

## Western Invitational Tournament 2013

Packet by Maryland A (Arun Chonai, Chris Manners, Brian McPeak, Chris Ray)

### Tossups

1. One character in this movie removes his shirt completely upon being told that the Spanish Armada sailed in 1588. That character earlier claimed that his friend “got it on” with the protagonist’s love interest, to which the protagonist simply says, “no they didn’t.” Near the end of this film, one character pulls out a revolver, only to be shot in the ass by the (\*) Steve Buscemi played Danny, who the protagonist had earlier made amends with. The protagonist attempts to earn his father’s trust by challenging Eric to an academic decathlon, and wins the love of the third grade teacher Veronica. For 10 points, name this film in which the title slacker attempts to finish all of his schooling in twenty-four weeks in order to inherit his father’s company, starring Adam Sandler.

ANSWER: Billy Madison

2. One character in this novel is afflicted with edema and taken to Sea Point because she is unable to work further. The title character of this novel witnesses a mother losing her baby while stationed in Jakkalsdriff, before which he refuses to eat while interred in a hospital. That character is taken to a work camp by soldiers after he is accused of growing (\*) pumpkins for rebel forces. This novel’s protagonist promises to transport his mother, Anna, to her childhood farm, but she dies before he can reach that area of South Africa’s Karoo region. For 10 points, name this novel about a hare-lipped gardener by John Maxwell Coetzee.

ANSWER: Life & Times of Michael K

3. Applying a Hadamard gate followed by a CNOT gate causes the control and target bits to have this property. In quantum teleportation, the parties start with qubits with this property. For two state systems, a state maximal for this property is  $\frac{1}{\sqrt{2}}|00\rangle + \frac{1}{\sqrt{2}}|11\rangle$ , which can be used to violate the CHSH inequality as well as (\*) Bell’s inequality. The EPR paradox was about this property’s supposed violation of locality. If the state of two systems cannot be decomposed into a product of individual states, then those systems have this property. For 10 points, name this property of quantum systems in which the states of subsystems are correlated, which Einstein derided as “spooky action at a distance.”

ANSWER: quantum entanglement

4. The only substantial accomplishment of the emperor Probus was completing one of these structures. One of these structures, following the demarcation of the ancient pomerium, was inaugurated by Servius Tullius. The governor Quintus Lollius Urbicus supervised the construction of another of these structures, which was heavily beset by the (\*) Caledonians. Another of these structures has “broad” and “narrow” sections, includes milecastles and turrets built by the Second, Sixth, and Twentieth Legions, and extends from Segedunum in the east to Solway Firth on the west, south of a similar structure built by Antoninus Pius. For 10 points, name these defensive fortifications, including one built by Hadrian to mark the northern boundary of the Roman Empire.

ANSWER: Roman walls [accept Aurelian’s wall, Servian wall, Antonine Wall, and Hadrian’s wall at any point]

5. Following one trial in this region, four people previously convicted to 10 years hard labor for their involvement in the death of a prizefighter had their sentence commuted to one hour, to be served in the office of governor Lawrence Judd. The overthrow of its government was decried as illegal in the Blount Report, which was later contradicted by the testimonies in the (\*) Morgan Report. Despite collecting 38,000 signatures, the Ku’e petition failed to annex this region, whose monarchy was rendered powerless by the Bayonet Constitution. This region’s sovereignty was transferred to the United States with a ceremony on the steps of the Iolani Palace. For 10 points, name this region ruled by Queen Lili’uokalani before becoming the 50th U.S. State.

ANSWER: Hawaii

6. A 5/8 ostinato ends this man’s piano concerto commissioned for the centenary of the founding of G. Schirmer Inc. Iso Briselli refused to play this composer’s violin concerto due to the difficulty of its *perpetuo moto* third movement. Another work by this man features an abrupt transition after the text “one is my father who is good to me,” which is thought to reference the composer’s badly ill father at the time. This composer orchestrated a short prose piece by (\*) James Agee in his *Knoxville: Summer of 1915* and arranged his

most famous work from the second movement of his *String Quartet, Opus 11*; that work was broadcast over the TV at the announcement of JFK's death. For 10 points, name this American composer of the *Adagio for Strings*.  
ANSWER: Samuel Osborne Barber II

