

ACF Nationals 2013

Packet by Michigan State University, the University of Ottawa, and the University of South Carolina

Tossups

1. In one of this author's novels, the fiendish alchemist Demetrius Doboobie takes the name Dr. Alasco and prepares a poison which is counteracted by an antidote provided by Wayland Smith. This author's characteristic style was imitated by Alfred de Vigny in his novel *Cinq-Mars*. He wrote a novel in which Anthony Foster dies in a gold room in Cumnor Place, which ends with Richard Varney tricking Amy Robsart into falling to her death. This author used the pseudonym Jedediah Cleishbotham to write a novel whose first section depicts the storming of the Old Tolbooth prison. The protagonist of that novel walks barefoot to London to plead for the life of her sister Effie. His novel about the idealistic Jeanie Deans forms part of his series *Tales of My Landlord*. For 10 points, name this author of historical romances such as *Kenilworth* and *The Heart of Midlothian*.

ANSWER: Sir Walter Scott

2. In 2006, Roberto Alagna stormed off the stage at La Scala after being booed for singing this character's first aria. This character's major aria ends with a pianissimo high B flat marked morendo, although many singers voice that note loudly instead of letting it softly fade away. After singing that aria, the "extraordinary joy" on this character's face is observed by a jealous woman in the duet "Quale insolita gioia." He sings an aria about his wish to build a woman a throne near the sun following the recitative "Se quel guerrier io fossi," in which he dreams of leading an army to victory. In the beginning of the first act, this tenor learns about an upcoming war from the high priest Ramfis. For 10 points, name this tenor who sings about the heavenly beauty of a foreign princess in the aria "Celeste Aida."

ANSWER: Radames

3. Hurwicz and Walker proposed incentive-compatible mechanisms for achieving a form of this concept proposed by Lindhal. In an infinite time horizon, assuming that utility functions have weak separability in consumption and leisure, these should be homogenous according to the Atkinson-Stiglitz theorem. That result was extended to suggest that assuming homogenous discount rates, one form of these should be zero for infinite horizons according to the Chamley-Judd theorem. A similar result by Diamond and Mirrlees showed that for flexible economies, these should always allow maintaining output along the production possibilities frontier. Constraints on maintaining utility and profits while applying these were the earliest formulation of the Ramsey problem, giving rise to the "optimal" analysis of these entities, which can hurt those with a high marginal propensity to consume. For 10 points, name these distortions that come in lump-sum and value-added varieties, and can be levied on income.

ANSWER: taxes [or taxation; or tax rates; accept Lindahl tax until "Lindahl"; accept "optimal tax" at any point]

4. This process can lead to type D extinction vortices, and Carl Huffaker suggested that it may lead to the creation of prey refugia by increasing heterogeneity. Two competing hypotheses about this phenomenon's effects are the proportional area and extinction threshold hypotheses. To investigate the effects of this process, Thomas Lovejoy conducted the BDFFP in the Amazon rainforest, which was also intended to help resolve the "single large or several small" debate, which Daniel Simberloff treated as a special case of this process. The species-area relationship has been used to apply island biogeography theory to the loss of biodiversity due to this process. This process increases the importance of edge effects, and although its negative effects can be mitigated by habitat corridors, it can cause inbreeding depression by isolating a species's populations. For 10 points, name this process in which a continuous habitat is broken up into smaller pieces.

ANSWER: habitat fragmentation [accept word forms or "population fragmentation"; prompt on "habitat loss" or equivalents]

5. One candidate in this election had previously been defeated as an incumbent in a mayoral race by Gerhard Bading, while another died in office on October 30th and was replaced on the ticket by Nicholas Butler. In addition to Emil Seidel and James Sherman, candidates in this election included the sitting Governor of Indiana, who was the winner's running mate. The man who won this election was advised by Colonel House and had come from the political machine of "Sugar Jim" Smith. The loser of this election had made the Winona Speech. Six percent of the vote in this election went to Eugene Debbs. Rival platforms in this election were called the "New Nationalism" and the "New Freedom". Only Vermont and Utah cast votes for the incumbent, who had signed the Payne-Aldrich Tariff. For 10 points, name this election spoiled by the Progressive Bull Moose Party, ending in the election of Woodrow Wilson.

