

## 2013 ACF Regionals: Transmitido en Quizbowlese ( “This man while traveling through the woods found bathing in a stream the naked goddess Artemis” )

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Packet by St. John's A (Carlo De Guzman, Claire Jones, Deven Lahoti, Jeffrey Fastow) + Rutgers-New Brunswick + Haverford (Jon DeWitt, Tommy Gundy, David Reilley, Thomas Littrell)

1. Paul Majunke flaunted this policy by ducking arrest warrants for much of the year before inexplicably appearing to take his seat in legislative sessions. Its architect defended it by making a comparison to Agamemnon's choice at Aulis shortly before he fortuitously deflected a bullet by waving his hand in greeting, foiling Edward Kullman's assassination attempt. It was justified as necessary to assimilate ethnic Poles living in Posen and stamp out Ultramontanism, and was blamed on Freemasonry – dubbed the “Synagogue of Satan” – in *Etsi multa*. Parliamentary fights about this policy nearly led to the imposition of universal suffrage out of spite thanks to the opposition of the Center Party. Rudolf Virchow coined the name for this policy, under which Education Minister Adelbert Falk created the May Laws. The bane of Pius VII, for 10 points, identify this anti-Catholic program implemented by Bismark, whose name is German for “culture struggle.”

ANSWER: Kulturkampf [or “culture struggle” before mentioned, I suppose]

2. More refined alternates to this equation include the Beattie-Bridgman and Benedict-Webb-Rubin equations. The formulator of this equation rewrote it in terms of reduced variables to obtain the law of corresponding states. Dependency on Pitzer's acentric factor was introduced to a modification of this equation by Soave. Another modification of this equation is used in the petroleum industry because it performs slightly better at the critical point than the Redlich-Kwong equation. That is the Peng-Robinson equation. This equation incorrectly predicts a critical compressibility factor of three-eighths. This equation uses constants a and b to correct for intermolecular forces and finite molecular size, respectively. For ten points, name this modification of the ideal gas law created by a Dutch scientist.

ANSWER: van der Waals equation of state

3. To explain his wife's sore throat, one character in this play recalls an Englishman from Phillipopolis who washed himself with cold water daily. At the beginning of this play, a male character tells the female protagonist that a cloak is a better weapon than a pistol after climbing a drainpipe into her room. That character states he must return home because he has to manage the hotels he inherits from his father. In this play, the servant-girl Louka pretends to be engaged to Nicola. The male protagonist of this play claims not to have received a portrait inscribed “to my chocolate cream soldier” from the main female, who was engaged to Sergius Saranoff. For 10 points, name this work that ends with Raina Petkoff professing her love for the Swiss Captain Bluntschli, a play by George Bernard Shaw with a title from Virgil.

ANSWER: Arms and the Man

4. Mary McGrory used the phrase “Christmas morning of our lives” to describe this man's national convention speeches, in which he promised to “talk sense to the American people.” This serial womanizer had a scandalous ten-year affair with married actress Marietta Tree. William Gallagher won a Pulitzer for a photo of this man revealing a hole in his right shoe, while he won his first major victory after Dwight Green's unpopular response to the Centralia Mining Disaster. Stewart Alsop made a famous quip about this man, who promised to wait “until Hell freezes over” for an answer from Valerian Zorin. This running mate of John Sparkman and Estes Kefauver was the namesake grandson of Cleveland's second vice president, and served as UN Ambassador during the Cuban Missile Crisis. For 10 points, name this Democrat and governor of Illinois derided as an “egghead” during his two failed presidential runs against Dwight Eisenhower.

ANSWER: Adlai (Ewing) Stevenson II

5. This composer included an F-sharp minor depiction of Polchinelle in a collection of piano pieces that includes his *Elegie in E-flat Minor*. That collection by him includes a piece with the repeated progression: C-sharp minor - E major - D-sharp minor - D major 6/4 [“six-four”] - G-sharp seventh. This composer of Opus 3 *Morceaux de fantaisie* made recordings of all his piano concertos with the Philadelphia Orchestra conducted by Ormandy and Stokowski. The second of those piano concertos opens with eight bell-like chords in C minor for the soloist before the orchestra enters. In another work by him, the eighteenth variation in D-flat inverts the theme of another composer’s Caprice No. 24 in A minor. For 10 points, name this Russian composer of *Prelude in C-sharp minor* and *Rhapsody on a Theme of Paganini*.

