

2016 MYSTERIUM: “I quiz all sounds, all thoughts, all everything”

Packet 4 – dohnanyi

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Tossups

1. In this organism, the protein Sic1 is degraded at the G1/S checkpoint, which is usually termed the “Start” point. A MAP kinase competes with a protein phosphatase for the phosphosites of the MAPK scaffold Ste5, whose tetraphosphorylation leads to the mating decision of this organism. The gene URA3, which encodes the protein OMP decarboxylase, is a selectable marker in this organism. This organism’s genome is 12 megabases in length, organized into 16 chromosomes. In this organism, the (\*) HO endonuclease makes a double-stranded break at the MAT locus. GAL4 is a transcriptional activator native to this model organism that is used in a method that fishes for protein–protein interactions called a two-hybrid screen. The products of meiosis in this organism comprise a tetrad contained within a membranous sac called an ascus. That tetrad consists of two haploid cells of this organism of each mating type, *a* and alpha. For 10 points, name this budding yeast, a species used by both brewers and bakers.

ANSWER: Saccharomyces cerevisiae [prompt on “*Saccharomyces*”; prompt on “yeast” until read]

<SP Biology>

2. Paul A. Cohen, in a book on *Discovering History in [this country]*, traced the historiographical influence of John K. Fairbank. This country is the subject of *The Making of a Hinterland* and other works by Kenneth Pomeranz, who studied under the author of the book *The Search for Modern [This Country]*, Jonathan Spence. According to Mark Elvin, this country suffered a “high-level equilibrium trap.” A massive, 27-book history of science in this country was started by Joseph (\*) Needham. A historian from this country wrote the *Comprehensive Mirror to Aid in Government*. This was the biggest power eclipsed in the “Great Divergence.” This country was the subject of *The Memory Palace of Matteo Ricci*. Its own historians include the author of the *Records of the Grand Historian*, Sīmǎ Qiān (“chee-en”). For 10 points, name this subject of the *Spring and Autumn Annals*, which underwent dynastic cycles as its emperors lost the Mandate of Heaven.

ANSWER: China [or Zhōngguó]

<JR Social Science/Thought>

3. In a novel, *this ideology* is apparently held by a French Marquis who meets the protagonist at a train station for a duel over a nose-pulling incident, only to flee with him from an army of men in black masks. A poem titled for this concept describes Murder throwing human hearts to his “seven blood-hounds.” The leader of a group with this ideology rides a zoo elephant then hijacks a hot-air balloon in order to bring his pursuers to his country house. A poem titled for this concept exhorts (\*) “rise like Lions after slumber,” states “Ye are many—they are few,” and was written in response to the Peterloo massacre. A council for this ideology is infiltrated by Gabriel Syme in G. K. Chesterton’s *The Man Who Was Thursday* in order to stop a bombing. For 10 points, Percy Bysshe Shelley wrote about the “Masque” of what state of government-less disorder?

ANSWER: anarchy [or anarchism]

<JB Other Literature>

4. This work includes a summary of Empedocles' theory of colors as "effluvia" travelling to the eyes. Near its beginning, the title character's differential treatment of people is compared to discussing each bee in a swarm individually. Late in this work, Socrates claims that the sons of good men are often bad, insulting Anytus. Its title character says that men should help their friends, hurt their enemies, and try not to get hurt, and was a student of Gorgias. It's not the *Phaedo*, but this work links the immortality of the soul to the theory of *anamnesis*. It's not the *Protagoras*, but its title character begins by asking if (\*) virtue can be taught. Like the *Theaetetus*, it was a major target in Edmund Gettier's attack on "Justified True Belief." For 10 points, name this Plato dialogue in which Socrates demonstrates that knowledge only has to be remembered, by guiding the title character's slave through a geometry problem.

ANSWER: Meno

<JR Philosophy>

5. In a short story, a character stops one of *these events* after seeing a man calmly eating cherries out of his hat, but later symbolically finishes it by making a third mark on a painting. One of these events occurs after some dragoons catch the protagonist sneaking around on the balcony of Princess Mary. Silvio participates in one of these events in the first of *The Belkin Tales*. One of these events occurs on the edge of a cliff, which (\*) Pechorin causes Grushnitsky to fall off in Lermontov's *A Hero of Our Time*. One of these events claims the life of Lensky after Eugene Onegin dances with Olga at her name-day party. For 10 points, name this sort of event which also killed Onegin's creator, Alexander Pushkin, a violent manner of settling points of honor common in Russian literature.