ANSWER: American Presidential Election of **1912**

6. Nehemiah 8:5 provides the basis for one part of this practice known as "hagbah," which is paired with the practice of "gelilah," while mishaps during this practice can result in a congregation being obligated to fast for a day. One practice for proper fulfillment of this action involves notations which are not visible known as "traup" or "neginot," the rarest of which is the "shalsholet." This practice is interrupted for 7 "aliyot," the first two of which are reserved for the "cohen" and "levy." Lesser forms of it are practiced during the Monday and Thursday morning prayers and before a particular instance of this, a father is called to recite a blessing that frees him from the "evils" or misdeeds of his offspring. Whether women can participate in this action, after which an object is paraded around the congregation for kissing, is a controversy in Modern Orthodoxy. Requiring all males over 13 to participate on a holiday following Sukkot, for 10 points, identify this action, in which portions of the Pentateuch are read from a scroll.

ANSWER: **Torah Reading** [or **Laying**; accept equivalents that have Torah and some equivalent for reading]

7. This figure's wife once held the lungs and heart of an enemy Hualla in her mouth, allowing him to defeat Copalimayta. Proving his origin by wearing a dress made of shiny silver and gold plates, this demigod banned incest, but still married his sister Cello. A variant tale of this figure has him oust and murder his three brothers, all named Ayar; in common with most tales about this figure, that variant has him emerge from Pacaritambo with the tapac-yauri. He and his companion Mama Huaco tested the softness of ground by casting a golden wand; after traversing some caves, this man founded a sun temple and eventual city where the rod sank. For 10 points, name this mythological man, usually consider the son of Inti and founder what is now Cuzco as the mythological first Inca.

ANSWER: **Manco** Cápac

8. In a 2012 *Nature* paper, Maehara et al. studied superflares emitted by slowly rotating examples of this type of object, finding more starspots than expected. The Subaru Telescope's HiCIAO (HI-chow) detector observed a relatively cool Jupiter-sized planet orbiting a star of this type. This type of star is relatively abundant in ionized calcium, giving rise to emission lines at 3968 and 3933 Angstroms, the H and K lines, and they have weak, but detectable, hydrogen spectral lines. This type of star, which is not the K type, has small concentrations of OH and CN radicals, but more iron, sodium, and titanium, among other metals. Examples of this type of star include 51 Pegasi, Alpha Centauri A, and Tau Ceti. For 10 points, name this fairly common type of star, prominent examples of which include the Sun.

ANSWER: **G**-type Main Sequence Star [or Class **G** Star; or **G** Dwarf Star; or **Yellow Dwarf** Star; or **G** V Star; prompt on main sequence **star**]

9. Two characters in this novel quarrel about the usefulness of a correspondence course on boxing after reading an ad that asks “CAN YOU PLAY A MAN’S PART?” One of this novel’s chapters parallels awkward dinner parties with the McKelveys and the Overbrooks. Its main character receives a private loan from William Washington Eathorne after helping him publicize the Sunday School of Reverend John Jennison Drew. At the end of this novel, its main character declares that he has wasted his life making “a quarter of an inch out of a hundred possible rods” and encourages his son Ted to become a mechanic. Its main character has a recurring dream about a romantic “fairy child,” and rebels against his peers by supporting Seneca Doane during a strike. Tanis Judique has an affair with this novel’s title character, who becomes dissatisfied with his life after the incarceration of his best friend Paul Riesling. For 10 points, name this 1922 novel about a conforming real estate agent by Sinclair Lewis.

ANSWER: **Babbitt**

10. Wolfred Nelson led one successful skirmish in this modern-day polity, later serving as mayor of its largest city from 1854-1856. Politicians from this polity include one-time professional athlete Chubby Power. Construction of a golf course led to a siege here at the Kanesatake community in the Oka Crisis. Roncarelli v. Duplessis was a victory for a Jehovah’s Witness discriminated against by the leader of this province, which also lost Switzman v. Elbing, in which the Canadian Supreme Court overturned this province’s “Padlock Law” allowing the closing of newspapers. A Prime Minister from this province signed the Kelowna Accord and passed the Civil Marriage Act legalizing same-sex marriage. This province enacted economic reforms and secularization during its “Quiet Revolution”. In response to events in this province one Prime Minister said “just watch me”. For 10 points, name this province that speaks French.