ANSWER: Sergei (Vasilievich) Rachmaninoff

6. The principle chemosensory organ of these organisms is the amphid. The first transposon found in this organism was the founding member of the Tc1/*mariner* family and was found by analysis of the *unc-54* gene. Two commonly studied strains of this organism are Bergerac and Bristol, and they are grown on NGM. Due to crowding, starvation or high temperature, their development can be sidetracked to the dauer stage. This organism can be either XO or XX, corresponding to a male and self-fertilizing hermaphrodite, respectively. Mello and Fire discovered RNA interference in this organism, and it was also studied by Sydney Brenner. For 10 points, identify this nematode model organism, which was the first multicellular organism to have its genome sequenced.

ANSWER: Caenorhabditis elegans [prompt on nematodes or worms]

7. One artist with this surname depicted a desperate woman wrapped in a blanket cradling an ailing child on the deck of a boat that had just been towed back out to sea by the Thai navy. That work is found in the series “The Boat of No Smiles,” which helped convince Carter to grant amnesty to the Boat People. Post-industrial landscapes were included in 1975’s *New Topographics* by Robert, who shares this surname with the aforementioned man who won the Pulitzer for a photo of a bound man in a flannel shirt next to a police chief, who holds a .38 revolver to his head. “Saigon Execution” was captured by a photographer with this surname, also held by a man who took a trip with Cedric Wright and worked with Fred Archer to develop the sensitometric Zone System. That man’s memorable shots include one snapped after pulling off Route 84 near Hernandez, and another showing a monolithic stone formation in Yosemite. For 10 points, name this photographic surname most famously held by Western photographer Ansel.

ANSWER: Adams [accept answers of Eddie, Robert, or Ansel Adams]

8. One character in this work recalls eating tree bark and skinning cats to survive, while being transferred across the Franco-Belgian border repeatedly. That figure in this work is a dockworker who hangs himself after being forced to militarily supply a country against whom he led a shipping boycott. This novel, in which Little Loewy appears, refers to the first person singular as a “grammatical fiction”. After the arrest of Ivanov, the interrogation of the protagonist is taken over by Gletkin, who accuses the protagonist of plotting against Number One. Conversations pass between the protagonist and his neighbor in cell 402 by tapping the wall in, for 10 points, what work, which ends with the execution of Rubashov in the name of Communism, a novel by Arthur Koestler?

ANSWER: Darkness at Noon [or Sonnenfinsternis or Solar Eclipse]

9. The economic damage inflicted by responses to this phenomenon are reflected by the sacrifice ratio. The opportunity costs of *this* are often referred to as “shoe leather costs. Academic predictions that it would be triggered by monetary overhang in 1990s Europe proved right everywhere except Hungary, which was then judged to have already begun liberalization. It is represented by pi in the Fisher Equation, which uses it to compare real and nominal interest rates. The Mundell-Tobin effect posits that there is not a direct relationship between nominal interest rates and *this*. Robert Gordon developed the “Triangle Model” of this phenomenon,

which assumes adaptive expectations, supply shocks, and increases in aggregate demand causes its three main types. Plotted in the Philips curve against unemployment and often considered in cost-push and demand-pull varieties, for 10 points, name this rise in price level over time.

ANSWER: Inflation

10. Sequences of this data structure are used in a data structure created by William Pugh. This data structure was first developed by Allen Newell, Cliff Shaw and Herbert Simon for use in IPL. This is one of the simplest data structures one can build out of conses in Lisp. A dummy object used to simplify boundary conditions in these data structures is called a sentinel. Their "unrolled" type uses the cache to increase performance by storing just enough elements in each section to fill a cache line. Their last element is usually null, but it can reference their first element to form a "circular" one of these data structures. They are often used to implement stacks and queues. These dynamically allocated data structures also come in a "doubly" variety. For 10 points, identify this data structure constructed of nodes with a data field and a pointer to the next node.

