



ACADEMIC COMPETITION FEDERATION

2015 ACF NATIONALS

PACKET BY RICE, ILLINOIS, AND WILLIAM & MARY

TOSSUPS

1. Claire Jean Kim proposed a “triangle” named for this concept which argues that a certain group of people have “relative valorization” over others. In an essay about “the aporias of a modern concept,” Etienne Balibar argued that anthropology is in a state of “decomposition” since philosophy and sociology are more suited to investigate this concept. A book about this concept argues that those negatively affected by it are subject to neither exploitation nor oppression, but rather, the “nihilistic threat,” which is the loss of hope and meaning. In *The Mind of Primitive Man*, Franz Boas concluded that this concept has no impact on cultural development or intelligence. Cornel West argued that in democratic societies, this concept still affects American lives in a book titled “[this concept] Matters.” For 10 points, name this social construct that groups humans into large populations, usually on the basis of skin color or geography.

ANSWER: race

2. The formation of these structures can be predicted by the DiANNA software. PRDX4 contributes to the formation of these structures by removing excess hydrogen peroxide. The formation of ascorbate via DHAR is accompanied by the formation of one of these structures in the enzyme’s second substrate. Ero1 (ee-ro-one) regenerates the activity of one protein which forms these structures; that protein contains four TRX domains, two of which contain the CXXC motif. RNase A contains 4 of these structures, which prefer to have dihedral angles near 90°. One of these structures exists in the oxidized, but not the reduced form of glutathione. DTT and beta-mercaptoethanol are used to cleave these structures, which are formed by PDI. Keratin is rich in these structures, which link together the heavy and light chains of antibodies. For 10 points, name these bonds in the tertiary structures of proteins which form between cysteine residues.

ANSWER: disulfide bonds [or disulfide bridges; or disulfide linkages; prompt on “cystines” or “cysteines”]

3. This man financed the Gravesend and Milton Mendicant Society for itinerant workers, and taught alongside his friend, the priest Frederick Freese at the Ragged School in Gravesend, after he was sent there as the Commandant of Engineers. After studying it for a year, this man used the writings of Claude Conder to argue that the Garden Tomb at Skull Hill was the true Golgotha, so it became known as this man’s “Calvary.” In a romanticized painting by George William Joy, this man is depicted at the top of a staircase staring down towards soldiers racing at him. After Gladstone reluctantly sent him to evacuate troops down the Nile River, he was slain while defending Khartoum against the forces of the Mahdi. Earlier, he had led the “Ever-Victorious Army” which fought against the army of Hong Xiuquan. For 10 points, name this British military officer whose acts in putting down the Taiping Rebellion earned him the nickname “Chinese.”

ANSWER: Charles George “Chinese” Gordon [or Gordon of Khartoum]

4. A poem in this collection opens by describing how the “salt off the sea whets / the blades of four winds” and depicts another author with “a hard pen scraping in his head”. In another of its poems, the speaker claims that “I rhyme / to see myself, to set the darkness echoing” and notes that “As a child, they could not keep me from wells”. A third poem from this collection laments the appearance of “a rat-grey fungus, glutting on our cache” and describes “palms sticky as Bluebeard’s.” “Synge on Aran” and “Personal Helicon” were published in this collection, whose title poem describes how the speaker “sickened, turned, and ran” after seeing that “the great slime kings / were gathered there for vengeance.” The lines “between my finger and my thumb / the squat pen rests” appear in the first and last stanzas of a poem in this collection that includes the line “By god, the old man could handle a spade.” For 10 points, “Digging” was published in what first major collection of poetry by Seamus Heaney?

ANSWER: Death of a Naturalist

5. The second movement of a concerto for this instrument was reconstructed in 2003 by Jos van der Zanden and Cees Nieuwenhuizen. In the second movement of another concerto for this instrument, before the last two measures the accompaniment consists entirely of sixteenth notes in the first violin and eighth notes in the rest of the non-soloist parts. Another concerto for this instrument features an *andante spiccato* opening movement and a second movement *adagio* that was transcribed for harpsichord by J.S. Bach. In Rimsky-Korsakov's orchestral arrangement of *Polovetsian Dances*, this instrument introduces the theme of the first dance. Concerti in D minor for this instrument were written by Alessandro Marcello and Tomaso Albinoni. A similar instrument lacks this instrument's low B flat key but otherwise has the same fingerings and is pitched a fifth lower; that instrument is the English horn. For 10 points, name this double reed woodwind instrument that plays the tuning note before orchestra performances.

ANSWER: oboe [do NOT accept "oboe d'amore"]

6. One text claims this figure was poisoned six times, and on the last time, he let himself be buried, only to return holding one shoe in his hand. In Japan, this figure is depicted as a hollow red doll with blanked eyes, one of which gets filled when setting a goal, and the other of which is filled after succeeding in that goal. He told his best student that he had attained his "marrow," which was deeper than the bones, flesh, or skin attained by other disciples. That student, Huike [hway-kuh] spent weeks in the snow begging to be his disciple, and was finally accepted after he cut off his left arm. The *Song of Enlightenment* says this man was 28th in a line beginning with Mahakasyapa, who smiled in response to Shakyamuni picking up a white lotus flower. The tea plant sprang from his eyelids after he cut them off to avoid sleeping while staring at a wall for 9 years, a practice later known as *zazen*. For 10 points, name this so-called "First Patriarch of Chan," an Indian-born monk who spread Zen Buddhism to China.