ANSWER: **Quebec**

11. These species may be called “foiled” when they are stabilized by a nearby double bond. When Tebbe’s reagent reacts with a Lewis base, it forms one of these. Imidazole-2-ylidenes are among the stable examples of these molecules, which can exist in Wanzlick equilibrium with their dimers, and which were first isolated in crystalline form by Anthony Arduengo. Those stable molecules of this type are called “persistent.” These molecules can be formed by photolysis of diazirines or diazoalkanes. Saturated N-heterocyclic types of these are combined with a ruthenium complex in 2nd generation Grubbs’ catalysts. If a metal bonded to one of these molecules bears an electron-withdrawing group, the result is named for Fischer; if it is bonded to an electron-donating group, it is named for Schrock. For 10 points, name these molecules found in singlet and triplet states, in which a neutral, divalent carbon atom has two unshared electrons.

ANSWER: **carbenes**

12. Cornelius Cardew attacked John Cage and this composer in a polemic whose title claims that he “serves imperialism.” This composer wrote movements such as “The Playful Constructor” and “The Exalted Spinning Spirit” for a solo clarinet piece named for a character from the commedia dell’arte. A percussion piece by this composer calls for the soloist to be surrounded by instruments such as güiros and African long drums, and features a spiral bound score with no defined beginning or end. He composed a series of piano works whose eleventh piece consists of nineteen fragments on a single page which can be played in any order. This composer of *Harlekin* and *Zyklus* wrote an opera which includes the scenes *Kathinka’s Chant* and *Lucifer’s Dream*. He composed nineteen *Klavierstücken*, as well as a seven-opera cycle subtitled “The Seven Days of the Week.” For 10 points, name this avant-garde German composer of the massive opera *Licht*.

ANSWER: Karlheinz **Stockhausen**

13. One of this author's novellas is divided into 24 sections, each consisting of a single long sentence, and is subtitled "on the Observing of the Observer of the Observers." That novella describes how Otto von Lambert hires the filmmaker F. to document his wife Tina's mysterious death. He wrote a play whose first act ends with a man who receives visions from King Solomon strangling his nurse Monika Stettler. In the second act of one of his plays, two characters reveal themselves to be the spies Kilton and Eisler before Mathilde von Zahnd vows to control the world using the Principle of Universal Discovery. This author of *The Assignment* also wrote a play set in the town of Gullen, whose inhabitants ritualistically murder Alfred III in order to receive a billion dollars from Claire Zachanassian. For 10 points, name this Swiss author of the plays *The Physicists* and *The Visit*.

ANSWER: Friedrich Durrenmatt

14. An argument based on causal closure and the rejection of overdetermination grounds Jaegwon Kim's defense of a kind of physicalism based on this concept. Jerry Fodor and Hilary Putnam have argued that multiple realizability undermines this concept and preserves the autonomy of "special sciences." The "greedy" version of this concept is dismissed, while a more modest form is defended through the metaphor of a crane, in *Darwin's Dangerous Idea* by Daniel Dennett. Along with the analytic-synthetic divide, a semantic form of this concept is one of the "Two Dogmas of Empiricism" Quine claimed to have refuted. Ernest Nagel identified this concept with the process of showing a theory to be logical consequence of a "base" theory via bridge laws. For 10 points, name this concept that most commonly refers to the ability of observations about an entity to be explained as solely the interactions of its parts.

ANSWER: Reductionism [accept word forms; accept "reductive physicalism" until "greedy"]

15. This man claimed that his ethnic group originated in Colchis, then moved to Rome, then followed the Cattle of Geryon to their present homeland, a story he attributes to Roman historian Pompeius Trogus. When this man arrived in one city as a refugee, he was given a meat stall to operate for income, which he used to train for the priesthood. The protagonist of one of this historian's books is betrayed by a relative named Moses, and as a child shows his future greatness by being able to bend a bow further than his future rival. This man's first book is an eyewitness account of two attacks on his home city and is titled the *Siege of Skhodra*. In a more famous book, this man describes the fortification of Kruja, the attacks of Ballaban Badera, and the formation of the League of Lezhe. That work centers on a man born George Castrioti. For 10 points, name this Albanian historian, best known for popularizing Skanderbeg in the West.