ANSWER: duels

<JB European Literature>

6. Fascists from this country included the woman who wrote *The Outlaw's Diary*, Cecile Tormay, and a man who led a party named for the two crossed scythes on its insignia. Fascist groups in this country united in the MOVE organization, whose propaganda stressed this European country's "Turanian" roots. The son of this country's leader was rolled up in a carpet and kidnapped by Otto Skorzeny after his father declared an armistice. The Vienna Awards partly reversed an (\*) agreement that took away 72 percent of this country's pre-WWI territory, the Treaty of Trianon. The Arrow Cross Party ruled this country as a Nazi puppet state after the overthrow of its regent, Admiral Miklós Horthy ("MEEK-lohsh HOR-tee"). For 10 points, name this country whose nationalist movements focus on its Magyar heritage.

ANSWER: Hungary [or Magyarország]

<JB European/Ancient History>

7. One of these buildings has an all-red floor and bright green escalators. The unusual shape of that one of these buildings was derived by "shifting" the floors relative to each other. One of these buildings has a "honeycombed" exterior with translucent white marble walls, and won the Pritzker prize for Gordon Bunshaft. Another of these buildings includes an oversized dark grey (\*) staircase, with oval steps in the middle and rectangular ones on the sides. One of these buildings has a diamond-patterned outside and a four-story spiral at its center, and was designed by Rem Koolhaas for Seattle. Michelangelo designed a Laurentian one in Florence. The statues "Patience" and "Fortitude" sit outside a large one in New York City.<sup>1</sup> For 10 points, name these buildings that include reading rooms and book stacks.

ANSWER: libraries [or library]

<JR Other Arts>

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<sup>1</sup> "You can just say New York" —Sterling Archer [JR]

8. This quantity can be approximated by multiplying a theoretical guess by one minus the quantity  $\rho$  over  $r$ -zero, where  $\rho$  is a distance-scale related to the compressibility of the material. In another formalism, this value is derived by assuming a two-term potential with an electrostatic negative  $1\text{-over-}r$  term plus a repulsive  $1\text{-over-}r$  to the  $n$  term. This quantity is proportional to a geometric constant found by summing an alternating series using a method developed by Ewald (“ay-vald”). It can also be found by using an equation with two empiric parameters discovered by (\*) Kapustinskii. It can be found exactly by adding together energies of sublimation, bond energies, electron affinities, and ionization energies by using the approach of a Born–Haber cycle. This quantity is proportional to ion charge and inversely proportional to ionic radius; this is why it is higher for MgO than for NaCl. For 10 points, name this quantity equal to the energy released by the formation of a crystal from infinitely separated ions.

ANSWER: lattice energy [accept lattice enthalpy or energy of crystallization or enthalpy of crystallization]  
<SP Chemistry>

9. A poem in this collection portrays a couple whose “ministering angels look surprise on one another” because one is a “guest for queens” and one is a “tired, wandering singer.” In a poem from this collection, a “mystic shape” reveals itself to be “not death, but love” after saying “Guess now who holds thee?” and drawing the speaker back by the hair. A poem from this collection (\*) lists “freely, as men strive for Right” and “purely, as they turn from Praise.” This collection’s opening poem discusses the “dear and wished for years” which Theocritus had once sung of. Two poems in this collection begin “Yes, call me by my pet name!” and “How do I love thee? Let me count the ways.” For 10 points, name this collection attributed to an Iberian by Elizabeth Barrett Browning.

ANSWER: Sonnets from the Portuguese  
<JB British Literature>

10. In one song, this artist declares “Out there in the dark, there’s a beckoning candle,” and opens with the line “There must be lights burning brighter somewhere.” He sang the lyrics “Papa done told me... ‘Son, that gal you’re foolin’ with, she ain’t no good for you’” in a song that repeats the phrase “anyway you do.” He paid tribute to MLK in the song “If I Can Dream.” The cover of (\*) *London Calling* was an homage to the pink and green lettering on this artist’s eponymous debut album. In one song, this man declares “Well they said you was high-classed—Well, that was just a lie.” Many people say that the ending of this man’s 1954 Sun recording of “That’s All Right” marks the beginning of rock and roll. In one of his songs, “everybody in the whole cell block was dancin’ to” the title music. For 10 points, name this singer of “Hound Dog,” “Heartbreak Hotel,” and “Jailhouse Rock.”

