valence electron with a very high principle quantum number. Because core electrons shield the nucleus from the valence electrons, these atoms display some electrochemical similarities to hydrogen atoms.

ANSWER: **Rydberg** atoms

6. Answer the following about Caribbean volcanoes, for 10 points each.

[10] Boiling Lake is a fumarole in this Caribbean nation which also includes Trafalgara Falls and is situated about halfway between Guadeloupe and Martinique.

ANSWER: **Dominica**

[10] This mountain range dominates the eastern portion of Jamaica, with Kingston at its base.

ANSWER: **Blue** Mountains

[10] This volcano on Montserrat has exploded numerous times in recent memory, dealing heavy damage to the capital of Plymouth.

ANSWER: **Soufriere Hills** volcano

7. Name these things about mountains from Hindu myth, for 10 points each:

[10] He lifted part of the Dronagiri Mountain to bring its Sanjeevani herb to save Lakshmana, the brother of Rama. This monkey-god was a son of Vayu.

ANSWER: **Hanuman**

[10] This mountain was used as a tool to churn the cosmic ocean. Among the things that spun out were the sun and moon, Lakshmi, and the sacred cow Surabhi.

ANSWER: Mount **Mandara**

[10] The gods uprooted Mount Mandara and set it on the back of this creature from Hindu myth.

ANSWER: **Kurma** (prompt on “turtle” or “tortoise”)

8. The Inquisition said of his *Last Supper* that it was filled with figures such as “a buffoon with a parrot on his wrist . . . a servant whose nose was bleeding . . . dwarfs and similar vulgarities.” For 10 points each—

[10] Name this 16th-century Venetian painter of massive canvases, such as *The Marriage at Cana*, who assuaged the religious authorities by changing the title of the painting to *Feast in the House of Levi*.

ANSWER: Paolo **Veronese** (or Paolo **Caliari**)

[10] In this Veronese work a column on the left reads “All is Vanity” but the focus is on two figures - the woman standing on a globe with a divine light above her head and to the right the figure of Hercules, though a little cupid sits at the bottom.

ANSWER: *Allegory of* ***Wisdom and Strength*** or *Allegory of* ***Strength and Wisdom***

[10] Veronese had earlier won a commission for decorating this residence in the town of Maser, a notable design by Andrea Palladio.

ANSWER: **Villa Barbaro** or the **Barbaro Villa** or the **Barbaro House** (prompt on Villa di Maser or Maser Villa)

9. His works include *The Marquis of Roccaverdina*,about a man who murders his mistress’s husband, and *Profumo*, about a woman whose condition causes her to emanate the smell of orange blossoms,for 10 points each:

[10] Identify this Italian author of such works as 1894’s *The Peasant Novel* and 1879’s *Giacinta*.

ANSWER: Luigi **Capuana**

[10] Capuana was heavily influenced by this literary group which originated in Milan and railed against Italian classicism. They included the short story writer Iginio Tarchetti and their name literally meant “the disheveled ones.”

ANSWER: ***La Scapigliatura***

[10] Capuana championed the writing of this French contemporary and naturalist who wrote *Germinal*.

ANSWER: Emile **Zola**

10. Francis Parkman wrote an 1851 work on this event, which began with a series of attacks in May 1763. For 10 points each:

[10] Identify this conflict named for the Ottawa chieftain primarily associated with it.

ANSWER: **Pontiac’s Rebellion** (accept equivalents, e.g. uprising, revolt, etc)

[10] One of the central events of the Rebellion was the siege of this fort, whose commander attempted to infect the Indians with smallpox. It was built near the site of the old Fort Duquesne in 1759.

ANSWER: Fort **Pitt**

[10] At the time the rebellion was known by the name of Pontiac and this Seneca chieftain, who was once a scout for George Washington.

ANSWER: **Guyasuta** (or **Kayahsota** or **Kiasutha** or **Kiasola** or **Kiasuta**)

11. Comprised of such chapters as “Ketman” and “The Lesson of the Baltics,” it centers on the challenges for a set of intellectuals named Alpha, Beta, Gamma, and Delta, for 10 points each:

[10] Identify this 1953 work that described the impact of Stalinist totalitarianism on literary artists.

ANSWER: ***The Captive Mind*** or ***Zniewolony Umysl***

[10] *The Captive Mind* was written by this Polish author and Nobel Prize winner, whose poems were collected in such volumes as *The Separate Notebooks* and *Bells in Winter*.

ANSWER: Czeslaw **Milosz**

[10] During his time at Berkeley, this former poet laureate met Milosz and subsequently translated many of his poems; this man’s own poems are collected in such volumes as *Human Wishes* and *Time and Materials*.

ANSWER: Robert **Hass**

12. The battle began with one side crossing over the Tchernaya River, for 10 points each:

[10] Identify this battle that turned on the ability of Lord Raglan’s troops to defend Home Hill from the Russian forces under Prince Menshikov.

ANSWER: **Inkerman**

[10] The French forces at Inkerman were led by this French Marshal who succeeded to the command of the army after the Battle of Alma.

ANSWER: Francois Certain **Canrobert**

[10] Raglan and Canrobert were also in charge of the allied forces at this 1854 battle that saw the famous Charge of the Light Brigade.

ANSWER: **Balaclava**

13. Answers these questions about Trygve Haavelmo, FTPE:

[10] Tryvgve won the 1989 Nobel Prize for introducing the probability approach to this. This subfield in economics is concerned with the identifying causal effects in data. Tinbergen and Frisch also won prizes for advances in this subfield.

ANSWER: **econometrics**

[10] One important method for estimating causal effects in econometrics makes use of this kind of quasi-random assignment device that is typically estimated using 2 stage least squares.