ANSWER: Marin Barleti

16. In one scene in this play, various members of the chorus claim to have suddenly gone lame and to have sprained an ankle while standing still. It is implied that one character in this play is raped by a character who repeatedly refers to him as "Ganymede" and drags him into a cave. The first character to appear in this play carries a rake with him and reminisces about stabbing his spear through the shield of Enceladus before noticing a group of characters performing the *sikinnis* dance. A group of characters were enslaved while searching for the kidnapped Dionysus before the events of this play, which is a burlesque version of a story from Book IX of the *Odyssey*. For 10 points, name this Euripides play in which Silenus and his satyrs chicken out of helping Odysseus blind Prometheus, the only fully extant satyr play.

ANSWER: *The* Cyclops [or Kyklops]

17. A university in this city is the location of the Lynn R. Lowrey Arboretum, which includes a pecan tree planted by John J. Pershing. Jean Dubuffet designed the Monument au Fantome in this city's park Discovery Green. This city, home to a house known as The Orange Show, has a chapel in the shape of an octagon inscribed in a Greek cross. This city is home to the largest church in the United States, Lakewood Church. This city's Allen Landing is the point at which the White Oak Bayou merges with the Buffalo Bayou. Home to the JPMorgan Chase Tower, this city is near the San Jacinto Battlefield, and has a center nicknamed Mission Control. For 10 points, name this location of the Rothko Chapel and the Johnson Space Center, a highly populated Texas city.

ANSWER: Houston

18. This man was given his first cabinet post because of the support of Lord Chichester, who was then Home Secretary. Early in his career, this man survived an assassination attempt by a Lieutenant Davies. This man nearly caused an international scandal by inviting Lajos Kossuth to his house, but was convinced not to do so at the last moment by a vote of the cabinet. This man sparked one war by strongly backing the actions of Harry Parkes. This man was once forced to resign over the Orsini Affair, where a bomb made in Britain was used in an assassination attempt on Louis Napoleon. He passed a law liquidating the British East India Company and transferring its power to the crown in response to the Sepoy Mutiny. Earlier, as Foreign Secretary, he blockaded the port of Piraeus and gave a moving speech in defense of Dom Pacifico. For 10 points, name this British Prime Minister of the 1850's known for his aggressive foreign policy.

ANSWER: Lord Palmerston [or Henry John Temple]

19. The central equation for one theory in this class describes the velocity as the ratio of Dirac current to probability density, which is dependent on the positions of all particles; the theory in which that equation appears posits what it calls a quantum potential. These are generally value-definite, which contradicts independence of basis by the Kochen-Specker theorem, one of many no-go theorems for these. One stochastic theory of this type was developed by Edward Nelson. Examples of these theories include pilot-wave theories like de Broglie's, in which equations of motion are known as guiding equations. In general, these systems propose additional postulates to complete quantum mechanics, a trend exemplified by the Bohm interpretation. Locality seems to necessitate one of these according to the EPR paradox, but Bell's theorem rules out all local ones of these. For 10 points, name these theories according to which quantum systems would be essentially determinate if we could obtain more information.

ANSWER: hidden variable theories

20. After viewing this painting at the Salon d'Automne, Isaac Grunewald proclaimed, "suddenly I stood in front a wall that sang, no screamed, color and radiated light" and joined the school of its painter. A pink house is partially cut off in the top-left corner of this painting, and is part of a landscape that includes two white poplar trees. Vases of oil and vinegar surround a bouquet of flowers in this painting. The artist's signature is present underneath a partially cut-off wooden chair on the bottom-left of this canvas. On the right of this canvas, a woman carries the dish that sometimes gives this painting its name. Before being delivered to Sergei Shchukin, this painting was originally exhibited with a green and then blue motif. The blue floral pattern on the tablecloth in this painting blends into the wallpaper, and its only human figure is a maid. For 10 points, name this 1908 masterpiece of Henri Matisse, primarily painted in the title color.