ANSWER: Elvis Presley [accept either name; prompt on answers involving “The King”]  
<JR Mythology/Other>

11. This institution was the site of “condemnations” in 1210 and 1277. This institution grew out of nearby Saint Geneviève and Saint Victor. This was the first institution of its kind to divide its members into four “nations” based on their place of origin. A strike at this institution was ended when Gregory VI promulgated the bull *Parens scientiarum*; during that strike, people affiliated with this institution withdrew from its city from 1229 to 1231. Because a large number of (\*) youths from this institution congregated there, a neighborhood received the name “Latin Quarter.” After Englishmen were banned from coming to this institution, many of them went to an analogous institution at Oxford. For 10 points, identify this French university that was often known as the Sorbonne.

ANSWER: University of Paris [or Université de Paris; accept Sorbonne until it is read]  
<NC European/British History>

12. If a palynologist studying a lake sediment core finds predominantly spruce pollen at the bottom of the core, and grass pollen at the top of the core, he or she would suspect that this process had occurred. This process is accompanied by a decrease in the relative degree of unsaturation of phytoplankton-derived alkenones. Approximately 55 million years ago, a large occurrence of this process caused a mass extinction of benthic foraminifera and an increase in dinoflagellates; that happened at the (\*) Paleocene–Eocene boundary. This change is accompanied by an increase in the isotopic abundance of oxygen-18 in ice cores. This process occurred during the beginning of the Holocene after the Younger Dryas, and it has been gradually happening since the end of the last glacial maximum 25,000 years ago. It is correlated with ocean acidification and anoxia. For 10 points, name this most famous effect of increases in global CO<sub>2</sub>, which has recently been driven by humans.

ANSWER: global **warming** [accept any answer indicating that **temperature increased**; prompt on partial answers like “climate change”]

<SP Other Science>

13. This composer’s Opus 16 includes the pieces “Premonitions” and “Peripeteia.” This composer’s song sets include his *Four Orchestral Songs*, Opus 22, and the cycle *Book of the Hanging Gardens*. This composer discussed the “musical prose” of “Brahms, the Progressive” in an essay from *Style and Idea*. He coined the term “developing variation,” and he described melody generated from changing timbres in his book *Harmonielehre*. His Opus 9 is notated in E major and called (\*) *Chamber Symphony No. 1*. This composer of *Gurre-Lieder* used piano, violin, cello, flute, and clarinet to accompany twenty-one songs using a hybrid singing-speaking technique. This composer wrote of the “emancipation of the dissonance,” pioneered atonality in works like *Verklärte Nacht* (“fuh-CLARE-tuh NOKHT”), and created the twelve-tone system. For 10 points, name this Second Viennese School composer of *Pierrot Lunaire*.

ANSWER: Arnold **Schoenberg**

<JR Auditory Arts>

[Note to moderator: be sure to look over the whole answerline before starting this tossup]

14. During one of these events, the president retreated to Camp David for a 10-day “domestic summit” before firing four cabinet secretaries, including Brock Adams and James Schlesinger. During one of these events, Project Independence was announced and William Simon was made “czar” of a new Policy Office. A speech given during one of these events called it the “moral equivalent of war” and declared the “worship of... (\*) consumption” part of America’s “crisis of confidence.” A 55 MPH speed limit was imposed for highways during one of these events, and the “malaise speech” was given during one of them. Odd-even rationing was implemented during one of these events that occurred due to US aid to Israel in the Yom Kippur War. For 10 points, name this sort of crisis that occurred in the US in 1973 and 1979 due to, respectively, an embargo and a price hike from OPEC.