ANSWER: linked list

11. During this war, Jorg Jenatsch took control over a controversial court in Valtellina and sentenced the head of the Planta family to be pinned to the floor with an axe, which he then eagerly carried out personally. The resulting *Bundner Wirren*, or Confusion of the Leagues, had to be put down by Henri de Rohan, whose own revolts during this conflict forced the Treaty of Montpellier. One general in this war was hacked to death in bed by Scotsmen under Walter Leslie. Southern Europe's last major bubonic plague outbreak occurred after the death of three Gonzaga brothers triggered the War of the Mantuan Succession. It saw Spanish *tercios* win at Nordlingen but fail disastrously at Breitenfeld, leading to the death of the Count of Tilly. Wallenstein lost at its Battle of Lutzen, which claimed the life of Gustavus Adolphus. For 10 points, name this massive European conflict resolved by the Peace of Westphalia.

ANSWER: Thirty Years' War [anti-prompt on specific sub-theaters like "War of the Mantuan Succession;" accept Bundner Wirren before mentioned; anti-prompt on "Huguenot rebellions," but DO NOT accept anything about the Wars of Religion]

12. This god once shot an arrow into the middle of a field, which he set on fire after sending his future son-in-law in after the arrow. Later, that son-in-law tied this deity's hair to the rafters while escaping his palace with his daughter. One story tells how this god created five other deities from the chewed-up fragments of a necklace. This god rescued the eighth daughter of a pair of earth deities by turning her into a comb, then intoxicating a certain creature with rice wine and trapping its eight heads in a series of gates. During his time in Izumo, this god retrieved the sword Kusanagi from the corpse of the aforementioned dragon Yamata no Orochi. He was banished from the heavens after throwing a flayed horse at his sister, who hid in a cave afterwards. For 10 points, name this Shinto god of storms, the son of Izanagi and brother of Amaterasu.

ANSWER: Susano'o [or Susanoo; or Susanowo; or Susanowa; or Takehaya Susanoo-no-Mikoto; or His Swift Impetuous Male Augustness]

13. In response to accusations made by a court, this character replies "I have eaten the King's bread and I am true to the King." This character refuses to believe that another character is his enemy because that enemy "always had a pleasant word for him". After refusing a bribe of two shining guineas, this character is reminded that "Jemmy Legs is down on" him by the Dansker. He earns the ire of the master-at-arms after spilling his soup onto the ship's deck, though he accidentally kills him later in reaction to accusations of mutiny. That crime forces Captain Edward Vere to order the execution of this character. For 10 points, name this enemy of John Claggart and "Handsome Sailor,"

the title character of a Herman Melville novella about a foretopman.

ANSWER: Billy Budd [accept either; or William Budd]

14. One intrinsic property of materials that exhibit this phenomenon can be determined using Arrott plots. One model of this phenomenon leaves out the non-diagonal terms of the spin matrices, keeping only the components along the field direction, in studying the Heisenberg Hamiltonian. It is a result of the quantum mechanical exchange interaction. Although its constituents do not exhibit this phenomenon, Heusler alloys do. For materials with this property, plotting M against H yields a value for remanence when H equals 0 on a hysteresis curve. Weiss suggested that materials that exhibit this phenomenon were composed of domains. It disappears above the Curie temperature. This phenomenon occurs when the spins of unpaired electrons line up parallel to each other. For 10 points, identify this type of magnetism typified in cobalt, nickel, and iron.

ANSWER: ferromagnetism [prompt on magnetism; accept antiferromagnetism around “exchange interaction”]

15. During a siege, this man supposedly crippled an enemy general with a potshot from his amazing rifle *Sangram*, prompting the city's women to light themselves on fire. This ruler won that battle by ordering a hill built to raise his cannon and defeating the forces of the twins Jaimal and Patta. This ruler overhauled the *zamindar* class by eliminating hereditary holdings and standardizing the *mansabdar* system, which awarded ranked echelons of land or gold. This taker of Chittorgarh and foe of Pratap Singh employed Birbal and Raja Todar Mal, who oversaw a series of reforms modeled on Sher Shah Suri, who forced his father into exile. His marriage to Mariam uz-Zamani ended a lengthy Rajput conflict a decade before he built the “city of victory,” Fatehpur Sikri. The Nine Jewels headlined the court of this student of Bairam Khan, who beat Hemu at Second Panipat. For 10 points, name this son of Humayun, the greatest Mughal emperor.