ANSWER: *The Dessert: Harmony in Red* [accept either underlined answer; also accept *The Red Room* or *Le Dessert: Harmonie en Rouge* or *Le Dessert: Harmonie en Rouge*; or *The Dinner Table*; or *Decorative Panel for a Dining Room*; do not accept "The Red Studio"]

Bonuses

1 A black coat hangs in the top left of this painting, which is set in a simple room with bare wooden floors. For 10 points each:

[10] Identify this 1893 genre painting by Henry Ossawa Tanner of an elderly black man teaching a youth how to play the title instrument.

ANSWER: *The Banjo Lesson*

[10] This American Realist depicted scenes like *Thanksgiving in Camp* for *Harper's Weekly* during the Civil War, and a painting of a storm coming on in *The Gulf Stream*.

ANSWER: Winslow Homer

[10] This other American artist was influenced by French Impressionism while studying under Karl Theodor von Piloty in Munich. Upon returning to New York, this artist of the Southampton-set *At the Seaside* and still-lives of dead fish established a namesake school now called Parsons The New School for Design.

ANSWER: William Merritt Chase

2. Hope for breakaway nations seeking statehood was strengthened after the independence of South Sudan in July of 2011. For 10 points each:

[10] This state, comprising the northern section of Mali, declared its independence in April of 2012 after Tuareg rebels forced the Malian Army out.

ANSWER: Azawad

[10] This group was founded in October 2011 in order to fight for the independence of Azawad. It has been accused of ties with Al-Qaeda in the Islamic Maghreb, and by April 1, 2012 it had taken control of almost all of northern Mali.

ANSWER: MNLA [or National Movement for the Liberation of Azawad]

[10] A great setback for Azawad has been the intervention of this European nation on the Malian side. This nation's new president has controversially raised taxes on the wealthy.

ANSWER: France

3. These singularities can be gotten rid of by regularization for theories that are perturbative at small distances or high energies; that process is known as completion. For 10 points each:

[10] Name this situation in which an integral representing a physical quantity seems to go to infinity. The original one occurs in the low-wavelength limit of the Rayleigh-Jeans law and motivated the development of quantum mechanics.

ANSWER: ultraviolet divergences [grudgingly accept ultraviolet catastrophe; prompt on divergence]

[10] A general framework for removing divergences is the method of this group, which encodes the scale invariance of a system. According to the namesake equation of this group, the partial of the g-parameter with respect to the log of the energy scale is equal to the beta function.

ANSWER: renormalization group

[10] Unlike ultraviolet divergences, infrared divergences occur only in theories gauged by particles with this property, which makes sense when one considers that infrared divergences result from very long-distance interactions.

ANSWER: massless [accept close equivalents; prompt on moving at the speed of light or close equivalents]

4. This revolt began after a group of peasants conspired in a cemetery to “destroy” the nobles who had abandoned King John II at the Battle of Poitiers. For 10 points:

[10] Name this 14th century peasant uprising in France. Centered in the Oise valley, it was so named because of the type of padded tunic worn by the peasants.

ANSWER: **Jacquerie**

[10] The Jacquerie was led by this wealthy peasant from Beauvais. He was tricked into accepting peace talks at the camp of Charles the Bad of Navarre where he was captured, tortured, and beheaded.

ANSWER: Guillaume **Cale** [or Guillaume **Caillet**; or Jacques **Bonhomme**; or Jack **Goodfellow**]

[10] The largest engagement of the Jacquerie came at this battle near Beauvais. After the death of Cale, the morale of the peasants was crushed, leading to their slaughter at the hands of Charles’ army.

ANSWER: Battle of **Mello**

5. The main character of this novel begins an affair with Alejandra before Jimmy Blevins is hanged. For 10 points each:

[10] Name this novel, in which Lacey Rawlins accompanies John Grady to Mexico. It precedes *The Crossing* in its author’s “Border Trilogy.”

ANSWER: **All the Pretty Horses**

[10] *All the Pretty Horses* was written by this American author of violent modern Westerns such as *Blood Meridian* and *No Country for Old Men*.