7. The tyrosine kinase expressed by the avian sarcoma virus undergoes myristoylation at one of these residues. The conversion of tetrahydrofolic acid to N<sup>5</sup>, N<sup>10</sup>-methylene-THF releases water and this product in the thymidylate synthase reaction. Strychnine antagonizes this compound by binding to the same ligand-gated chloride channels. This compound has the largest allowable area out of any Ramachandran plot. Proline, (\*) hydroxyproline, and this amino acid recur in the primary sequence of collagen. Along with GABA, this compound serves as an inhibitory central nervous system neurotransmitter. This amino acid is not chiral because it has hydrogen as its side chain. For 10 points, name this smallest and simplest amino acid.  
ANSWER: glycine [or gly; or G]

8. This man theorized the WARP and SARP criteria for two good bundles within a budget set, claiming that consumer behavior could be modeled by purchasing choices under Revealed Preference Theory. In his best-known work, which supplanted the efforts of Lorie Tarshis, this man popularized the term “paradox of thrift” to refer to *The General Theory's* discussion of *The Fable of the Bees*. This man championed the (\*) neoclassical synthesis of Keynesian thought promoted by Hicks in that work, co-written with William Nordhaus. This economist and Milton Friedman collaborated on a *Newsweek* column where they took opposite sides. For 10 points, name this first American to win the Economics Nobel, an MIT professor who wrote the textbook *Economics*.  
ANSWER: Paul Anthony Samuelson

9. Operation Nemesis was organized by Shahan Natalie and the Dashnak Party in retaliation for this action, which inspired Raphael Lemkin to introduce a new field of study. Facilitated by the Tehcir Law and a few selective arrests on April 24 known as “Red Sunday,” this action was opposed by the Sassoun, Zeitun, and Van resistance movements. This action was preceded by the failed siege of (\*) Sarikamish, which a leader of the CUP blamed on turncoats siding with Russian forces. Hrant Dink was prosecuted under the infamous Article 301 for “insulting Turkishness” by acknowledging this action. Enver Pasha was the architect of, for 10 points, what campaign of mass killing during World War I perpetrated by the Ottomans on a certain Caucasus ethnic group?  
ANSWER: Armenian Genocide [accept equivalents; accept the Great Crime or Medz Yeghern]

10. Harold Bloom's *The Visionary Company* highlights the similarities in the portrayal of natural death in the third stanza of this poem to Coleridge's “Frost at Midnight.” The subject of this poem is compared to a “gleaner” who “keep[s] steady thy laden head across a brook” and can be found both “by a cider press, with patient look” and “sitting careless on a (\*) granary floor.” The speaker of this poem rhetorically inquires, “Where are the songs of Spring?” claiming that the subject should “think not of them.” Its subject is described as a “close bosom-friend of the maturing sun” which conspires to “load and bless with fruit the vines that round the thatch-eaves run.” For 10 points, name this John Keats poem addressed to a season “of mists and mellow fruitfulness.”  
ANSWER: “To Autumn”

11. One character in this work mocks the study of Virgil and Ovid, suggesting that no book bigger than the alphabet is needed to answer questions about life. That character draws two points and asks which of three paths represents the true distance between them. This work imagines a man below deck on a ship who can't tell whether the ship is docked or not, presenting an argument further bolstered by considering the occurrence of (\*) tides. Divided into four “days” of arguments between Sagredo, the Aristotle fanboy Simplicio, and the autobiographical Salviati, its publication resulted in the author spending his last days under house arrest for heresy. For 10 points, name this work which defends the heliocentric model championed by its author Galileo.  
ANSWER: Dialogue Concerning Two Chief World Systems [or Dialogo sopra i due massimi sistemi del mondo; be lenient about the title, particularly if they add “the” before “two”]

12. If a theory with this property is satisfiable then it has a model of every infinite cardinality by the Lowenheim-Skolem theorem. An algebraic closure either has the same cardinality as the initial field or has this property. The sets of a sigma algebra are closed under this type of union. Zorn's lemma is frequently used rather than induction on sets without this property. Sets with cardinality (\*) Aleph-Naught have this property. One proof that a certain set does not have this property lists the elements and changes the  $i^{\text{th}}$  digit of the  $i^{\text{th}}$

entry for all  $i$ ; that is Cantor's diagonalization argument. For 10 points, name this property of a set which is not possessed by the reals, but possessed by the rationals and integers, defined as having the same cardinality as the natural numbers.