ANSWER: Abu'l Fath Jalal-ud-Din Muhammad Akbar the Great [or Akbar I]

16. This philosophical position is explained in one work using a cylindrical toy filled with balls of various sizes and colors. This theory can be modeled by Newtonian forces operating as a sieve according to Elliot Sober, who critiqued a “would-be vampire [killer]” who likened it to Skinner's behaviorism in a text co-written with Piatelli-Palmarini. An architectural term from renaissance archways was borrowed to describe a consequence of this theory by Richard Lewontin, whose “spandrels” were attacked in the aforementioned work by Jerry Fodor. A dubious argument found in *Warrant and Proper Function* uses some dude named Paul's encounter with a tiger to claim that this theory implies humans cannot evaluate truth; Alvin Plantinga thus declared it an argument against Naturalism. Pierre Teilhard inspired a Theodosius Dobzhansky work extolling “the light of” this theory. For 10 points, identify this theory philosophically treated in works like *The Nature of Selection* and *What Darwin Got Wrong*.

ANSWER: Theory of Evolution [or Natural Selection; accept any variant types of evolution; ]

17. Climbers wishing to ascend this peak are often forced to stay in the Refuge of the Eleven, a hotel made of a gigantic mobile home perched precariously over a sheer cliff. This home to the “World's Nastiest Outhouse” is the source of a river running through Armavir and Krasnodar, the Kuban. This mountain's west summit was first scaled in 1874 by an expedition led by a man who had scaled the Zinalrothorn a decade earlier, Florence Crauford Grove. Like a separate mountain range to the east that contains Mount Damavand, this peak derives its current name from the primordial mountain of Zoroastrianism. This inactive volcano was previously known as Strobilus, and regarded as the location where an eagle ripped the liver from a chained Prometheus. For 10 points, name this 5600-meter high mountain that straddles the Eurasian border in the Caucasus near the border of Georgia and Russia.

ANSWER: Mount Elbrus [or Minī taw]

18. One of these poems describes a constellation known as Fruit-Garland that is among the stars of Grief-Land. Another of these poems describes the “bliss of little creatures that stay in the womb that carried them forever,” after describing a creature that

“gazes into openness with all its eyes.” In the fifth of these, the speaker asks about travellers who are “even more transient than we are ourselves,” before mentioning an urn with the inscription “Subrisio Saltat: the Saltimbanque’s smile.” The first of these poems asks if the reader has “remembered Gastara Stampa sufficiently yet” after asking “Who, if I cried out, would hear me among the angelic orders?” in its opening lines. For 10 points, name this collection of ten poems by Rainer Maria Rilke.

ANSWER: Duino Elegies [or Duineser Elegien]

19. The *nahn* ceremony in this religion involves the chewing of three pomegranate leaves, which gives an individual spiritual immortality. In the navjote rite of passage, a priest gives a child a white undervest known as a *sudreh* and wraps a lamb’s wool cord made of 72 threads, the *kushti*, three times around the waist. Virtuous deceased members of this religion, rather than being dragged by a demon into the House of Lies, are led by Daena across the Chinvat Bridge and into heaven. Members of this religion worship in fire temples. Because corpses in this religion are exposed to druj, they are left for birds of prey on Towers of Silence. This religion’s central texts include the *Yasna*, the *Gathas*, and the *Avesta*. For 10 points, name this dualist religion in which the evil Ahriman clashes with Ahura Mazda, named for its Persian founder.

ANSWER: Zoroastrianism [or Magianism; accept Mazdaism until “Ahura Mazda” is read]

20. A Jacques de Gheyn engraving sharing a title figure with this work shows that figure standing behind a crossbowman, manipulating his arms to point the weapon directly at the viewer. The artist of this work used blue pigments washed with yellow glaze to achieve the odd green hue on the central figures *morsmouwen*, or “mess sleeves.” A laundry basket may have been painted over in the lower right of this painting, which is currently occupied by tiles decorated with a cupid motif and a small foot-warmer. A bread basket and copper pail hang next to the window at left of this piece, whose central figure wears a yellow top with a blue apron and holds a red clay receptacle. Often conjectured as a sexual allegory, this work’s title is belied by its setting of a Dutch kitchen rather than a barn. For 10 points, name this Vermeer painting of a servant pouring a jug filled with a certain liquid.

