Michigan Winter Tournament

"The Holy Roman Empire of Tournaments"

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Packet 4

Tossups:

1. **The flu-ridden protagonist of a novel titled for this activity finds the phrase "Relax! God is in control" to be emblematic of his visit home. The protagonist repeatedly comments on the corruption of his hometown of Lagos in a Teju Cole novel titled for this activity. A character who leads children in this activity repeatedly urges his employees not to "peach" on him. Death narrates a novel titled for this activity about a girl who reads *The Gravedigger's Handbook*, (*)** Liesel Meminger. To protect a boy engaging in this practice, Nancy tells Rose Maylie about his half brother Monks, which gets her killed by Bill Sikes; Sikes is a member of a group who perform this activity, including the Artful Dodger. For 10 points, name this activity, which is performed by a group of boys led by Fagin in *Oliver Twist*.
ANSWER: **thieve**ry [accept **pickpocketing** and equivalent answers; accept *Every Day Is for the **Thief** or The Book **Thief***] <Laurie, World/Other Literature>

2. **O'Driscoll et al. first described a syndrome caused by a mutation in one of these proteins, which is similar to NBS but with normal checkpoints in culture. One isoform of this enzyme complexes with XLF, XRCC4, and DNA-PK during VDJ recombination. In one application, this enzyme is incubated with a sample overnight at 16 degrees Celsius for 2 hours at room temperature, then inactivated for 10 minutes at 65 degrees Celsius. The *E. coli* version of it uses an NAD cofactor, while the (*)** T4 phage version uses ATP. This enzyme operates on blunt or sticky ends created by restriction enzymes. During replication on the lagging strand, this enzyme joins Okazaki fragments together. For 10 points, name this enzyme that forms phosphodiester bonds between pieces of DNA.
ANSWER: DNA **ligase** <Mukherjee, Biology>

3. **Following a mob lynching in St. Louis, this politician argued that rebuilding the "pillar of liberty" built by the American Revolution required shedding passion and replacing it with the "solid quarry of sober reason." In a speech admonishing a "don't care" attitude on an issue everyone cares about, this politician criticized attempts to find "middle ground between the right and the wrong." That one of his speeches ended with the command to (*)** "dare to do our duty as we understand it." In a speech centered on a group who "constituted a peculiar and powerful interest," this politician urged the country to "strive on to finish the work we are in" "with malice towards none, with charity for all." For 10 points, name this politician who delivered two 1860s inaugural addresses.
ANSWER: Abraham **Lincoln** [the first line is from the Lyceum Address; the second and third from the Cooper Union speech] <West, American History>

4. **John Mueller has argued that these objects are "essentially irrelevant" to what he calls "general stability" because these objects are not revolutionary. Philip Tetlock asked experts if these objects were to be used by a certain actor as part of his forecasting tournaments. These objects were the subject of an analysis that included concepts such as a "focal point" and a "credible (*)** commitment" for use in Thomas Schelling's *The Strategy of Conflict*. Bernard Brodie suggested that these objects "must be always at the ready, yet never used." These objects will not be used because of a retaliatory strike according to the deterrence theory of these objects. For 10 points, name these objects which, according to conventional theory, would cause mutually assured destruction if ever launched at another nation.
ANSWER: **nuclear bombs** [accept obvious equivalents such as **nukes** or **nuclear weapons** or **North Korean nukes** or **American nukes**; prompt on bombs or just weapons] <Bunker, Political Science>

5. **Because solar heating causes better conditions for the occurrence of these phenomena, they occur most frequently between 5pm and 7pm. The "recycling hypothesis" argues that these phenomena occur through a positive feedback loop driven by the rear flank downdraft. A region of clouds extending below the main cloud base, known as a "wall cloud", is often a sign of these phenomena. These phenomena are often caused by updrafts forcing the (*)** rotation of a region of air undergoing significant wind shear. These phenomena can be detected on Doppler radar by the presence of a characteristic hook-shaped radar signature. The enhanced Fujita scale is used to measure, for 10 points, what large rapidly rotating columns of air common in the Midwest?
ANSWER: __tornado__es [or __twister__s, prompt on __cyclone__s because people also call hurricanes that] <Thompson, Earth Science>

6. **This instrument plays a lively duet with the snare drum in the "Ballerina's Dance" of Stravinsky's 1946 revision of** *Petrushka*. **A solo for this instrument appears in the second movement of Vaughan Williams's** *A Pastoral Symphony*, **where the musician is instructed to imitate this instrument's "natural type". The** *Sanctus* **hymn is played by an offstage one of these instruments in the second movement of Respighi's (*)** *Pines of Rome*. A "felt crown" mute is used on this instrument during its laidback solo in Gershwin's *An American in Paris*. This instrument repeats a short-short-short-long rhythm on C# to open the funeral march beginning of Mahler's Symphony No. 5. For 10 points, name this high pitched brass instrument with three valves.
ANSWER: __trumpet__ [accept __cornet__ before "1946 revision"] <Fu, Classical Music>