ANSWER: **oil crises** [or **energy crises**; or **oil shocks**; or **oil embargos**; accept answers like **oil** or **petroleum** after “crisis” is read]

<JB American History>

15. While spending the night in a barn in *this* state, a character talks to a friend who disguises his voice to reveal his sexual love for a pig named Portia. A laughing statue of “Fat May” appears in a story set in this state in which a family plays a game of “looking for the Towers” on a drive to the seashore. In a novel, three brothers born in this state make up for their hereditary micropenises by using the “Holy Eggplant” aphrodisiac. A professor suffering from “cosmopsis” goes to the Remobilization Farm in this state in *The* (\*) *End of the Road*. “Lost in the Funhouse” is set in this state, as is a novel in which the syphilitic prostitute Joan Toast marries Ebenezer Cooke, the Poet Laureate of this state. For 10 points, name this state where John Barth set novels such as *The Sot-Weed Factor* in the Chesapeake bay region.

ANSWER: **Maryland**

<JB American Literature>

16. In 1962, Shah and Bolech discovered inconsistencies in the standard strategy for expressing 1D systems in terms of these particles. Spin operators can be written in terms of creation and annihilation operators for these particles in the Holstein–Primakoff transformation. The path integral representation of these particles *does not* require using Grassmann numbers. The exchange interaction for these particles is (\*) attractive, and the wavefunction is unchanged upon exchanging them according to the spin-statistics theorem. Cornell and Wieman first produced a system in which many of these particles occupy the ground state, which is possible because they do not obey the Pauli exclusion principle. For 10 points, identify this class of integer-spin particles whose namesake and Einstein name both the statistics they follow and the condensate they can form.

ANSWER: bosons

<SE Physics>

17. *Description acceptable.* Prior to this phenomenon, a *Bereitschaftspotential* is often observed. Different varieties of this phenomenon were mapped onto Brodmann area 4 by Wilder Penfield to create his “homunculus.” This phenomenon is regulated by a structure that outputs through the dentate nucleus, while another of its regulatory structures inputs through the caudate (“CAW-date”) nucleus and the putamen. Mirror neurons were first discovered in an area of the brain responsible for this phenomenon. The part of the brain associated with this phenomenon sits right in front of the primary (\*) somatosensory cortex in the middle of the brain. Regulating this phenomenon is the main function of the basal ganglia. This phenomenon is inhibited in apraxia and ataxia. Sensory feedback for this action is provided by proprioception. This action is regulated by the cerebellum, and is inhibited in Huntington’s and Parkinson’s diseases. For 10 points, name this general action that involves stimulating muscles.

ANSWER: movement [accept any answer involving motion, moving around, etc.; accept more specific answers like fine motor control; prompt on “acting,” “doing things,” or similar answers]

<JR Economics/Psychology>

18. According to legend, Yassu Moa aided this dynasty’s return to power, which took place after the regicide of Yitbarek. This dynasty’s lands were invaded by the forces of Ahmad the Left-Handed, the leader of Adal. The death of Iyoas I, a ruler from this dynasty, ushered in a period of disorder known as the “era of the princes,” or Zemene Mesafint (“zuh-MUH-nuh muh-SAH-fint”). This dynasty’s genealogy was recorded in the (\*) *Kebra Nagast*. This dynasty was deposed by Mengistu Haile Mariam and the communist Derg. A ruler from this dynasty defeated General Oreste Baratieri’s Italian forces at the Battle of Adwa; that ruler was Menelik II. For 10 points, name this dynasty that produced Haile Selassie I, the last emperor of Ethiopia, which is named after a wise Biblical king.

ANSWER: Solomonid [accept Solomonic or answers that mention Solomon]

<WC World History>

19. The full moon day in the month of Ashadha marks a holiday dedicated to these figures. One text states that these figures are the center of a *mandala* including three mountains. That Vyasa-authored “song” about these figures begins with Parvati questioning why Shiva himself is bowing to no one in particular. A paragon of these figures is Brihaspati, the god who presides over Thursday. Submission to these figures is called *prapatti*. The word for these figures literally means “dispeller of (\*) darkness.” The term “Upanishad” describes texts that are to be studied while sitting near these people, who reside in places called *mathas* or *kulas*. One of these people got five men to volunteer their heads, and then founded the *khalsa*. A set of eleven of them ends with the book Granth Sahib. For 10 points, what Sanskrit word for “teacher” is used to describe the spiritual leaders of Sikhism?