ANSWER: The Milkmaid [or Servant Pouring Milk or De Melkmeid or Het Melkmeisje; accept The Kitchen Maid before “Kitchen,” prompt afterward]

Tiebreaker. The government of this polity was based on the Ordinances of Justice developed by Giano della Bella, and one prominent post in this city was the Gonfaloniere of Justice. After the murder of the Abbot of Vallombrosa, this city’s forces were dealt a crushing defeat at the Battle of Montaperti due to the treachery of Bocca degli Abati. Later, this city fought the War of the Eight Saints against Pope Gregory XI, leading to the end of the Avignon Papacy. That same year saw a revolt of wool carders demanding inclusion in this city’s trade guilds. That Revolt of the Ciompi was suppressed by an ancestor of this city’s ruling family, which would later be targeted by the Pazzi Conspiracy, feud with the monk Savonarola, and produce members such as Cosimo and Lorenzo the Magnificent. For 10 points, name this birthplace of the Italian Renaissance, a city on the Arno long ruled by the Medici.

Answer: Florence

1. In one play, this character blackmails an official for a monopoly of spirituality at government executions on Bar Beach and forms the Church of the Apostolic Salvation Army. For 10 points each:

[10] Name this character, a charlatan “prophet” who is hounded by the trader Amope and attacked by her husband Chume in another play.

ANSWER: Brother Jero [or Brother Jeroboam; accept either name preceded by “Prophet” or “General” ]

[10] *The Trials of Brother Jero* and *Jero’s Metamorphosis* were written by this Nigerian

playwright of *The Strong Breed* and *Death and the King's Horseman*.

ANSWER: Akinwande Oluwole "Wole" **Soyinka**

[10] Soyinka introduced a slave chorus and a pantomime of the Wedding at Cana to his adaptation of this Euripides play, in which Agave leads the followers of Dionysus in murdering her son Pentheus.

ANSWER: *The **Bacchae***

2. The highly policed trade in this commodity required it to pass from the metaxopratai, who bought the raw material, though the katartarioi, metaxarioi, and vestiopratai guilds. For 10 points each:

[10] Name this commodity, which the Byzantine Empire monopolized by exploiting their position on a namesake trade route originating in China.

ANSWER: **Silk**

[10] More than you ever wanted to know about the Byzantine silk trade can be found in this essential historical text, a commercial manual compiled for the governor of Constantinople beginning around the reign of Leo the Wise.

ANSWER: ***Book of the Prefect*** [or ***Book of the Eparch*** or ***To Eparkhikon Biblion***]

[10] A healthy slice of the Byzantine silk industry was pretty much plundered wholesale from Corinth and Thebes by Roger II of Sicily during this conflict, which saw Louis VII and Conrad III fail to retake Edessa. It did succeed in wresting Lisbon from the Moors.

ANSWER: **Second Crusade**

3. This physicist's theory of specific heat models the atoms of a solid as independent harmonic oscillators. For ten points each:

[10] Name this person whose namesake field equations are at the center of his theory of gravity, general relativity.

ANSWER: Albert **Einstein**

[10] This man's solution to the Einstein equation describes a stationary, homogeneous universe with nonzero cosmological constant, filled with rotating dust. He also showed that any logical system capable of supporting Peano's axioms could not be both consistent and complete.

ANSWER: Kurt **Gödel**

[10] Gödel's solution was the first to show the possibility of these entities; in his solution, the rotation tilts the light cones, creating them. Their existence would imply the ability to travel back in time.

ANSWER: **closed timelike curves** [or **CTCs**]

4. During the American Revolution, France used this country to set up the fictitious Roderigue Hortalez and Co. out of the Lesser Antilles to supply arms to the rebels. For 10 points each:

[10] Identify this European country whose colonial governor, Bernardo de Galvez, ran British forces out of the Gulf region after joining the war in 1779.

ANSWER: Kingdom of **Spain**

[10] All of Louis XVI's economic ministers supported the venture except this author of the *Réflexions*, a rival of Necker whose efforts to implement a single land tax were hampered by the fact that everyone thought he was dick.

ANSWER: Anne-Robert-Jacques **Turgot**, Baron de Laune

[10] All that international intrigue was organized by this Frenchman, who cooked up the scheme while chasing the transsexual spy Chevalier d'Eon around London. Though he's better known for other stuff, he was apparently so proud that troops supplied by his efforts won at Saratoga that he overturned his carriage racing to tell Paris the news.