7. **This woman's father erected a statue of Aidos, goddess of modesty, at the spot that she left him. According to one story, Telegonus marries this woman after killing her husband, and Telegonus's mother marries this woman's first son. Icarius of Sparta promised to marry this daughter of his to whoever can beat him in a race. This woman's servant (*)** Melantho has an affair with her suitor Eurymachus. To confirm her husband's identity, this woman ordered Eurycleia to move her bridal bed. This woman prayed to Artemis to kill her after promising to marry the first man who can shoot an arrow through twelve axes. For three years, a shroud for Laertes is unraveled each night by, for 10 points, this queen of Ithaca and faithful wife of Odysseus.
ANSWER: __Penelope__ <Ranganathan, Mythology>

8. **In a play set in this state, Elliot Ortiz's mother Ginny moderates a chat room under the name "Haikumom" for recovering drug addicts. A bartender in a play set in this state warns two of his regulars that "you could wake up tomorrow and all your jobs are in Mexico." Evan serves as Chris and Jason's parole officer in that play set in this state. The protagonist of a play set in this state describes wrestling with the devil for "three days and three nights." In another play set in this state, (*)** Boy Willie wishes to sell the title object to purchase Sutter's land. A mentally-handicapped character believes he is the archangel Gabriel in a play set in this state in which Cory is prohibited from playing football. For 10 points, August Wilson set *Fences* and *The Piano Lesson* in which US state, the site of his Pittsburgh Cycle?
ANSWER: __Pennsylvania__ [the unnamed plays are, in order of mention, Quiara Hudes's *Water by the Spoonful* and Lynn Nottage's *Sweat*] <West, American Literature>

9. **These people created namesake "stone arrangements," examples of which include Bora rings, which doubled as the sites of an initiation ceremony. Many of these people settled Arnhem land while moving to rural areas during the outstation movement. These people burned forests in a procedure called "fire-stick farming." These people, who have operated an unofficial "tent embassy" outside of their country's parliament since 1972, were the victims of a genocide at the hands of George Arthur's (*)** "Black Line." A subgroup of these people, the Gweagal, made contact with a captain sailing aboard the HMS Endeavor. National Sorry Day was created to commemorate some of these people known as the stolen generations. For 10 points, name these people, the indigenous peoples of Australia.
ANSWER: __Aborigine__s [prompt on any answer indicating the __indigenous__ people or __native__s of __Australia__ or __Tasmania__] <Laurie, Other History>

10. **In Japanese philosophy, these non-ring concepts are used to title sections explaining sword and battle strategies in Miyamoto Musashi's most famous book. In another culture, these concepts were related to different organs, medicinal properties and planets. Proclus differentiated these things based on the three properties of sharpness, density and mobility. In** *On Generation and Corruption*, **each of these objects are associated with two of the (*)** four sensible qualities. These objects are described according to the Chinese *wuxing* ["woo-shing"] system and were enumerated by Empedocles. Disagreeing with Heraclitus, Thales argued that one of them was the base substance of all things. For 10 points, identify this set of objects which classically consisted of air, fire, earth and water.
ANSWER: __elements__ [anti-prompt on any of __earth__, __fire__, __water__, __air__ or __aether__ by __asking__ "what class of objects does [GIVEN] belong to?"; accept __wuxing__ before mention and reasonable translations of the Chinese such as __planets__ before mention or __ways__] <Bunker, Philosophy>

11. **The Hamiltonian for one model of these materials has a kinetic energy term parameterized by the hopping integral and a second term corresponding to electron repulsion. By accounting for bound states formed when screened fields are strong enough to invalidate the tight-binding model, the Hubbard model predicts the existence of one variety of these materials exemplified by (*)** nickel oxide. Puncture arcs and flashover arcs are failure modes of these materials. The Mott variety of these materials, which have associated breakdown voltages, have very large band gaps. Examples of these materials include paper, teflon and other plastics and rubbers. For 10 points, identify these materials in which low amounts of current can flow.
ANSWER: __insulator__s [accept specific forms such as __Mott insulator__s] <Bunker, Physics>

-- This packet contains 22 tossups. Halftime is after tossup 11. --

12. **After being captured in this body of water, Jan Janszoon and Simon de Danser commanded large forces on it. A cartographical school in this body of water was led by Abraham Cresques. Portolan charts originated as maps detailed ports on this body of water, which is also the subject of Piri Reis'** *The Book of Navigation*. **Dragut died defending Fort St. Elmo during a battle in this body of water against forces led by (*)** Jean de Valette. Pope Paul III's Holy League lost the Battle of Preveza on this body of water, resulting in a power balance that held until a battle where John of Austria and Andrea Doria defeated Ottoman forces. For 10 points, name this body of water, where Ottoman and Holy League forces clashed at Lepanto.
ANSWER: __Mediterranean__ Sea <Laurie, World History>