ANSWER: countability [or countably infinite; accept word forms; prompt on infinite]

13. This non-Swiss artist's time in Munich produced an image of a red-hewed man facing away and blowing a conch horn next to a floating, topless mermaid entitled *Siren and Triton*. Like the landscape *Prometheus*, that work arose from a formative period this man spent reinterpreting Arnold Böcklin. Another painting by him features a marble torso juxtaposed with a characteristic banana bunch, as well as a background locomotive this artist frequently depicted passing through Montparnasse station. This artist of *The (\*) Uncertainty of the Poet* is best known for painting a girl playing with a hoop before a single looming shadow. For 10 points, name this metaphysical artist of *Mystery and Melancholy of a Street*.

ANSWER: Giorgio De Chirico

14. The protagonist's appointment of the servant Guillot nearly precludes the central event of this work, which ends with Zaretsky commanding a horse-drawn carriage. A woman in this work finds herself in a house of bizarre creatures after she is pursued by a talking bear, who delivers her to another man. This work's translation led to a feud between Edmund Wilson and (\*) Vladimir Nabokov. The protagonist takes out his distaste for society parties by hitting on his friend's fiancée, and criticizing her sister's love letter as naïve. A slight during a name-day celebration in this work leads to the fatal shooting of Lensky in a duel by the main character, who loses his chance at love with Tatyana. For 10 points, name this verse novel by Alexander Pushkin.

ANSWER: Eugene Onegin [or Yevgeny Onegin]

15. A grotto at one of these kinds of locations houses Giambologna's *Bathing Venus*. That location of this kind houses a large amphitheatre and an Egyptian obelisk, is found behind the Pitti Palace, and rises out of Boboli Hill. The "moonlight" one in Agra is perfectly aligned with the "charbagh," the location of this type in the Taj Mahal complex. Andre Le Notre designed several of these places for Louis XIV, most notably the ones at (\*) Versailles. Another of these places is situated to the west of the Serpentine Bridge, separating it from Hyde Park. Several of these built in accordance with Zen philosophy include sparse bits of moss and rock. For 10 points, name these places, including the Kensington ones in London and some fictional "hanging" ones at Babylon.

ANSWER: gardens [accept a buzz of parks until "Boboli" is mentioned]

16. This action creates the necessity of using a *siwaak*, whose ideal size, flexibility, and frequent use are explicitly delineated in the Quran. The "law of necessity" in Surat al-Baqarah principally concerns this activity, and, like chaste women, its central materials may be provided by Dhimmi. This is the most recognizable activity halted when white and black threads become distinguishable. This activity is regulated by the opening of Surat al-Ma'ida, which places restrictions on this action for those (\*) substances which are raffled with arrows, sacrificed on an altar, suffered a violent death, or attended to by carrion. The term "halal" is most often used in regard to, for 10 points, what action which is done after sunset during Ramadan?

ANSWER: eating stuff [accept word forms and synonyms]

17. This author closed by entreating "Learn to labor and to wait" in a poem that notes "For the soul is dead that slumbers/And things are not what they seem," spoken from "the Heart of the Young Man." A youth is found frozen to death after charging up a snowy peak with a banner proclaiming the title Latin command to go "ever higher" in his poem "Excelsior." This author of "A (\*) Psalm of Life" wrote a poem in which Father Felician buries a man whose daughter is loved by Gabriel Lajeunesse; that poem begins "this is the forest primeval." This author used Kalevala meter for a poem based on Ojibwe legends, whose title character marries Minehaha. For 10 points, identify this American poet of *Evangeline*, *The Song of Hiawatha*, and "Paul Revere's Ride."