ANSWER: Cormac **McCarthy**

[10] McCarthy also created this character, who chooses to spare the wounded man Shelby and refuses to abandon Sam Tate. At the end of the novel he appears in, he tells his antagonist “You ain’t nothin” before being killed.

ANSWER: the **kid** [or the **man**]

6. These states are marked with a double dagger, and their structure in relation to the free energy of the reaction is described by Hammond’s postulate. For 10 points each:

[10] Name these states that correspond to saddle points on a potential energy surface and are found at the highest-energy point on a reaction coordinate diagram.

ANSWER: **transition** states [or **activated complex**]

[10] These are visualizations of potential energy surfaces for reactions with simultaneous changes in two bonds. In them, the transition state moves along the central diagonal according to the change in free energy in the reaction pathway of interest, and perpendicular to the diagonal as a function of the energy changes in competing pathways.

ANSWER: **More O’Ferrall-Jencks** plots (either name is acceptable)

[10] One consequence of transition-state theory is this equation, which gives the relationship between Gibbs free energy and reaction rate.

ANSWER: **Eyring-Polanyi** equation (either name is acceptable)

7. This poem includes a page which begins and ends with the capitalized words “AS IF,” and ends with the image of a constellation. For 10 points each:

[10] Name this poem that insists the title condition holds even “cast in circumstances of eternity / From the depths of a shipwreck.” Its unusual layout incorporates many different typefaces.

ANSWER: “A **throw of the dice** will never abolish chance” [or “Un **coup de des** jamais n’abolira l’hasard”]; be generous in accepting translations]

[10] “A throw of the dice will never abolish chance” was written by this French Symbolist, whose poem “The Afternoon of a Faun” inspired a prelude by Debussy.

ANSWER: Stephane **Mallarme** [or Etienne **Mallarme**]

[10] This fellow Symbolist praised Mallarme in his anthology *The Accursed Poets*. Faure’s song cycle *Le bonne chanson* sets nine poems by this author, who may be more famous for his poem “It Rains in My Heart.”

ANSWER: Paul **Verlaine**

8. This expedition resulted in the collapse of the Zhili Clique and the defeat of Zhang Zoulin. FTPE,

[10] Name this KMT offensive of the 1920's, which sought to unify China by defeating warlords.

ANSWER: **Northern Expedition**

[10] The Northern Expedition was led by this man, who would go on to lead the Republic of China until his death in 1975.

ANSWER: **Chiang Kai-shek**

[10] The Northern Expedition destroyed this autocratic military government, which was established by Yuan Shikai.

ANSWER: **Beiyang** Government

9. This creator of the dome of the sky and companion of Väinämöinen is promised the Maiden of Pohjola, but she rejects him. For 10 point each:

[10] Name this forger of the Sampo in the *Kalevala*.

ANSWER: Seppo **Ilmarinen**

[10] Ilmarinen created one of these for himself made of gold and silver, which he then found unworthy and attempted to pawn off on Väinämöinen.

ANSWER: **wife** [accept **woman** or equivalents; prompt on **person** or **robot** or **idol**]

[10] Ilmarinen's attempts to forge himself a gold wife and to win the Maiden of Pohjola were necessitated when his wife was killed by magical bears. Those bears were called down evoked by this vengeful orphan, who was piqued at the rocks in the bread Ilmarinen's wife had given him. He went on to genocide Untamo's tribe and kill himself.

ANSWER: **Kullervo**

10. This author memorialized a friend suffering from AIDS in his poem "The Man With Night Sweats." For 10 points each:

[10] Name this British poet, whose collection *The Sense of Movement* includes his poem about a motorcycle gang, "On the Move."

ANSWER: Thom **Gunn**

[10] Thom Gunn is often considered a member of this group of post-World War II British poets, whose works are characterized by straightforward language and ironic themes. Its other members included D. J. Enright, John Wain, and Kingsley Amis.

ANSWER: The **Movement**

[10] This English poet of "High Windows" was a prominent member of the Movement. He warned "they fuck you up, your mum and dad" in his poem "This Be the Verse."