13. **A poet from this country developed "naked poetry" shortly after marrying Zenobia Camprubi, with whom he collaborated on a translation of the poetry collection** *The Crescent Moon*. **A poet from this country wrote a collection of poetry in which he is accompanied by his silver-colored donkey. A poet known by the mononym Azorin coined the name for a literary group in this country that included an author who fictionalized Cain and Abel as a doctor and painter. A literary (*)** collective in this country formed on the 300th anniversary of the death of a baroque poet from this country, who developed *culteranismo*. For 10 points, Luis de Gongora inspired the Generation of '27 in what country, whose poets include Miguel de Unamuno and Juan Ramón Jiménez?
ANSWER: __Spain__ [or Kingdom of __Spain__; or Reino de __Espana__] <Laurie, European Literature>

14. **This artist called the title figure in a van Gogh painting which he greatly admired a "phantom in the road." Many of this artist's works were based off of photographs by John Deakin, such as several portraits and reclining nudes of Henrietta Moraes. In the right panel of one work by this artist, the subject vomits into a toilet shortly before his death; that series, as part of the (*)** *Black Triptychs*, depict the suicide of this artist's lover George Dyer. Two large pieces of a cow's carcass are behind a figure based on Diego Velazquez's *Portrait of Innocent X* in his *Figure with Meat*. A series by this artist includes thin, cage-like lines, and a motif of an open mouth inspired by *Battleship Potemkin*. For 10 points, name this Irish artist of the *Head* series and many "screaming popes."
ANSWER: Francis __Bacon__ <Tsai, Painting>

15. **One implementation of this operation must satisfy a condition where for a pair of different Ks, only one product of two different K modulo N is 0, and has a computational complexity of big O of N log N. It's not addition or factoring, but one algorithm for this operation relies on highly-composite numbers, can sometimes be solved in polynomial time with the help of Shor's algorithm, and is named for Cooley and (*)** Tukey. When one applies this operation to a random variable, one obtains its characteristic equation. The integral of the square of a function is related to the coefficients generated by this process by Parseval's identity. For 10 points, name this operation where a function is transformed from the time domain into the frequency domain.
ANSWER: __Fourier transform__ [accept __fast Fourier transform__, __quantum Fourier transform__, __discrete Fourier transform__; prompt on "__multiplying larger numbers__ or integers" by __asking__ "what operation or algorithm is used by the computer to do that?"] <Bunker, Other Science>

16. **The prosperity and fertility god Sagaan Ubgen, or the White Elder, is worshipped in the so-called "white" version of a religious tradition in this country, which is contrasted with the "black" and Buddhist-influenced "yellow" versions. This country's first** *Bogd Gegeen*, **Zanabazar, spread the Gelugpa school of Buddhism to it. This country's national emblem features the Wind Horse, a symbol it inherited from (*)** Tibetan Buddhism, which spread to this country through the Yuan dynasty. The native shamanic tradition of this country's primary ethnic group includes worship of gods called *tengri*. For 10 points, identify this country where the equestrian war god Sülde Tengri is identified with Genghis Khan.
ANSWER: __Mongolia__ <Thompson, Religion>

17. **Pittsburgh-based workers in this profession who worked under Jack Sutherland went on strike in 1939, helping catalyze the creation of the Sanity Code of 1948. Anthony Gonzalez is among the proponents of NIL ["N-I-L"] legislation, which pertains to people in this profession. A video game series based on the work of people in this profession was discontinued following (*)** Ed O'Bannon's class action lawsuit. Kain Colter led an ultimately unsuccessful effort to unionize these people at Northwestern. In 2019, California passed the Fair Pay to Play Act, which pertained to these people's ability to profit off their work. For 10 points, name these people whose ability to be paid is restricted by the NCAA.
ANSWER: **college athlete**s [or **NCAA athletes**; accept **college football players** or **NCAA football players** or similar answers; prompt on (student-)athletes or football players or other answers that do not indicate that they're in college by asking "at what level?", do NOT accept or prompt on "professional athletes"] <Laurie, Other Academic>

18. **This Empire employed a general who was twice operated on by Jean Massot after, in a span of four years, he was legendarily shot twice through the temples. This Empire used a series of flèches to repeatedly repel the forces of Louis-Nicolas Davout. After defecting from his home country, a General who theorized the "fog of war" fought in this Empire's army. A ruler of this Empire learned military tactics at a young age with a group called his (*)** "toy army." This Empire's first dreadnoughts were named the Gangut class in reference to the first significant victory by its navy, which was established after its Emperor's Grand Tour of Western Europe. That ruler also oversaw this Empire's victory in the Great Northern War. For 10 points, name this Empire that modernized under Peter the Great.
ANSWER: **Russia**n Empire <Laurie, European History>