ANSWER: Henry Wadsworth Longfellow

18. In the *Heimskringla*, this god succeeds Odin as the leader of the Swedes after Odin's death; he eventually died, had himself marked for Odin using a spear, and was burned. Loki claims this god was urinated upon by the daughters of Hymir. In the *Gylfaginning*, this god was said to be called on by hunters and voyagers, and he was exchanged as a (\*) hostage for Hoenir. After his marriage, this god spent half of the year in Thrymheim before deciding he did not like living in the mountains and hearing the cries of wolves, going back to his residence

at Noatun. This god's wife chose him after only being able to look at his feet and mistaking him for Baldur. For 10 points, name this husband of Skadi, the Norse god of the winds and the sea.

ANSWER: Njord

19. David Lewis used this substance to illustrate the problem of the many. According to Jean Buridan, Socrates expressed a preference for this substance when Plato warned him what would happen if the next thing he said was a lie. In "Of Miracles," Hume presents an Indian prince who was incredulous after seeing the transformation of this substance. A character named "Oscar" describes this substance differently than his (\*) counterpart, who uses it to refer to XYZ, in the "twin earth" experiment proposed by Hilary Putnam. Because of a change in this substance, Heraclitus said of a certain source of it that no man steps in it twice. For 10 points, name this substance which Thales held as the basis of the Earth, privileging it over earth, air, and fire.

ANSWER: water [or H<sub>2</sub>O; or XYZ before mention; prompt to be less specific than river; accept clouds in the first sentence, even though that's a bit of a misreading of Lewis's argument]

20. During this battle Captain Benjamin Hallowell was afraid he had fired on his own side until he hailed a battered ship and received the reply "Bellerophon, going out of action disabled." This battle would see the ship *Franklin* attacked by *Swiftsure* and *Leander*, a ship that would also pummel the *Peuple Souverain*. It opened with shots between the (\*) *Goliath* and the *Guerrier*. A famous incident from this battle was the death of the son of Captain Casabianca. This battle also saw the explosion of the massive 118-gun flagship *L'Orient*. Succeeded by an unsuccessful Siege of Acre and preceded by the storming of Alexandria, for 10 points, name this decisive 1798 British victory over French forces in Egypt that made Horatio Nelson a national hero.

ANSWER: Battle of the Nile [or Battle of Aboukir Bay]

#### Tiebreakers

21. The meridional transport of these features is related to the curl of the wind stress by the Sverdrup balance. The Coriolis force, when balanced by a pressure gradient, is the cause of geostrophic ones. The Coriolis force also causes the direction of the net transport of these features to be perpendicular to the direction of the wind in (\*) Ekman transport. One system of these features is driven by the formation of cold, saline bottom water that is later upwelled, and is called the thermohaline circulation. Systems of these features can link to form ocean gyres. For 10 points, including the North Atlantic Drift and the Gulf Stream, name these large scale motions of ocean water.

ANSWER: ocean currents

22. One character in this novel dies of a heart attack while masturbating at home the very same day that Fat Stew, a man who taught a course on "My Time in the Pacific," dies. Early on in this novel, the protagonist has part of his ear bitten off by the dog Bonkers, who belongs to the family that runs the Steering School. Duncan is forced to wear an (\*) eye-patch after a car accident in this novel that also involves the title character's wife, who bites off part of Michael Milton's penis. The protagonist marries Helen Holm in this novel shortly after publishing his first story while in Vienna, before breaking out with *The Pension Grillparzer*. For 10 points, name this novel about a man conceived when his mother takes advantage of a dying turret gunner, written by John Irving.

ANSWER: *The World According to Garp*

## Bonuses

1. It's 2013 and Joseph Kony still hasn't been found. Answer some questions about where he might be, for 10 points each.

[10] There is a slim chance Joseph Kony is located in this nation, where he was born. Much of the violence carried out by Kony's Lord's Resistance Army occurred in this nation, whose capital is Kampala.

ANSWER: Republic of **Uganda**

[10] Kony might be in this nation, where the city of Ramciel is being built near the world's largest grass swamp. Salva Kiir Mayardit leads this nation, home to runner Guor Marial, who competed under the Olympic flag in 2012.