ANSWER: gurus [or acharyas; prompt on “teachers”]

<AP Religion>

20. This painting was exhibited with a terrible poem including lines like “It is the slave, like the amorous night, who comes to make the day bloom, delicious to see.” An essay titled for its central figure’s “choice” is the second chapter of T.J. Clark’s *The Painting of Modern Life*. Contemporary critics seem to have missed most of its central figure’s hair, since it is almost the same color as the Japanese screen in the background. It was first exhibited below its artist’s *Jesus Insulted by the Soldiers*. It was attacked for the heavy charcoal outlines and tensed left (\*) hand of the central figure, whose skin was compared to a cadaver. Its central figure wears a black choker and an orchid in her hair. The artist’s friend Baudelaire called it “the picture... with the Negress and the cat.” This painting shows Victorine Meurent (“murr-ON”) posed like the *Venus of Urbino*. For 10 points, name this painting of a nude prostitute, by Édouard Manet.

ANSWER: *Olympia*

<JR Visual Arts>

## Bonuses

1. This man was the first to emphasize the use of *taqiyya* for self-protection. For 10 points each:

[10] Name this imam. His sons Isma‘il and Musa al-Kadhim were held to be his true successors, by the Isma‘ili and Twelver sects, respectively.

ANSWER: Ja‘far ibn Muhammad **al-Šādiq** [accept The **Truthful**]

[10] Al-Šādiq was an imam of *this* smaller of the two major branches of Islam. Unlike Sunnis, they believe that Ali was Muhammad’s rightful successor.

ANSWER: **Shi‘a** Islam [accept word forms like **Shi‘ite**]

[10] Several works of *this* kind are attributed to al-Šādiq. In general, these works are interpretations and explanations of the Qur’an.

ANSWER: **tafsīr**

<JR Religion>

2. Anthony Burgess called this man’s most famous work “the greatest literary biography of the century.” For 10 points each:

[10] Name this literary critic who wrote the 1959 biography *James Joyce*. He also wrote acclaimed biographies like *Oscar Wilde* and *Yeats: The Man and the Masks*.

ANSWER: Richard (David) **Ellmann**

[10] Ellmann’s biography of Joyce takes its epigraphs from *Finnegans Wake*, which begins with *this* made-up word. This word obliquely places the Liffey in the Garden of Eden.

ANSWER: **riverrun**

[10] The Liffey flows through *this* city that was the namesake setting of a Joyce short-story collection. This city is also the setting of *Ulysses*.

ANSWER: **Dublin**

<JR British Literature>

3. In the 1990s, this photographer recreated stereotypical pornographic shots using parts of mannequins. For 10 points each:

[10] Name this American photographer who depicted herself as a number of stereotypical female movie characters from the late 1970s.

ANSWER: Cindy **Sherman** [Cynthia Morris Sherman]

[10] Many of Sherman’s *Untitled Film Stills* depict her holding a suitcase. This German Fluxus artist used a suitcase to make *I Know No Weekend*, as well as creating *How to Explain Pictures to a Dead Hare*.

ANSWER: Joseph **Beuys** (“YO-zef BOYCE”)

[10] Beuys’s *How to Explain Pictures to a Dead Hare*, in which he actually explained pictures to a dead hare and *I Like America and America Likes Me*, in which he lived in a room with a coyote, exemplify *this* kind of art.

ANSWER: **performance** art

<JR Visual Arts>

4. This empire's *pōchtēcah* ("POACH-tay-kah") merchants often served as spies for its ruler. For 10 points each:  
[10] Name this empire that, under Moctezuma I, defeated the Mixtec king Atonal to avenge his execution of 160 merchants. This empire with capital at Tenochtitlan was later defeated by Hernán Cortés.

ANSWER: **Aztec** Empire

[10] The funeral rites of Aztec merchants, during which they were bound to a frame and burned on a mountain, is described in a codex compiled by Bernardino de Sahagún and named for this Italian city.

ANSWER: **Florence** [or **Florentine** Codex]

[10] Non-merchant elites of the Aztec empire could send their kids to the Calmecac ("call-MAY-kahk") school, where they could join the ranks of these two elite military orders named for animals. Name both.

ANSWER: **Jaguar** AND **Eagle** Warriors [or **ocēlotl** AND **cuāuhtli**]

<JB World History>

5. This quantity is approximately 9 for hydrocyanic acid and 33 for ammonia. For 10 points each:

[10] Name this value for an acid, the negative log of the acid dissociation constant. The Henderson–Hasselbalch equation relates this value for an acid to a pH of its solution.