ANSWER: Philip **Larkin**

11. This figure was succeeded by a man known as Uncle Chlodwig. For 10 points each:

[10] Name this German statesman who succeeded Otto von Bismarck as the imperial chancellor of Germany in 1890. He is perhaps most famous for a strip of land in Africa.

ANSWER: Leo, Count von **Caprivi**

[10] Caprivi's free trade policies were opposed by this organization that was supported by the Junker class. It came to dominate the Conservative Party and ultimately merged into the Reichslandbund.

ANSWER: **Agrarian League** [or **Bund Der Landwirte**]

[10] Franz von Papen was a chancellor from this political party, which opposed Caprivi due to his denial of control of religious education to the Catholic Church. This party also opposed Bismarck's Kulturkampf.

ANSWER: **Center** Party [or **Zentrum**spartei]

12. This book claims that the title concepts numb people into a state of “Narcissus narcosis.” For 10 points each:
[10] Name this 1964 book, which argues that new technology becomes “extensions of man.” It divides the title concepts into “cool” and “hot” types, which respectively require more involvement and less involvement by their users.

ANSWER: Understanding Media

[10] *Understanding Media* was written by this Canadian communications theorist, who coined the aphorism “the medium is the message.”

ANSWER: Marshall McLuhan

[10] This one-time editor of the *Partisan Review* wrote a scathing review calling *Understanding Media* “impure nonsense.” He lambasted mass culture in his essays *Masscult and Midcult*, and demolished James Cozzens’s literary reputation in his essay “By Cozzens Possessed.”

ANSWER: Dwight Macdonald

13. The activity of this pathway is suppressed by the drug metformin, which indirectly downregulates enzymes such as PEPCK in this process. For 10 points each:

[10] Name this metabolic pathway largely localized to the liver that allows for the production of a particular carbohydrate from non-carbohydrate precursors such as pyruvate.

ANSWER: gluconeogenesis [or GNG]

[10] Glucose-6-phosphatase, the last enzyme in the gluconeogenesis pathway, essentially does the reverse of this first enzyme in glycolysis, which converts glucose to glucose-6-phosphate.

ANSWER: hexokinase

[10] The presence of differing enzymes in gluconeogenesis and glycolysis, and the differential regulation thereof, help prevent this situation where opposing metabolic processes run simultaneously to cancel out useful work, only producing heat by the net hydrolysis of ATP.

ANSWER: futile cycle or substrate cycle

14. Members of this sect refer to themselves as muwahhidun, or monotheists, and conversion to or from this faith is prohibited. For 10 points each:

[10] Name this Lebanon-based sect whose members are allowed to openly deny their faith in times of persecution if their lives are in danger.

ANSWER: Druze [or Duruz; or Darazi]

[10] Those who are allowed to fully participate in Druze religious services and know Druze doctrine belong to this highest level of the Druze faith. They are contrasted with the ignorant members of the faith known as juhhal.

ANSWER: uqqal [or aqil]

[10] The symbol of the Druze is a star with this many points. This is also the number of wounds suffered by Christ during the crucifixion.

ANSWER: five

15. A.B. Mitford's *Tales of Old Japan* opens with an account of these people, who became famous for taking part in the Ako incident. For 10 points each:

[10] Identify this group of people whose story is often fictionalized under the title *Chushingura*. They became famous for avenging their late lord Asano Naganori by executing the court official Kira Yoshinaka.

ANSWER: the **forty-seven ronin** [or **Shi-jū-shichi-shi**; prompt on partial answers or equivalents of "loyal retainers"]

[10] The most popular stage adaptation of the story of the forty-seven ronin was 1748's *Kanadehon Chushingura*, a play in this dramatic form. The most prominent author of these plays was Chikamatsu Monzaemon.

ANSWER: **bunraku** [or **ningyō jōruri**; prompt on "puppet theater"]

[10] Another adaptation of the story, "The Uncivil Teacher of Court Etiquette Kotsuke no Suke," appears in this Jorge Luis Borges collection, which was first published in 1935.

ANSWER: A **Universal History of Infamy** [or A **Universal History of Iniquity**; or **Historia universal de la infamia**]

16. This isorhythmic motet is divided into four sections based on the ratio 6 to 4 to 2 to 3, which may symbolize the proportions of the Temple of Solomon. For 10 points each:

[10] Name this motet, which uses "Terribilis est locus iste" as its cantus firmus. It was composed to celebrate the completion of the dome of the Florence Cathedral.