ANSWER: Republic of **South Sudan** [do not accept or prompt on "Sudan"]

[10] Kony is most likely hiding in this nation, where his bodyguard was killed in Djema in 2012. Most of this nation's people speak Sangho instead of its official language, French.

ANSWER: **Central African Republic**

2. Elsdon Best described these individuals as leaders of *hapu*, though by the 19<sup>th</sup> century they had taken on more political identities by leading large groups of their *iwi* against colonial occupation. For 10 points each:

[10] Identify this class of individuals who included Hono Heke and Hongi Hika, who led resistance against the British. Over 500 of them signed the Treaty of Waitangi.

ANSWER: **Rangatira** [prompt on Maori **chieftains** or similar answers]

[10] The amateur state-building of the "Baron" de Theirry inaugurated four decades of grotesque hyperviolence in New Zealand after *rangatira* like Hongi Hika obtained these weapons, which name a series of Maori conflicts.

ANSWER: **muskets** [prompt on **firearms** or **guns** equivalents, but **muskets** is the proper name for the wars]

[10] Hone Heke cut down James Busby's flagstaff to start the First Maori War, which is often described with this term. It is also applied to a "Great" conflict fought between Charles XII and Peter the Great.

ANSWER: **Northern** War

3. Answer the following about Chinese art, for 10 points each.

[10] In traditional Chinese painting, the Four Gentlemen refer to plants used to symbolize each of the seasons. The orchid symbolized this season, also the inspiration for Botticelli's *La Primavera*.

ANSWER: **spring**

[10] During the Liu Song dynasty, this type of painting was exemplified by the shanshui movement. This type of painting was also exemplified by the northern and southern schools and by artists such as Dong Yuan.

ANSWER: **landscape** painting [accept **scenery** painting]

[10] The most famous Chinese painting is certainly this 12th-century work by Zhang Zeduan, which is actually a 17-foot panoramic scroll that shows a transition from rural to urban scenes along a waterway during the title festival.

ANSWER: *Along the **River** During the **Qingming** Festival* [or *Along the **River** During the **Spring** Festival*; or ***Qingming Shanghe Tu***; there are innumerable ways to translate this title, so accept anything that has both **River** and **Qingming/spring**; also accept anything with both **River** and **Peace**, which could be another way to translate "Qingming"]

4. He would compose the piece "Les mots sont alles" for the "eSACHERe" project celebrating Paul Sacher's 70th birthday. For 10 points each:

[10] Name this avant-garde Italian composer of the series *Chemins* and *Sequenza*.

ANSWER: Luciano **Berio**

[10] Another avant-garde composer was this composer of *Atmospheres* and *Lux Aeterna*, both of which appeared in *2001: A Space Odyssey*.

ANSWER: Gyorgy **Ligeti**

[10] Ligeti's *Poème symphonique* is scored for 100 of these devices, which are used by musicians to keep a steady beat.

ANSWER: **metronomes**

5. After Heracles dies, this figure unsuccessfully attempts to find his sons in Athens and kill them. For 10 points each:

[10] Name this Greek ruler whom Heracles was instructed to serve for twelve years as penance for killing his sons. Through this king, Hera issued Heracles his Twelve Labors.

ANSWER: **Eurystheus**

[10] The first labor was to kill this kind of creature. Its hide was impervious to weapons, so Heracles killed it with its own claws, and then wore its hide as armor.

ANSWER: Nemean **Lion**

[10] After cleaning the Augean stables, Augeas refused to give Heracles the one tenth of his cattle he promised if it could be finished in a day. The angry Heracles killed Augeas and gave his kingdom to this man, Augeas' exiled son.

ANSWER: **Phyleus**

6. The title figure of this poem "makes the solid tree trunks sound again" and claims that "highway dust is over all," for 10 points each:

[10] Name this poem about a "singer everyone has heard," which asks "what to make of a diminished thing."

ANSWER: "The **Oven Bird**"

[10] This eight-line poem by the author of "The Oven Bird" is about "the hardest hue to hold," noting that as "leaf subsides to leaf/So Eden sank to grief, So dawn goes down to day," repeating the title mantra.

ANSWER: "**Nothing Gold Can Stay**"

[10] Both "The Oven Bird" and "Nothing Gold Can Stay" were penned by this American poet who wrote "Mending Wall" and "The Road Not Taken."