ANSWER: **pKa**

[10] Primary alcohols generally have a pKa of approximately *this* integer, the closest one to water's pKa. Please answer within a margin of error of one.

ANSWER: **17** [also accept **16** or **18**]

[10] This alcohol, however, has a pKa of 10. That is because this compound's conjugate base is stabilized by resonance delocalization, since the hydroxyl is attached directly to a benzene ring.

ANSWER: **phenol**

<SP Chemistry>

6. A member of this group, Macaria, offers herself up after an oracle calls for the sacrifice of a maiden. For 10 points each:

[10] Identify this group of siblings that titles a Euripides play, in which they and Iolaus are hounded by Eurystheus after the death of their father.

ANSWER: the **children** of **Heracles** [or obvious equivalents]

[10] *The Children of Heracles* is set in this city, which is ruled by Theseus's son Demophon. This city chose its namesake goddess as its patron when she gave it the olive tree.

ANSWER: **Athens**

[10] In another Euripides play about Heracles, Megara, Heracles's children, and *this* man are sentenced to death by the Theban Lycus. This man once tried to kill a cow with a club, which rebounded, killing his uncle Electryon.

ANSWER: **Amphitryon**

<JB Other Literature>

7. During this battle, an astounding 13 Confederate generals were either killed or wounded. For 10 points each:

[10] Name this November 1864 battle that was a disaster for the Army of the Tennessee, at that time led by John Bell Hood. John Schofield led the Union forces in this "Pickett's Charge of the West."

ANSWER: Battle of **Franklin**

[10] Hood replaced this man as commander of the Army of the Tennessee. He reinforced P. G. T. Beauregard at the First Battle of Bull Run, and shared his last name with the Confederate commander killed at the Battle of Shiloh.

ANSWER: Joseph **Johnston**

[10] As head of the Confederacy's Department of the West, Johnston refused to reinforce this Mississippi stronghold. It fell to Grant on July 4, 1863, effectively splitting the Confederacy in half.

ANSWER: **Vicksburg**

<LL American History>



8. This man wrote an influential defense of philosophy's status as a discipline in *An Essay On Philosophical Method*. For 10 points each:

[10] Name this early 20th-century English philosopher, who drew upon his work in archaeology in his books *An Autobiography* and *The Idea of History*.

ANSWER: R.G. Collingwood [Robin George Collingwood]

[10] Collingwood is often grouped with a British philosophical school of this kind. This philosophical position emphasizes the role of the mind in creating entities, and is opposed to realism, naturalism, and physicalism.

ANSWER: idealism [accept word forms like idealist]

[10] Collingwood also wrote an influential work called *The Principles of [This Field]*. The philosophical study of this field is called aesthetics.

ANSWER: art [accept *The Principles of Art*]

<JR Philosophy>

9. A small cluster below the “spin-up line” in a plot of these objects contains binary and millisecond ones. For 10 points each:

[10] Name these neutron stars that rotate very precisely. These stars emit radio waves in narrow beams out of their magnetic poles until they fall below the “death line.”

ANSWER: pulsars

[10] Pulsars start in the top left of this diagram and evolve toward the lower right “graveyard.” This diagram's  $x$ -axis ranges from 1 ms to 10 seconds, and its  $y$ -axis is a related dimensionless quantity that is small and hard to measure.

ANSWER:  $P$ -dot diagram or plot [prompt on “period–change in period” or “period–time derivative of period,” or similar answers with “spin rate” instead of “period”]

[10]  $P$  over two  $P$ -dot estimates this quantity, which is constant along positively sloped lines on a  $P$ -dot plot. The HR turnoff point estimates this quantity for a globular cluster, since its stars have the same value for this quantity.

ANSWER: age [accept characteristic age]

<OL Other Science>

10. In one of this film's pervasive visual metaphors, the narrator twirls his cane while walking by a spinning merry-go-round. For 10 points each:

[10] Name this Max Ophüls (“mocks OH-fulls”) film in which a narrator introduces ten different vignettes about illicit sex.