ANSWER: **Nuper Rosarum Flores**

[10] This early Renaissance composer, a leading member of the Burgundian school, wrote *Nuper Rosarum Flores*. Along with Antoine Busnois, he was one of the first composers to write a mass based on the song "L'homme arme."

ANSWER: Guillaume **Dufay**

[10] *Nuper Rosarum Flores* is one of Dufay's many motets that feature this type of music, in which two or more independent voices play simultaneously. Its name derives from the Greek for "many sounds."

ANSWER: **polyphony** [or **polyphonic**]

17. The unanimous ruling in this case modified *Betts v. Brady* and *Powell v. Alabama*, with Justice Black calling it an "obvious truth" that Counsel for the less fortunate was required. For 10 points each:

[10] Name this U.S. Supreme Court case which extended the right to counsel for poor people charged with criminal offences to all cases, and whose facts dealt with a break-in at a Panama City, Florida Pool Hall.

ANSWER: **Gideon** v. Wainwright

[10] Gideon's counsel at the Supreme Court was this man, later appointed by Eisenhower to the Supreme Court himself. He resigned because of an ethics scandal when he gave advice to Lyndon Johnson while on the court.

ANSWER: Abraham "Abe" **Fortas**

[10] In this 1947 case, the Supreme Court declined to incorporate the Bill of Rights against California, allowing state courts to infer guilt from the silence of the accused. Hugo Black wrote a notable dissent arguing that the Fifth Amendment should apply to states.

ANSWER: **Adamson** v. California

18. In the work in which it appears, this concept is exemplified by a film that provides the spectator with a “standardized echo of himself to which he hearkens.” For 10 points each:

[10] Identify this concept, described in a chapter of the same name, which causes every detail to be “so firmly stamped with sameness that nothing can appear which is not marked at birth, or does not meet with approval at first sight.”

ANSWER: the **culture industry**

[10] The term “culture industry” was coined in this seminal 1947 work co-written by Theodor Adorno and Max Horkheimer.

ANSWER: **Dialectic of Enlightenment**: *Philosophical Fragments*

[10] In an essay collected together with eight others in a collection titled *The Culture Industry*, Adorno argues that this theorist foresaw the rise and character of fascist propaganda, as well as anticipating “the fascist leader’s... resemblance to ham actors and asocial psychopaths.”

ANSWER: Sigmund **Freud**

19. This framework silicate crystallizes at the confluence of the continuous and discontinuous branches of Bowen’s reaction series. For 10 points each:

[10] Name this mineral.

ANSWER: **orthoclase**

[10] Orthoclase can form from continuous-branch plagioclase. The continuum of plagioclase is defined by relative abundance of these two elements, one of which is enriched at high temperature and the other at low temperature.

ANSWER: **calcium** and **sodium** [or **Ca** and **Na**]

[10] Plagioclase and orthoclase are at the same positions on Bowen’s reaction series and the Goldich dissolution series, which gives relative rates of this phenomenon. This is defined as the in situ breakdown of minerals by the environment.

ANSWER: **weathering**

20. One of these artists depicted herself suggestively eating a banana in *The Artist Eating a Banana*, while another presented a disheveled bed surrounded by detritus in *My Bed*. For 10 points each:

[10] Name this group of artists that includes Sarah Lucas, Chris Ofili, and Tracey Emin, who gained prominence in exhibitions such as *Freeze* and *Brilliant!* and earned the ire of the Stuckists.

ANSWER: **Young British Artists**

[10] Young British Artist Damien Hirst floated one of these creatures in formaldehyde in his work *The Physical Impossibility of Death in the Mind of Someone Living*. A John Singleton Copley painting shows one of these creatures attacking Brook Watson as it is about to be harpooned.

ANSWER: **shark**

[10] This Tracy Emin work chronicles a time period from 1963-1995 and is sometimes referred to as *The Tent*. Billy Childish is one of the names written on the inside of this work.

ANSWER: **Everyone I Have Ever Slept With** 1963-1995