ANSWER: Robert **Frost**

7. A famous scene in this play involves the discussion of one characters collection of china, which is riddled with bawdy double meanings and puns. For 10 points each:

[10] Name this play in which Harry Horner beds tons of women using the tried and true "impotence trick," including the naive Margery Pinchwife, who moves to London and clashes with its civilized, yet corrupt denizens.

ANSWER: *The* **Country Wife**

[10] The author of "The Country Wife", William Wycherley, wrote his plays during this period of English history, which occurred following The Commonwealth, which had stifled creativity.

ANSWER: The **Restoration**

[10] This other Restoration playwright wrote the plays *The Feigned Courtesans* and *The Emperor of the Moon* in addition to her novel set partially in Surinam, *Oroonoko*.

ANSWER: Aphra **Behn**

8. Name these organisms that are often used to illustrate genetic principles, for 10 points each.

[10] The recessive low-armored mutation in these organisms prevailed in Loberg Lake. Tinbergen discovered that these organisms demonstrated a mating-ritual-related fixed action pattern by attacking their own mirror images.

ANSWER: **stickleback** fish [or **Gasterosteidae**]

[10] Thomas Hunt Morgan unearthed extensive evidence of genetic linkage in these insect model organisms.

ANSWER: **Drosophila melanogaster** [or common **fruit fly**; or **vinegar fly**; prompt on **fly**; prompt on **Diptera**]

[10] This fungal organism has two mating types that fuse to form a diploid cell, but the diploid is short-lived. Beadle and Tatum studied this organism to formulate the "one gene-one enzyme" hypothesis.

ANSWER: **Neurospora crassa** [or **red bread mold**; prompt on **bread mold**; prompt on **mold**]

9. Items in this game include one that can spin a player's hero up into the air in a cyclone and one that turns a player's hero into a pig, even though it is colloquially referred to as a Sheepstick. For 10 points each:

[10] Name this action-RTS mod for Warcraft III based on a Starcraft map called "Aeon of Strife". Its enigmatic

developer is known only as IceFrog.

ANSWER: **Defense of the Ancients** [or **DotA**; do not accept **DotA II**]

[10] The wonderfully similar sequel to DotA, DotA II, is being developed by this popular game developer. It launched the Steam distribution platform, and revealed plans for a Steam-based living room console in 2012.

ANSWER: **Valve** Corporation

[10] The first iteration of The International, Valve's annual DotA II tournament, was won by this Ukrainian e-Sports organization. They are perhaps best known for their award-winning Counter-Strike team.

ANSWER: **Natus Vincere** [or **Na'Vi**]

10. This novel takes its title from a letter written by Henry James Sr. to his sons. For 10 points each:

[10] Name this novel set mostly in a convent called La Casa del Ejercicios Espirituales de la Encarnacion which follows the narration of several characters, who turn out to be guises of Humberto Penaloza.

ANSWER: *The **Obscene Bird of Night*** [or *El **obsceno pájaro de la noche***]

[10] José Donoso, the author of *The Obscene Bird of Night*, was a novelist from this South American country, also home to Pablo Neruda and Nicanor Parra.

ANSWER: Republic of **Chile**

[10] This contemporary of Donoso described a search for Mexican poet Cesárea Tinajero in *The Savage Detectives* and penned the gargantuan novel 2666.

ANSWER: Roberto **Bolaño** Avalos

11. Answer the following about the graphical misadventures of Pope Pius IX, for 10 points each.

[10] In *Pastor aeternus*, Pius IX confirmed the Petrine primacy as the basis of this doctrine, which is enacted when the pontiff speaks *ex cathedra* and allows the Holy See to make divinely-validated declarations on matters of faith.

ANSWER: Papal **infallibility**

[10] Pius commissioned the *Enchiridion symbolorum*, which was promoted as a core element of faith by James Gibbons, an Archbishop of this U.S city and namesake of the first major catechism created for North America.

ANSWER: **Baltimore**

[10] Pius's encyclical *Ubi Primum* lent modern theological support for the use of "mediatrix" to elevate this figure beyond the intercessory role of other saints. Vatican II also calls her "advocatrix," "auxiliatrix," and "adjutrix."