19. **The Belgian comic artist François Schuiten designed one of these locations to resemble a submarine from the works of Jules Verne. One of these locations in Cambridge, Massachusetts is home to a series of suspended bells and hammers designed by Paul Matisse and collectively known as the "Kendall Band". The largest colored glass work in the world, the "Dome of Light", decorates one of these locations in Kaohsiung ["cow-shung"], Taiwan. Hector (*)** Guimard designed a number of entrances to these locations in the Art Nouveau style in Paris. Romanesque Revival architecture characterized the first of these locations in New York, which closed due to its too-short platforms. For 10 points, identify these locations in which passengers board subterranean trains.
ANSWER: **subway stations** [or **metro stations**, or **underground** rail or train **stations**; prompt on train stations or transit stops] <Thompson, Geography>

20. **By studying a prison in Ionia, Michigan, Jonathan Metzl explains how this disease became associated with African Americans in the civil rights era in his 2010 book. The "limit" of this disease is related to a characteristic malady in a book which also claims that the "unconscious is a factory." The conception of a "sluggishly progressing" version of this condition was utilized by (*)** Andrei Snezhnevsky to discredit political opponents in the Soviet Union. Risperidone and other antipsychotics are used to treat this disease which usually presents in early adulthood. Symptoms of this disorder include a flat affect, agitated body movements and delusions. For 10 points, patients may suffer hallucinations in what neurological disorder whose name comes from the Greek phrase for "split mind?"
ANSWER: **schizophrenia** [prompt on psychosis until "limit" is read; accept ***Capitalism and Schizophrenia***] <Bunker, Other Social Science>

21. **It wasn't "vengefully" treated by the critic Tony Tanner, but an essay about this novel compares one of its protagonists to a Victorian girl treated for excessive masturbation and was written by Eve Kosofsky Sedgwick. The protagonist of this novel criticizes her suitor's reading of William Cowper's ["cooper's"] poetry as being done with "such dreadful indifference!" After leaving his lover, a character in this novel returns a (*)** lock of her hair, which he obtained after helping her home when she slipped in the rain. Two siblings in this novel move to Barton Cottage after the death of their father, and one of them eventually marries Colonel Brandon instead of John Willoughby. For 10 points, name this novel about Marriane and Elinor Dashwood, written by Jane Austen.
ANSWER: ***Sense and Sensibility*** (the Sedgwick essay is "Jane Austen and the Masturbating Girl") <Mitchell, British Literature>

22. **Lennie Tristano wrote "Requiem" in commemoration of this man. The final album this man worked on was a collection of Cole Porter covers. This man used the chord progression of George Gershwin's "I Got Rhythm" for his song "Constellation." Inspired by his six-month stay in a psychiatric hospital, this man wrote the C major blues piece "Relaxin' at Camarillo." Oboist Mitch Miller was a soloist on an album of ballads this man recorded with a (*)** chamber orchestra, on the album *[this musician] with Strings*. On the original recording of a song by this man, Dizzy Gillespie stood in for Bud Powell and played piano instead of trumpet, in a pioneering example of bebop. For 10 points, name this jazz saxophonist and composer of "Ko-Ko", "Ornithology", and "Yardbird Suite."
ANSWER: Charlie **Parker** Jr. [accept Yard**bird** before mention] <Phadnis, Other Auditory>

Bonuses:

1. A paper by Matthew Baker provides an extremely cool proof of this statement in terms of a sequence-forming game. For 10 points each:
[10] Identify this statement about the size of a set which can be constructed through Dedekind cuts, which is equivalent to the statement that aleph-one and aleph-null are not the same cardinal. It was first established by a "diagonal argument" of Georg Cantor. A description is acceptable.
ANSWER: the **uncountability** of the **real** numbers [accept any answer indicating that **the cardinality of the reals is not the same as the cardinality of the integers**, or the natural numbers, or the rationals; prompt on answers like "there are more real numbers than integers"]
[10] Unlike the reals, this set of numbers is countable, meaning it can be put in bijection with the naturals. This set contains fractions where the numerator and denominator are both integers and is typically symbolized with a double-struck Q.
ANSWER: **rational** numbers
[10] Because the rational numbers are countable, they have this property, meaning that they can be covered by open balls whose radii sum to an arbitrarily small number. Sard's theorem guarantees that the set of critical values of a smooth function between manifolds has this property.
ANSWER: they have (Lebesgue) **measure zero** [prompt on small] <Thompson, Mathematics>