ANSWER: *La Ronde*

[10] *La Ronde* and other films by Ophüls are perhaps best-known for their “swooping” and “gliding” use of this cinematographic technique. In *Goodfellas*, Martin Scorsese used this technique for the Copacabana nightclub scene.

ANSWER: tracking shot

[10] The narrator of *La Ronde* sings “turn, turn my characters,” to this kind of tune. This ballroom dance is particularly associated with Vienna, which is the setting of *La Ronde*.

ANSWER: Viennese waltzes [or valeses]

<JR Other Arts>

11. The author of this poem called its pronouns “tiny, wispy, weakly argumentative Kilroy-is-here announcements.” For 10 points each:

[10] Name this poem by Gwendolyn Brooks, which is set at the Golden Shovel and depicts pool-players who “Jazz June” and “Die Soon.”

ANSWER: “We Real Cool”

[10] Brooks stated “We say ourselves fortunate to be driving by today” in a poem from *Annie Allen* describing an upper-class neighborhood in *this* city. This city is called “hog-butcher to the world” in a Carl Sandburg poem.

ANSWER: Chicago

[10] Brooks’ “sonnet-ballad” repeatedly asks one of these figures “where is happiness?” Another Brooks poem titled for one of these people ends “Believe me, I knew you, though faintly, and I loved, I loved you all.”

ANSWER: mothers

<JB American Literature>

12. Stasanor’s attempts to curtail these people’s practice of Zoroastrianism may have led them to revolt under Spitamenes and besiege their capital, Maracanda. For 10 points each:

[10] Name these people, the namesake of a rock fortress which soldiers rappelled up in order to reach the Bactrian princess Roxana in 327 BCE.

ANSWER: Sogdians

[10] The Sogdians were most famous for their role as merchants on this network of trade routes, along which a namesake cloth was transported from Asia to Europe.

ANSWER: the Silk Road

[10] A Sogdian princess named Apama was the wife of this member of the Diadochi surnamed Nicator. He established an empire in the Near East ruled by several kings named Antiochus.

ANSWER: Seleucus I Nicator

<JB European/Ancient History>

13. You’ve got a bunch of chilies and you want to make some delicious food. Answer some questions about what you might do, for 10 points each.

[10] With the ancho chilies, you should totally make *mole* (“MOLE-ay”), a Mexican sauce that integrates *this* normally-sweet ingredient. This ingredient is made as candy by Scharffenberger and Hershey’s.

ANSWER: chocolate

[10] If you have some bird’s-eye chilies, you should make one of the various Southeast Asian salads based on *this* tropical fruit when it is unripened or “green.” In New York, this fruit titles a popular hot dog chain.

ANSWER: green papaya [accept Papaya King]

[10] You can soak your red chilies in olive oil to make *this* tomato-based sauce, which is usually served over penne. This Italian sauce takes its name from the word for “angry” because of its spicy kick.

ANSWER: *sugo all’*arrabbiata

<JR Mythology/Other>

14. This phenomenon only occurs once the modulation amplitude exceeds a critical threshold, but once that is achieved it is not impeded by frictional energy loss. For 10 points each:

[10] Identify this phenomenon that occurs when a system's natural frequency oscillates around a mean value at a rate given by twice that mean value, enabling efficient energy transfer from the force driving the oscillation.

ANSWER: **parametric resonance** [prompt on "resonance"]

[10] Parametric resonance only occurs if the parametric modulation exceeds 2 over the square root of this number. This value equals 2 pi times the ratio of the energy stored to the energy lost per cycle, and hence describes the lifetime of resonant excitations.

ANSWER: **Q-factor** [or **quality factor**]

[10] If the Q-factor is exactly one-half, then a system exhibits the critical form of this phenomenon. Usually caused by friction in physical systems, it reduces the amplitude of the system's oscillations.

ANSWER: **damping**

<SE Physics>

15. This act was passed under the Prime Ministership of Lord Derby and it was opposed by the Adullamites. For 10 points each:

[10] Name this act, a ploy by Conservatives to help the Party in general elections. John Stuart Mill tried to introduce a provision into this bill that would benefit women.

ANSWER: **Second Reform Act** [or **Reform Act of 1867**; or **Representation of the People Act**; prompt on "Reform Act"; do not accept "First Reform Act"]

[10] During the leadup to the passing of the Second Reform Act, rowdy riots occurred in this London location in May 1867. The riots in this location led to the resignation of Spencer Walpole.