ANSWER: the **Virgin Mary** [or **Madonna**]

12. Longtime CBS president Frank Stanton served as the network's research grunt for the first major sociological study of this medium. For 10 points each:

[10] Identify this form of media, the subject of an eponymous 1937 research project by the Rockefeller Institute that revolutionized audience survey and examined the infamous broadcast of an H.G. Wells classic in 1938.

ANSWER: **radio** [or the **Radio Project**]

[10] The Radio Project was directed by this founder of Columbia's Bureau of Applied Social Research, who developed the Two-Step Flow model for mass communication and pretty much inaugurated media studies.

ANSWER: Paul Felix **Lazarsfeld**

[10] This philosopher headed up the study's Music Division, but quit in a huff over Lazarsfeld's Madden-esque fascination with unimportant ideas. He collaborated with Horkheimer on *Dialectic of Enlightenment*.

ANSWER: Theodor W. **Adorno** [or Theodor Ludwig **Weisengrund**]

13. The familial progression central to this series begins with Adelaide Fouque, a neurotic nymphomaniac whose marriage to a laborer and affair with a smuggler produces Pierre, Ursule, and Antoine. For 10 points each:

[10] Identify this 20-novel series, heavily influenced by the evolutionary theories of Prosper Lucas, that includes *Abbe Mouret's Transgression* and *Doctor Pascal*, as well as better-known works like *Nana* and *Germinal*.

ANSWER: *Les **Rougon-Macquart*** [or *The **Rougon-Macquart***]

[10] This Frenchman wrote the Rougon-Macquart cycle and also penned the famous letter "J'accuse."

ANSWER: Emile **Zola**

[10] In this insane novel from the series, Lantier vicariously enjoys Roubaud's murder of Grandmorin until his cousin derails a commuter train, leading him to rekindle his love of murdering by whacking his lover Severine.

ANSWER: *La **Bête Humaine*** [or *The **Human Beast***]

14. This event saw the murder of the former Prime Minister Istvan Tisza. For 10 points each:

[10] Name this 1918 event in Hungary, that installed Mihaly Karolyi as Prime Minister, named for a flower worn by protesters.

ANSWER: Aster Revolution [or Chrysanthemum Revolution]

[10] The Rose Revolution forced Edvard Shevardnadze to resign from the presidency in this country, a former Soviet Socialist Republic where Joseph Stalin hailed from.

ANSWER: Georgia [or Sakartveto]

[10] The Bulldozer Revolution is named for the vehicle that Ljubisav Dokic rammed into a radio television building spewing propaganda for this leader, who died in the midst of being tried at The Hague for war crimes.

ANSWER: Slobodan Milosevic

15. The Ring and Cat's Eye Nebulae are prominent examples. For 10 points each:

[10] Name these shells of ionized gas that are expelled from the outer layer of stars and are then ionized by the exposed core.

ANSWER: planetary nebulae [prompt on nebula]

[10] Planetary nebulae occur during this phase of stellar evolution, after hydrogen fusion in the core has stopped. Stars in this phase appear toward the upper-right in the H-R diagram.

ANSWER: red giant [or Asymptotic Giant Branch]

[10] This process may occur in low-mass stars at the beginning of the red giant phase. It is a runaway fusion that ends when thermal pressure causes the core to expand.

ANSWER: helium flash

16. 850 soldiers drowned in the disastrous Walker Expedition during this war. For 10 points each:

[10] Name this conflict, part of a larger war that saw Spanish Florida fight with the Province of Carolina and the Wabanaki Confederacy defend against New England's incursion into Acadia.

ANSWER: Queen Anne's War [or Third Indian War; prompt on War of the Spanish Succession; don't read this prompt out loud!]

[10] Queen Anne's War also saw a raid on this Massachusetts city by forces under Hertel de Rouville, who massacred 56 villagers and took 106 captive.

ANSWER: Deerfield, Massachusetts

[10] Queen Anne's War was part of this larger 1701 to 1714 conflict which was ended by the Treaty of Utrecht. It arose over the issue of who would succeed Charles II as head of an Iberian kingdom.