2. Answer the following about the geopolitics of the world's second most popular sport, cricket, for 10 points each:
[10] These two South Asian countries share a heated rivalry in cricket, and the 2011 World Cup semifinal match between them was watched by almost half a billion people. The sporting rivalry between these two countries is inflamed by their diplomatic tensions, such as those concerning the disputed region of Kashmir.
ANSWER: the Republic of **India** and the Islamic Republic of **Pakistan** [accept **Bhārat** Gaṇarājya for India]
[10] The British government threatened to boycott trade with this country after the English cricket team were accused of unsportsmanlike behavior for their controversial "bodyline" bowling tactics, which they used in a 1932-33 series against this country's team.
ANSWER: **Australia**
[10] This country has funded the construction of several cricket stadia in the West Indies as part of its practice of "stadium diplomacy", in which this country funds the construction of stadia in exchange for diplomatic concessions.
ANSWER: The People's Republic of **China** [or the **PRC**, or **Zhōngguó**, do NOT accept or prompt on "Taiwan" or "Republic of China"] <Thompson, Other Academic>

3. The "proliferation of supermarkets and malls… best describe our detour from grace" in a poem by this author which ends "there is no beginning or end / You must make your own map." For 10 points each:
[10] Name this current US Poet Laureate who is the first Native American poet to hold the position. This author of the collection *A Map to the Next World* tours with the musical act Arrow Dynamics.
ANSWER: Joy **Harjo**
[10] "She had [these animals]" opens every line of the first section of an oft-anthologized Harjo poem. Another of these animals "must think it queer / To stop without a farmhouse near" in Robert Frost's "Stopping By Woods on a Snowy Evening."
ANSWER: **horse**s [accept "She Had Some **Horse**s"]
[10] As poet laureate, Harjo succeeded Tracey K. Smith, who won the 2011 Pulitzer Prize in Poetry for a collection titled for life in this location. A Ray Bradbury collection titled for this place includes the stories "There Will Come Soft Rains" and "Yila."
ANSWER: **Mars** [accept *Life on **Mars*** or *The **Martian** Chronicles*] <Laurie, American Literature>

4. James Irwin, who became a born-again Christian after visiting this location, credits the so-called "overview effect" with his finding God. For 10 points each:
[10] Identify this location, which was claimed for the Diocese of Orlando by its bishop on the grounds that canon law assigns newly discovered territory to the diocese from which the expedition to it left.
ANSWER: Earth's **moon**
[10] The first religious observance to take place on the moon was this ritual, performed by Buzz Aldrin following the Apollo 11 landing. The Catholic doctrine of transubstantiation holds that the bread and wine used in this ritual physically become the body and blood of Christ.
ANSWER: holy **communion** [or the **Eucharist**]
[10] In 1968, the crew of the Apollo 8 mission performed this religiously-oriented action in a live television broadcast from the Moon's orbit, which sparked a lawsuit from atheist firebrand Madalyn Murray O'Hair.
ANSWER: **reading** from the Book of **Genesis** [accept obvious equivalents like **reading the beginning of the Bible**; prompt on reading the Bible by asking "what part of the Bible?"] <Thompson, Religion>

5. The Arditi-Ginzburg model makes predation pressure a function of the ratio of prey to predators, which contrasts with this prey-dependent pair of equations. For 10 points each:
[10] Name these equations. This doubly-eponymous pair of first-order nonlinear differential equations is used to model predator-prey relations.
ANSWER: **Lotka-Volterra** equations [do not accept "competitive Lotka-Volterra equations"]
[10] Contrasted with predation, this relationship between species exists where one organism lives on or in another organism, harming but not necessarily killing its host.
ANSWER: **parasitism** [accept word forms]
[10] Predators can sometimes kill and eat each other, known as this type of predation. This type of predation results as a combination of predation and competition, because both species rely on the same prey resources and also benefit from preying on each other.
ANSWER: **intraguild** predation <Phadnis, Biology>

6. While visiting an art exhibition, this man claimed that an artist "is nuts and his imagination has gone wild!" For 10 points each:
[10] Name this man who described his experience at that art exhibition in his essay "A Layman's View of an Art Exhibition."
ANSWER: **T**heodore **Roosevelt** [or **Teddy Roosevelt**; or **TR**; prompt on Roosevelt]
[10] Roosevelt described his experience at this art exhibition in that essay. Marcel Duchamp's *Nude Descending a Staircase, No. 2* was first exhibited in America at this art exhibition, which helped introduce modern European art movements such as Cubism and Futurism to Americans.
ANSWER: 1913 **Armory** Show [or **International Exhibition of Modern Art**]
[10] The Armory Show first exhibited in this city, where George Bellows and the Ashcan school primarily worked. This city's museums include the Whitney and the Metropolitan Museum of Art.
ANSWER: **New York** City [or **NYC**] <West, Painting>