ANSWER: **Hyde Park**

[10] Lord Derby's Chancellor of the Exchequer was this man, who was Prime Minister from 1874 to 1880. He feuded with William Gladstone and was targeted in the Midlothian Campaign.

ANSWER: Benjamin **Disraeli**

<LL European/British History>

16. A play by this author opens with a Young Man and a Young Girl telling each other "I love you and everything is beautiful." For 10 points each:

[10] Name this pioneer of the Theatre of Cruelty who included the essay "No More Masterpieces" in his book *The Theatre and its Double*.

ANSWER: Antonin **Artaud** [Antoine Marie Joseph Artaud]

[10] This extremely short play by Artaud features "legs of living flesh" and temples falling from two colliding stars. It ends with the vagina of the Wet-Nurse splitting and glistening like the sun.

ANSWER: **Jet of Blood** [or **Jet de Sang**; accept **Spurt of Blood**]

[10] Artaud comes from this country. Another playwright from this country wrote *The Blacks* and *The Maids* and was named Jean Genet ("john juh-NAY").

ANSWER: **France**

<LL European Literature>

17. One of these works includes a depiction of a moment “as if the sky had quietly kissed the Earth” from a poem by Eichendorff. For 10 points each:

[10] Name this musical genre, one example of which begins with “Im wunderschönen Monat Mai” (“im VOON-duh -sher-nen MOH-naht MAI”). Many works in this genre are characterized by a reprise of the beginning at the end, as in Beethoven’s *An die ferne Geliebte*.

ANSWER: **song cycles** [accept *Liederkreise*, *Liederzyklus*, or *Liederzyklen*]

[10] During his 1840 “year of song,” this German Romantic composer wrote song cycles like *Dichterliebe* and *Frauenliebe und -leben* (“FROWN-lee-b-uh oont LAY-bun”) for his new wife, Clara.

ANSWER: Robert (Alexander) **Schumann**

[10] This German baritone recorded several song cycles for a six-CD Schumann set with Christoph Eschenbach. He also recorded the “three” Schubert song cycles as part of a 21-CD Schubert set with Gerald Moore.

ANSWER: Dietrich **Fischer-Dieskau**

<JR Auditory Arts>

18. This hypothesis was partially refuted using the finiteness of human lifetimes by James Poterba and Lawrence Summers. For 10 points each:

[10] Name this hypothesis that aggregate demand does not depend on whether the government changes taxes or issues bonds.

ANSWER: **Ricardian equivalence**

[10] A related hypothesis holds that individual consumption is based on what they expect their “permanent” value for *this* quantity will be. This quantity represents how much money a person earns.

ANSWER: **income**

[10] The permanent income hypothesis was put forward by *this* American economist.

ANSWER: Milton **Friedman**

<JR Economics/Psychology>

19. This book infamously exhorts women to taste their own menstrual blood. For 10 points each:

[10] Name this 1970 book that explores how society detaches women from their sexual desire. It was written by Germaine Greer.

ANSWER: *The **Female Eunuch***

[10] Like Shulamith Firestone’s *The Dialectic of Sex*, *The Female Eunuch* was a landmark in *this* movement that lasted from around 1960 to 1980. This movement was the driving force behind the Equal Rights Amendment.

ANSWER: **second-wave feminism** [prompt on “feminism”]

[10] This author may have kicked off second-wave feminism with her 1963 book *The Feminine Mystique*.

ANSWER: Betty **Friedan**

<JR Social Science/Thought>

20. This vitamin is required for the intestinal absorption of calcium. For 10 points each:

[10] Name this steroid vitamin group whose synthesis in the dermis is dependent on sunlight.

ANSWER: vitamin **D**

[10] After cholecalciferol is synthesized or ingested, it must undergo this process twice: first in the liver, and second in the kidney. This process is performed by cytochrome P450s.

ANSWER: **hydroxylation** [prompt on “oxidation”]

[10] Vitamin D upregulates calcium binding proteins, such as calbindin, that bind and transport calcium into intestinal epithelium. Those proteins bind to calcium using this helix-loop-helix protein motif.

ANSWER: **EF-hand**

<SP Biology>