ANSWER: Pierre **Beaumarchais** [really!]

5. Identify some notable players of the tenor saxophone, for 10 points each.

[10] This saxophonist, known for his "sheets of sound" approach, musicalized his

spiritual aspirations in the album *A Love Supreme*.

ANSWER: John (William) Coltrane

[10] This musician, nicknamed “Prez”, was famed for his time with the Count Basie Band and for his collaborations with Billie Holiday. His namesake tune is titled “[his name] Leaps In”.

ANSWER: Lester (Willis) Young

[10] This musician was tenor saxophonist and primary composer for Art Blakey’s Jazz Messengers and a co-founder of Weather Report with Joe Zawinul.

ANSWER: Wayne Shorter

6. After separating himself from Lot, this man later rescued him and his household at the Battle of the Vale of Siddim. For 10 points each:

[10] Name this patriarch of the Israelites, who received a thousand pieces of silver from King Abimelech after revealing that his wife Sarah was indeed technically his sister, as he had previously claimed.

ANSWER: Abraham [or Abram; or Avraham; or Ibrahim]

[10] After the death of his wife Sarah, Abraham married this woman and had six children with her. Members of the Baha’i faith believe they are the descendants of both Sarah and this woman.

ANSWER: Keturah

[10] Some Jewish philosophers, including Rashi, believe that Keturah is actually this woman, who was first exiled from Abraham’s household at Sarah’s request after she gave birth to Ishmael.

ANSWER: Hagar [or Agar; or Hajar]

7. Clinical features of this syndrome include a short neck with webbed appearance, multiple pigmented nevi, and low-set ears. For 10 points each:

[10] Name this genetic condition in which females only a single X chromosome.

ANSWER: Turner syndrome

[10] This second most common cause of Turner syndrome occurs when some cells lose their X chromosome during the early stages of embryonic development. In this condition, cells within a person have a different genetic makeup.

ANSWER: X chromosome mosaicism

[10] Many individuals have a bicuspid one of these valves, which means that this valve that regulates blood flow to the major blood vessel from the heart has only two, instead of three, components.

ANSWER: bicuspid aortic valve

8. This man inspired a poem in which the title figure lives atop a pillar for thirty-seven years and describes himself as “the basest of mankind” and a “sinner viler than you all.” For 10 points each:

[10] Name this English poet, whose death at twenty-two inspired another poet to write “St. Simeon Stylites” and “In Memoriam”.

ANSWER: Arthur Henry Hallam [prompt on “A.H.H.”]

[10] “St. Simeon Stylites” and “In Memoriam, A.H.H.” are by this Victorian poet of “Charge of the Light Brigade”.

ANSWER: Alfred (Lord) Tennyson, 1<sup>st</sup> Baron Tennyson

[10] Hallam’s death also inspired Tennyson to write this poem in which the speaker longs “for the touch of a vanished hand” and laments that “the tender grace of a day that is dead / Will never come back to me.”

ANSWER: **“Break, Break, Break”**

9. With Richard Lyons, this man names the treaty that sought to end the Atlantic slave trade, and he also helped settle the Trent Affair. For 10 points each:

[10] Name this Secretary of State under Lincoln and Johnson whose “folly” was the 1867 purchase of Alaska.

ANSWER: William (Henry) **Seward**

[10] Seward's concerns may have triggered the exposure of the bizarre, possibly-fictional 1861 plot to kill Lincoln as he visited this city, where Allan Pinkerton and some femme fatale named Kate Warne allegedly foiled a murderous hairdresser. Two months later, the 6<sup>th</sup> Massachusetts Militia was attacked here by rioters on Pratt Street.

ANSWER: **Baltimore**

[10] Seward joined Johnson in this disastrous 1866 speaking campaign meant to raise support for Reconstruction. Johnson's many questionable actions during this effort include repeatedly comparing himself to Jesus, screaming “I don't care about my dignity” to a group of reporters, and talking to people from Cleveland.

ANSWER: **Swing Around the Circle** tour

10. Identify these ancient thinkers who used some suggestive imagery to describe philosophical concepts, for 10 each:

[10] This man's *De Rerum Natura* inspired the belief that the universe is governed by “the swerve,” a presumably R&B-accompanied path followed by particles.