7. Followers of this man published a bomb-making pamphlet titled *Health is within you!*, which figured in the prosecution of the Bresci Circle. For 10 points each:
[10] Name this man, whose followers included Mario Buda. A. Mitchell Palmer was among the many targets of a bombing campaign perpetrated by this man's followers in 1919.
ANSWER: Luigi **Galleani**
[10] Galleani was deported in the aftermath of this event, whose prime suspect was Mario Buda. It surpassed the 1910 Los Angeles Times building bombing as the most deadly domestic terror attack in US history.
ANSWER: 1920 **Wall Street bomb**ing
[10] These two men were frequently tied to Luigi Galleani. These two Italian anarchists were controversially executed for armed robbery and murder in Braintree, Massachusetts.
ANSWER: Nicola **Sacco** and Bartolomeo **Vanzetti** <Laurie, American History>

8. J. G. Ballard was a heavy influence on this band's second album *Closer*, and was referenced on the song "Atrocity Exhibition". For 10 points each:
[10] Name this English post-punk rock band, whose "New Dawn Fades" can be found on their only other album *Unknown Pleasures*. This band reformed as New Order after the suicide of their lead singer, Ian Curtis.
ANSWER: **Joy Division**
[10] Before his suicide, Ian Curtis listened to this album, the debut album of Iggy Pop. Many songs on this album were written in collaboration with David Bowie, and its cover pose was inspired by *Die Brücke* artist Erich Heckel.
ANSWER: The ***Idiot***
[10] Heckel also inspired the cover of this David Bowie album, the second entry in his "Berlin trilogy." The title song of this album says "Just for one day/We can be [the title figures]," and its own cover was appropriated for Bowie's penultimate album *The Next Day*.
ANSWER: ***"Heroes"*** <Tsai, Other Auditory>

9. A character living in this city begins an affair with Eleanor after his performance in "The Jungle Book" earns him a role in Mathew Pyke's acting troupe. For 10 points each:
[10] Name this city which is the setting of a novel where Nazneen begins an affair with Karim after attending Bengal Tigers meetings; at its end, she refuses to leave this city with her older husband Chanu.
ANSWER: **London** [the second unnamed novel is Monica Ali's *Brick Lane*]
[10] Hanif Kureishi, who fictionalized London in *The Buddha of Suburbia*, has also worked extensively with this medium. The playwright Martin McDonagh's works in this genre include the works *In Bruges* and *Three Billboards Outside Ebbing, Missouri*.
ANSWER: **screenplay** [or film **script**; accept **film** or **movie**]
[10] London was also the site of an attempted assassination of this author, who frequently employs magical realism in works like *Shame*. The protagonist of another of his novels is revealed to be the son of William Methwold after originally being switched at birth by Mary Pereira.
ANSWER: Salman **Rushdie** [or Sir Ahmed Salman **Rushdie**] (the novel is *Midnight's Children*) <Laurie, British Literature>

10. Alfonso de Arellano became one of the first people to sail the Urdaneta route, a voyage between Manila and this city, after its discovery. For 10 points each:
[10] Name this Mexican port city. Under the rule of New Spain, it was granted a monopoly on the Manila galleon trade.
ANSWER: **Acapulco**
[10] Items arriving from Manila made their way from Acapulco to this eastern port city, after which the items would sail across the Atlantic to Europe. The US' path toward Mexico City was cleared after Winfield Scott's successful amphibious assault on this city.
ANSWER: **Veracruz**
[10] The Manila galleon trade was established under the rule of this dynasty, whose first Spanish King was Charles I. This longtime ruling house of Austria was replaced in Spain by the Bourbon Dynasty.
ANSWER: House of **Habsburg** [or House of **Hapsburg**] <Laurie, European History>

11. This county, known by locals as "The County", is the largest by land area east of the Mississippi River, being larger than Connecticut and Rhode Island combined. For 10 points each:
[10] Name this county established in 1839 following a namesake "war" that was settled by the Webster-Ashburton treaty. It is the most French-speaking county in the U.S. outside of Louisiana.
ANSWER: **Aroostook** County, Maine
[10] Most of Aroostook County's French-speakers live in the valley of this river, which forms much of the northern border of Maine and drains into the Bay of Fundy at a city with the same name.
ANSWER: **Saint John** River [or Rivière **Saint-Jean**]
[10] Aroostook County is home to the largest scale model of this astronomical system in North America, which has a scale of one mile to one AU, and stretches 40 miles from the Sun in Presque Isle, to a one-inch-wide Pluto in a Houlton rest area.
ANSWER: the **solar system** <Thompson, Geography>

12. This method can be used to determine splitting in the Stark effect by accounting for a term of the form "dipole moment dot field." For 10 points each:
[10] Name this quantum-mechanical approximation method in which a Taylor expansion is used to find corrections to energy eigenstates and eigenvalues from a small correction to the Hamiltonian.
ANSWER: **perturbation** theory
[10] Roughly speaking, the Hamiltonian refers to the *total* amount of this quantity in a given system. For many classical systems, this quantity is equal to one half $m v$ squared plus $m g y$.
ANSWER: total **energy** [do not accept "kinetic energy" or "potential energy"]
[10] Perturbation theory can be used to resolve issues involving this interaction in the Hartree-Fock method. The dynamic and static forms of this interaction can be mixed in using additional Slater determinants to give a better estimation.
ANSWER: electron **correlation** <Bunker, Physics>