ANSWER: War of the Spanish Succession

17. Many people were involved with or inspired by the *Rite of Spring*. Name some, for 10 points each.

[10] This man was the original choreographer of the *Rite of Spring* and danced in some of his own ballets in the Ballets Russes before going insane.

ANSWER: Vaslav Nijinsky

[10] After the mixed response to the original choreography, this man re-choreographed the ballet. His own works include the "symphonic ballet" *Les Presages* and *La Boutique Fantasque*, or *The Magic Toy Shop*.

ANSWER: Léonide Massine

[10] This French composer's *Ameriques* was inspired by the *Rite of Spring*. He wrote *Density 21.5* for solo flute and used various sounds in his *Poeme electronique*.

ANSWER: Edgard Varese

18. The primary part of these programs is the kernel. For 10 points each:

[10] Name this software that acts as an interface between other programs and the hardware, such as handling resource management and possibly providing a user interface. UNIX and Microsoft Windows are two examples.

ANSWER: operating system

[10] These are the smallest sequence of instructions executable by an operating system. Several of these may exist within a single process and be executed simultaneously.

ANSWER: threads

[10] One potential problem with threads is this scenario where they mutually prevent each other from progressing due to each holding a resource the other thread needs and neither releasing its resource until it has the other's.

ANSWER: deadlock



19. Answer the following about asymmetric induction, the preferential formation of one stereoisomer over another in chemical reactions, for 10 points each.

[10] Asymmetric induction was introduced by this chemist, who developed an indole synthesis and came up with a two-dimensional cross-like projection for depicting stereochemistry.

ANSWER: Hermann Emil **Fischer**

[10] One compound that is commonly depicted with a Fischer projection is this monosaccharide with formula  $C_6H_{12}O_6$ . It is stored in the liver in the form of glycogen.

ANSWER: **glucose**

[10] Felkin, Ahn, and Eisenstein all revised this rule of asymmetric induction. It states that a sterically hindered group attached to a chiral center adjacent to a carbonyl carbon will dictate which of two stereoisomers will form.

ANSWER: **Cram**'s rule

20. This event happened in Athens under the reign of King Otto. For 10 points each:

[10] Name this affair where a Portuguese Jew complained to the British government after his house was raided.

ANSWER: **Don Pacifico** affair

[10] This British Foreign Secretary responded to the Don Pacifico affair by ordering the seizure of ships in the Aegean with value equal to the goods lost. He also gave the "Civis Romanus Sum" speech in defense of his actions.

ANSWER: Henry John **Temple**, 3rd Viscount **Palmerston** [accept either underlined answer]

[10] Palmerston defended the actions of Harry Parkes in precipitating the second war over this substance. Those wars were fought because the Chinese resisted British attempts to promote the recreational use of this drug.

ANSWER: **opium** [or **poppy**]

21. A semidirect product of the Lorentz group and translations form this space's symmetry group. For 10 points each:

[10] Name this pseudo-Riemannian manifold that is the setting for special relativity.

ANSWER: **Minkowski space** [prompt on partial answer]

[10] It is pseudo-Riemannian because this bilinear form on Minkowski space is not positive-definite, and thus can output negative values.

ANSWER: **inner product**

[10] Two events in Minkowski space are separated by a spacelike interval if one cannot causally affect the other. There is then a frame of reference in which the events bear this relation to each other.

ANSWER: **simultaneity** [or things that are **simultaneous** to one another; or things that **happen at the same time**; accept answers along those lines]

22. The title of a work with this war in its title references the Jean Giraudoux play "The Trojan War Will Not Take Place". For 10 points each:

[10] That work of three essays claims that this title event did not take place, not to deny the events, but to call attention to the fact the media misrepresented and misnamed what really happened.

ANSWER: Persian **Gulf War** [or First **Gulf War**]

[10] This French philosopher wrote "The Gulf War Did Not Take Place", as well as *Simula and Simulacrum*.

ANSWER: Jean **Baudrillard**

[10] Baudrillard wrote a work titled this object "of production." A pragmatist Richard Rorty work pairs this object with philosophy, and it is described as one "of nature."

ANSWER: **mirror**