ANSWER: Titus **Lucretius** Carus

[10] This thinker is often seen as a major intersection of Greek, Jewish, and Christian thought, and recast Genesis in light of Platonic forms. His *The Contemplative Life* relates how the Therapeutae assaulted his city with toplessness by convincing women that wrapping their breasts in bondage cords would allow them to “sing like the angels.”

ANSWER: **Philo** of Alexandria

[10] This Stoic Roman Emperor espouses rational thought in favor of sexual preoccupations, which he derided as “the rubbing together of abdomens” in his *Meditations*.

ANSWER: **Marcus Aurelius** Antoninus Augustus

11. *The Narrative of Arthur Gordon Pym* rests on the mantle next to this man in *Not to Be Reproduced*, and his face is engulfed in light in the painting *The Pleasure Principle*. For 10 points each:

[10] Name this poet and aristocrat, the major British patron of Surrealism. He gave his estate of West Dean a famous Surrealist makeover that included Dali's *Lobster Telephone*.

ANSWER: Edward (William Frank) **James**

[10] *Not to be Reproduced* and *The Pleasure Principle* were painted by this man, who also painted an egg in a cage in his *Elective Affinities* and featured a cannon in his *On the Threshold of Liberty*.

ANSWER: René (François Ghislain) **Magritte**

[10] Magritte featured this fruit in *The Listening Room* and painted a large one in lieu of the central figure's face in *The Son of Man*.

ANSWER: green **apple** [prompt on “apple”]

12. The Hess diagram plots the relative number of stars in each region of this diagram. For 10 points each:

[10] Name this two-dimensional scatter graph of stars whose horizontal axis is stellar temperature or color index and vertical axis is absolute magnitude or intrinsic luminosity.

ANSWER: **HR** diagram [or **Hertzsprung-Russell** diagram; or **HRD**; prompt on **CMD**; prompt on **color-magnitude** diagram; prompt on **temperature-luminosity** diagram]

[10] This Japanese astrophysicist showed that there is a boundary on the HR diagram cooler than which stable stars cannot exist. He also names a path taken by some protostars on the HR diagram.

ANSWER: Chushiro **Hayashi**

[10] As a protostar contracts, its core gets hotter and its opacity decreases according



to this person's opacity law, which approximates it as density times temperature to the negative 3.5. This Dutchman independently derived a formula that relates the real and imaginary parts of an analytic complex function.

ANSWER: Hendrik Anthony "Hans" Kramers

13. Answer some questions about sextets, for 10 points each:

[10] A Richard Dehmel poem was the basis for this composer's string sextet, *Transfigured Night*. He was the founder of the Second Viennese School and the inventor of the twelve-tone technique.

ANSWER: Arnold Schoenberg

[10] This Minimalist composer won the Pulitzer Prize for his *Double Sextet*. He included parts for tape in *It's Gonna Rain* and *Different Trains*.

ANSWER: Steve Reich

[10] Tchaikovsky's only string sextet is given this epithet, because he wrote one of its main themes in the title city.

ANSWER: "Souvenir de Florence"

14. The title character of this play falls in love with Lorna Moon, his manager's girlfriend. For 10 points each:

[10] Name this play in which violinist Joe Bonaparte risks his hands by becoming a boxer.

ANSWER: Golden Boy

[10] This American playwright wrote *Golden Boy*. He wrote about union leader Harry Fatt's attempt to quell a taxi drivers' strike in *Waiting for Lefty*.

ANSWER: Clifford Odets

[10] *Golden Boy* and *Waiting for Lefty* were both premiered by this socially conscious drama troupe co-founded by Harold Clurman and Lee Strasberg, which was the first to use Method acting.

ANSWER: The Group Theatre

15. Answer the following about Germany at the end of World War II, for 10 points each:

[10] This March 1945 order called for the destruction of German factories, supply depots, and communication lines in order to deny them to the invading Red Army. It was given an apt historical nickname.

ANSWER: Nero Plan [or Nerobefehl] or Demolitions on Reich Territory Decree or Befehl betreffend Zerstörungsmaßnahmen im Reichsgebiet]

[10] Albert Speer, who sabotaged the Nero Plan, claimed it was the impetus for his final break with Hitler in this memoir, considered one of the essential resources on the upper echelons of Nazi Germany.