13. Part of these people's confederation was ruled by a *zipa*, who would cover his body in gold dust and jump into Lake Guatavita along with some gold offerings. For 10 points each:
[10] Name these people, whose confederation was ruled by a *zipa* in the south and a *zaque* in the north. The last powerful *cacique* of these people, Tundama, was killed with a large hammer by Balthasar Maldonado.
ANSWER: **Muisca** [or **Muisca** Confederation]
[10] The *zipa*'s ritual was depicted in a golden votive item which took the form of this general kind of object. The Keralan city of Beypore was long noted for its production of *dhows* [rhymes with "cows"], a kind of these objects.
ANSWER: **boat**s [accept equivalents like **raft**s or **ship**s; accept Muisca **Raft** or El Dorado **Raft**]
[10] The Muisca were one of the four great pre-Colombian civilizations; the only other one in South America was this Cuzco-based Empire whose rulers included Atahualpa and Pachacuti.
ANSWER: **Inca**n Empire <Laurie, World History>

14. In his functionalist conception of illness, this thinker said that sick people should be absolved of all blame for their illness and should be excused from normal social responsibilities. For 10 points each:
[10] Name this American sociologist who developed "The Unit Act of Action Systems" in his most notable work.
ANSWER: Talcott **Parsons**
[10] Talcott Parsons was a scholar of this German sociologist who said that the state has a monopoly on the use of violence in his essay "Politics as a Vocation."
ANSWER: Max **Weber**
[10] Contemporary sociologist and philosopher Jürgen [YURR-gen] Habermas was influenced by Weber to develop his theory of *this kind* of action which titles a 1981 work by him. In this form of action, oft-contrasted with strategic action, speakers coordinate their goals based on a shared understanding.
ANSWER: **communicative** action <Bunker, Psychology/Sociology>

15. The Tafel equation can be used to calculate the rate of an electrochemical reaction in relation to the existence of this quantity. For 10 points each:
[10] Identify this quantity whose activation version is the potential difference above the equilibrium potential required to overcome the activation energy of the cell reaction.
ANSWER: **overpotential**
[10] The overpotential is multiplied by quantity one minus alpha times this constant. This constant represents the charge on one mole of electrons.
ANSWER: **Faraday** constant [prompt on F]
[10] One can use the Faraday constant to calculate the amount of moles of this element produced from the electrolysis of its salt in the Hall-Héroult process. This metal is mined from the ore bauxite.
ANSWER: **aluminum** [accept **Al**] <Bunker, Chemistry>

16. Sergio Leone settled out of court when his spaghetti Western film *A Fistful of Dollars* was sued for ripping off the plot of this film. For 10 points each:
[10] Name this Akira Kurosawa film where the main character offers to be the bodyguard of two rival crime lords. A dog carrying a severed human hand greets Toshiro Mifune's character in this film when he enters the town.
ANSWER: *Yojimbo*
[10] Mifune often portrayed these Japanese warriors in Akira Kurosawa's many *jidaigeki* ["ji-dai-ge-ki"] films such as *Yojimbo*. Mifune also played Kikuchiyo, who pretended to be one of these people, in a Kurosawa film titled for seven of these people.
ANSWER: **samurai** [or **rōnin**; or Seven **Samurai**; or Shichinin no **Samurai**]
[10] In this director's film *Samurai Rebellion*, Mifune plays a vassal of a clan who is ordered to give over his son's wife as a concubine to the clan's daimyo. This director's films include *Harakiri*, the horror anthology *Kwaidan*, and a World War II trilogy, *The Human Condition*.
ANSWER: Masaki **Kobayashi** [or **Kobayashi** Masaki] <Ranganathan, Other Visual>

17. At the end of the novel titled after it, this object causes its user to die in his lover's arms after he has sex with her. For 10 points each:
[10] Identify this wish granting object given to Raphaël de Valentin after Valentin goes to the Seine to drown himself.
ANSWER: the **Wild Ass's Skin** [or **Peau de chagrin**; or the **Skin of Sorrow**]
[10] *The Wild Ass's Skin* titles one novel in *The Human Comedy*, the massive novel sequence by this 19th century French author.
ANSWER: Honoré de **Balzac**
[10] After attending Goriot's funeral, this character looks out at Paris and declares "It's between you and me now!" The criminal Jacques Collin tries to convince this character to marry Victorine and kill her brother in a duel.
ANSWER: Eugene de **Rastignac** [or **Eugene** de Rastignac] <Bunker, European Literature>