ANSWER: **instrumental** variable

[10] This Chicago economist and 2000 Nobel winner has criticized the instrumental variable approach. He is known for his namesake correction, which is used to deal with selection bias. He studies the development of human capital.

ANSWER: James **Heckman**

14. This novella’s 34th and final chapter, details how the protagonist’s brother, Harry, was back from the wars and she was awaiting the birth of another child, for 10 points each:

[10] Identify this 1953 work that begins with a description of a seven year old black girl who liked “candy buttons, and books,” and follows the title figure’s life as she matures and moves from Chicago to New York.

ANSWER: ***Maud Martha***

[10] *Maud Martha* was written by this author of *Bronzeville Boys and Girls* and *Annie Allen*.

ANSWER: Gwendolyn **Brooks**

[10] The title poem of this 1968 collection by Gwendolyn Brooks, which contains such works as “The Second Sermon on the Warpland” and “The Blackstone Rangers,” depicts the tragic life in and around a decaying apartment complex.

ANSWER: ***In the Mecca***

15. Recently there has been rapid progress and competition in a problem similar to packing luggage, attracting commentary in the New York Times from Ed Cohn’s brother. For 10 points each:

[10] Although Aristotle mistakenly claimed that these regular polyhedra are space-filling, recent advances in packings of them by Torquato and Jiao and by Chen have currently maxed out at about 85.6% density.

ANSWER: **tetrahedra**

[10] This conjecture about the best possible way to fill space with spheres waited nearly five centuries for a proof by Thomas Hales, showing that the maximal density for sphere-packing is about 74%.

ANSWER: **Kepler** conjecture

[10] Soap films efficiently divide up three-dimensional space according to these rules, examples of which are that surfaces have constant curvature and that three of them can meet at 120 degree angles.

ANSWER: **Plateau’s** laws [or rules]

16. It came into use in 1873 when Rudolf Virchow declared that the battle with the Roman Catholics was assuming “the character of a great struggle in the interest of humanity.” For 10 points each:

[10] Identify this term for the struggle on the part of Otto von Bismarck to subject the Church to state controls.

ANSWER: ***Kulturkampf***

[10] Bismarck was rebelling against decrees passed by this man who convened the First Vatican Council.

ANSWER: **Pius IX** (or Giovanni Maria **Mastai-Ferretti**)

[10] Pius IX issued this papal bull in 1873 attacking a favorite Church target, Freemasonry, and also listing the Kulturkampf as one of three forces fighting against the church at the time.

ANSWER: ***Etsi multa***

17. Name some things about a class of receptors active in the innate immune system, for 10 points each:   
[10] These receptors, which share a domain with interleukins, are expressed on a variety of immune cells and were named for their resemblance to a *Drosophila* protein.

ANSWER: **Toll-like** receptors or **TLR**s  
[10] Ligands for Toll-like receptors include bacterial surface proteins like LPS, as well as bacterial proteins associated with this tail-like structure, which *E. coli* and *Salmonella* use for motility.

ANSWER: **flagella**  
[10] Activation of this kinase complex by Toll-like receptors causes it to phosphorylate its N-F-kappa-B-binding target protein, leading to the target’s degradation and the release and activation of N-F-kappa-B.

ANSWER: **IKK** (accept individual IKKs

18. Among his designs were the gardens for the UNESCO headquarters in Paris and the waterfall wall at 666 Fifth Avenue in New York. For 10 points each—

[10] Name this landscape architect and sculptor, perhaps best known for his lifelong collaboration with Martha Graham, for whom he designed the sets for *Appalachian Spring*.

ANSWER: Isamu **Noguchi**

[10] After receiving a Guggenheim Fellowship, Noguchi went to Paris in 1927 and worked for six months in the studio of this sculptor of *Sleeping Muse* and *Bird in Space*.

ANSWER: Constantin **Brancusi**

[10] In 1961 Noguchi began a five-year collaboration with this architect, whose own designs include the Richards Medical Center in Philadelphia and the Kimbell Art Museum in Fort Worth

ANSWER: Louis **Kahn**

19. He arranged religions in a hierarchy, with animism on the bottom and monotheism at the top, for 10 points each:

[10] Identify this thinker who argued in such works as *On Religion: Speeches to its Cultured Despisers*,that theology should not be associated with transcendental truth or morality, but with emotions, such as “the pious feeling.”

ANSWER: Friedrich **Schleiermacher**

[10] This 1821 Schleiermacher work, his masterpiece, posited that to truly experience the title religion, a believer must affirm the unknowable by practicing absolute dependence on God or ‘God Consciousness.”

ANSWER: ***The Christian Faith***

[10] This French Philosopher and Theologian, who taught at the University of Chicago, wrote two essays on Schleiermacher’s Hermeneutics, as well as *Fallible Man*, *The Symbolism of Evil*, and *Time and Narrative*.

ANSWER: Paul **Ricoeur**

20. Answer the following about verdant poems and their creators, for 10 points each:

[10] This work, written partly in prose and verse, includes such chapters as “The Manners of Kings” and “On the Excellence of Contentment.” It is the masterwork of the Persian poet Sa’di.

ANSWER: ***Gulistan*** or ***The Rose Garden***

[10] In addition to writing a series of “Mower” poems that take place in pastoral settings, this 17th century poet also wrote a cautionary tale about the seductiveness of nature in “The Garden.”

ANSWER: Andrew **Marvell**

[10] This poet won Pulitzer for his collection *The Waking*, but may be best known for poems such as “The Rose” and “The Far Field” which were inspired by his childhood in the family greenhouses.

ANSWER: Theodore **Roethke**