ANSWER: Inside the Third Reich

[10] Speer's memoir also relates the politically-consequential marital problems of this Nazi and his wife, Magda, who apparently was revenge-banging Karl Hanke at the end of the war. He was the chief Nazi propagandist.

ANSWER: Paul Joseph Goebbels

16. He wields a yellow spear known as Gáe Buide and a red spear known as Gáe Derg, both of which dealt unhealable wounds. For 10 points each:

[10] Name this figure who slept with the personification of youth, thereby gaining the ability to make any woman fall in love with him by looking at a spot on his forehead.

ANSWER: Diarmuid Ua Duibhne [or Diarmuid O' Dyna; or Diarmid of the Love Spot]

[10] Diarmuid's love spot caught the eye of Gráinne, the intended wife of this hero, who as a result later refused to heal a dying Diarmuid. This man gained wisdom after burning himself while cooking the Salmon of Knowledge.

ANSWER: Fionn mac Cumhaill [or Finn McCool; or Fingal; or Deimne]

[10] This son of Finn McCool narrates the Fenian Cycle that features both Diarmuid and Finn. According to the Tales of the Elders, he later tells the stories of the fianna to Saint Patrick.

ANSWER: Oisín [or Ossian; or Osheen]

17. The *N*-hydroxysuccinimide, or NHS, type of these compounds are commonly used as homobifunctional cross-linkers for amines and as a means to immobilize ligands onto solid supports for affinity chromatography. For ten points each:

[10] Name these compounds whose generic notation is R-C(=O)-O-R' and which have a fruity smell.

ANSWER: esters

[10] This reaction creates an ester by treating a carboxylic acid with an alcohol in the presence of an acid catalyst. High yields can be achieved by removing water via azeotropic distillation using a Dean-Stark trap.

ANSWER: Fischer-Speier esterification

[10] This synthesis uses a namesake type of ester to create substituted carboxylic acids, and should not be confused with acetoacetic ester synthesis. It consists of four steps: enolate formation, enolate alkylation, ester hydrolysis and decarboxylation.

ANSWER: malonic ester synthesis

18. Appropriately, this work introduced the notion that something could become so well known in a discipline that its originator would no longer be given credit when it was used. For 10 points each:

[10] Name this text which originated such terms as “self-fulfilling prophecy” and “Obliteration by incorporation,” the major work of Robert Merton.

ANSWER: *Social Theory and Social Structure*

[10] Merton followed and developed this approach to sociological theorizing that rejects extremes like abstract theory. It relies on formulating theories that can be tested empirically with an eye toward constantly evolving a better scheme.

ANSWER: Middle Range Theory

[10] Merton introduced a paradigm of deviant behavior to model various reactions to anomie, a concept first explored by this French sociologist who wrote *Suicide*.

ANSWER: Emile Durkheim

19. In one poem, the speaker asserts that “dumb swans, not chattering pies, do lovers prove”, and in another, the poet’s muse tells him to “look in thy heart, and write”. For 10 points each:

[10] Name this 108-sonnet sequence, the thirty-first of which notes “with how sad steps” the moon rises.

ANSWER: *Astrophil and Stella*

[10] *Astrophil and Stella* is by Sir Philip Sidney, who wrote a romance for the Countess of Pembroke titled after this mythical pastoral location, peopled by shepherds living in harmony.

ANSWER: Arcadia

[10] Unusually for sonnets of the time, some of the sonnets in *Astrophil and Stella* are written in this dodecasyllabic meter, common in French poetry.

ANSWER: alexandrine

20. This U.S. state is the only state in the Union not to have a modern ship named after it in the United States navy and has a population of just over one million people.

For 10 points each:

[10] Name this U.S. state, the fourth largest in the country by land area, that borders Wyoming, Idaho, and both Dakotas, and is known as “Big Sky Country.”

ANSWER: **Montana**

[10] This city, Montana's most populous, is located in the Yellowstone Valley and known as the "Magic City."

ANSWER: **Billings**

[10] This lake in Montana, bordered by the Salish and Mission mountains, is the largest natural freshwater lake in the western United States (west of the Mississippi).