18. In general, the Löwenheim ["loo-ven-heim"]-Skolem theorem does not hold for this system. For 10 points each:
[10] Identify this form of logic which allows one to quantify over general predicate statements. This allows for sentences such as "a closed subset of the real line has a supremum" or "if shape A and B are both cubes, there exists a property "Cube" possessed by both A and B."
ANSWER: **second-order** logic [prompt on "higher order logic"]
[10] Much of the early work in second order logic was done by Gottlob Frege ["fray-guh"]. Frege's results, when expanded, allow for this logician's paradox about the set of all sets that do not contain themselves. His namesake teapot is invoked to urge the one presenting the claim to provide the burden of proof.
ANSWER: Bertrand **Russell**
[10] A generalized form of second order logic is named after a theory of these classes of formal systems. According to *The Principia* numbers like 1, 2 and 3 belonged to this kind of class named Nat and the induction version of these objects is built from a set of constructors.
ANSWER: **types** [accept word forms like **type** theory] <Bunker, Philosophy>

19. In *Sabers and Utopias*, this author recounts telling his deathbed-ridden friend Jose Donoso "Henry James is shit," to which Donoso responded "Flaubert, more so." For 10 points each:
[10] Name this author who ran for his country's presidency in 1990. One of his novels follows four assassins plotting to kill Dominican dictator Rafael Trujillo.
ANSWER: Mario **Vargas Llosa** [prompt on partial answer] (the unnamed novel is *The Feast of the Goat*)
[10] The journalist Kathryn Harrison argued that Vargas Llosa's *The Bad Girl* was a rewrite of this novel. This Gustave Flaubert novel is titled for Emma, the wife of the country doctor Charles, who has affairs with Leon Dupuis and Rodolphe Boulanger.
ANSWER: *Madame **Bovary*** [or *Madame **Bovary***: *Moeurs de province*]
[10] In a Vargas Llosa novel, a drunkard plays his harp above one of these locations, which was built by his daughter Chunga. That one of these locations in Piura was inspired by one Vargas Llosa visited, whose residents included "The Young One."
ANSWER: a **brothel** [or a **bordello**; or a **whorehouse**; or *The **Green House***, since all of the clues are about the novel] <Laurie, World/Other Literature>

20. Cassette tape might be a boomer relic now, but it was instrumental in shaping composers experimenting with electronic music. For 10 points each:
[10] Cassette tape loops are used for *It's Gonna Rain*, an early example of phasing by this composer. Phasing repeats a musical motif in and out of sync, such as in this composer's *Clapping Music*.
ANSWER: Steve **Reich**
[10] William Basinski used an old deteriorating tape for *The Disintegration Loops*, whose completion coincided with this event. *On the Transmigration of Souls* by John Adams commemorates this event by including a tape recording of the names of victims of this event.
ANSWER: **September 11** attacks [or **9/11**; or obvious equivalents]
[10] An American experimental composer called for a cassette tape recording of 42 phonographs in his fifth and final piece of this title. In the second piece with this title, subtitled "March No. 1", the composer called for strange instrumentation including wastebaskets and a lion's roar.
ANSWER: *Imaginary Landscape* (by John Cage) <Tsai, Classical Music>

21. This goddess created eleven monsters to save her consort Apsu, who was captured by Enki because he felt his descendants were too noisy. For 10 points each:
[10] Name this sea goddess, who was killed after Marduk trapped her with winds.
ANSWER: **Tiamat**
[10] Tiamat being slain by Marduk is part of the *Enuma Elish*, the creation myth of a civilization governed from this city. Tiamat's weeping eyes created the Tigris and Euphrates rivers important to this city around 53 miles south of Baghdad.
ANSWER: **Babylon**ian civilization
[10] Tiamat gave this item to her son Kingu, who wore it as a breastplate. After killing Tiamat and Kingu, Marduk took this item, signifying his authority to rule.
ANSWER: the **Tablet of Destinies** [or **Tablet**s **of Destiny**] <Tsai, Mythology>

22. Eugenie Peterson, who took on the name Indra Devi, was a student of Tirumalai Krishnamacharya, who helped popularize the hatha form of this practice in the US by opening a studio in Hollywood. For 10 points each:

[10] Name this Hindu practice. This practice has been largely stripped of its spiritual context in western countries, where it is primarily a form of physical exercise.

ANSWER: **yoga**

[10] Because she was a yoga enthusiast, this woman allowed Indra Devi to set up shop in her Shanghai home. She promoted the four virtues in her New Life Movement.

ANSWER: **Soong** Mei-Ling [accept **Madame Chiang** Kai-Shek]

[10] Though he initially refused her, Krishnamacharya took Devi on as a student on the urging of this Kingdom's Maharaja. The British East India Company defeated this Kingdom in a series of four wars fought against its Maharajas Hyder Ali and Tipu Sultan.

ANSWER: Kingdom of **Mysore** <Laurie, Other History>