ANSWER: Bodhidharma

7. One ruler by this name stabbed himself in the company of his eunuch Drastamat after being thrown in jail trying to negotiate peace with Shapur II. Another ruler by this name, also known as Artabanus, ceased minting coins after a loss to Antiochus III at the Battle of Mount Labus, which allowed Antiochus to occupy Hecatompylos. The numerically second ruler of this name was succeeded by his son Pap, and built several hospitals and monasteries with the help of his chamberlain St. Nerses the Great. The final Roman client ruler of Armenia had this name, as did a king credited with founding the city of Nisa. The revolt of the governor Andragoras allowed that ruler of this name to lead the Parni tribe in occupying Hyrcania. The kingdom founded by that man later employed the general Surena, who poured molten gold down the throat of Crassus after defeating him at Carrhae. For 10 points, identify that man who was the namesake of a dynasty as the first ruler of the Parthian kingdom.

ANSWER: Arsaces [or Arshak]

8. Scattering from magnetic impurities destroys the pairing of time-reversed states in these materials. The properties of these materials are not affected by disorder in the system according to Anderson's theorem. In these materials, photons have a non-zero effective mass. The Nambu-Gorkov and Bogoliubov-de Gennes Hamiltonians can be used to explain these materials, which come in s-wave, p-wave, and d-wave types. One theory of these materials predicts that heat capacity varies exponentially with the band gap divided by temperature, and that the band gap's energy equals 3.5 times Boltzmann's constant times a critical temperature. In that theory, electron-phonon interactions cause the formation of bosonic particles which condense into the ground state. The London equations and BCS theory explain these materials, which expel magnetic fields in the Meissner effect. For 10 points, name these materials which have exactly zero electrical resistance.

ANSWER: superconductors [or word forms]

9. The anthropologist W.J. McGee distinguished between the "piratical" and "amicable" forms of this process in his work on the Seri Indians. With Melville Herskovits and Ralph Linton, Robert Redfield issued a memorandum for the study of this process in 1936. As part of a study at UCLA in 1978, John Schumann created a model by this name to describe second language acquisition. Canadian psychologist John Berry created perhaps the best-known model of this process, which places people into four boxes - that model built on the work of Theodore Graves, who coined the term for the "psychological" type of this process. This term itself was first used in 1880 by John Wesley Powell in his report to the U.S. Bureau of American Ethnography. Under Berry's model, it is strongest when people are fully assimilated, having weak ties with their home group. For 10 point, give this term, which is the process by which people adapt to a new culture.

ANSWER: acculturation [do NOT accept or prompt on "assimilation" or descriptive answers, such as "adapting to a new culture" - the clues specifically reference the term "acculturation"]

10. In an alleged travelogue by this author, he is shocked by locals who find enjoyment by watching an elephant get aroused, and purchases a Javanese slave named Zetnaybia who ends up bossing him around. This author of *Voyage to the Orient* wrote a novel whose protagonist loses the love of Aurelie and the title character because of his obsession with Adrienne. The speaker of a poem by this man describes “plucking from Orpheus’ lyre one by one / the saintly sighs and the faerie cries” and asks “Am I Phoebus or Love?...Biron or Lusignan?” Eliot’s “The Waste Land” quotes a line by this man about “the Prince of Aquitaine in the ruined tower,” which comes from a poem that opens “I am the dark one, the widower, the unconsolated.” For 10 points name this French author of *Sylvie* and “El Desdichado,” who owned a pet lobster.

ANSWER: Gérard de Nerval [or Gérard Labrunie]

11. The Basque goddess Mari turned a shepherd who built a house too close to one of her caves into this animal. One of these animals named Kutkh turns into an old man after regurgitating the Earth in a Chukchi myth. The protector deity Gonpo Jarodonchen is represented by this animal, explaining its presence on the royal crown of Bhutan. One of these animals pushed a thorn into the foot of another animal to make it drop the box containing the sun, moon, and stars. In a similar myth system, one of these animals sang to a clam to make it release the first men. Another goddess appeared in the form of this animal to advise Donn Cuailnge (“Cooley”) to flee and also to signify the death of Cuchulainn. Apollo’s prophecies were delivered by this animal, which was originally white until he scorched it for bringing him bad news. The Morrigan often took the form of, for or 10 points, which bird, two of which named Hugin and Munin were owned by Odin?

ANSWER: ravens [or crows; or corvids; prompt on “birds”]

12. A painting by this artist depicts a flirtatious man next to a virgin playing the harpsichord, which is inscribed with the title ironic phrase *Acta Virum Probant*, meaning “actions prove the man.” In another of his paintings, broken egg shells near two women indicate the then well-known sexual euphemism of “cracking eggs in a pan.” A teacher uses the plaster nude on his desk to instruct a child and young woman in a third of his paintings. This artist of *The Christening Feast* and *The Drawing Lesson* painted multiple tavern scenes inspired by his profession as an innkeeper. His characteristic paintings include one in which mischievous children teach a cat how to dance, and one in which a child in a gold dress has received all the gifts during the title celebration. For 10 points, name this painter of interior comedy scenes, such as *The Feast of St. Nicholas*.

ANSWER: Jan Steen

13. The pre-equilibrium rate constant for one of these reactions is proportional to the cube of the minimum distance of the approach of the reactants times the exponential of the Coulombic potential energy of the reactants according to the Fuoss-Eigen equation. That rate constant arises from the Eigen-Wilkins mechanism, which describes this kind of reaction. In square planar complexes, the rate of this kind of reaction can be enhanced by the presence of a strong sigma donor ligand on the other side of the complex in the trans effect. This type of reaction can take place via associative or interchange mechanisms. Alcohols can be converted to tosylates to increase their reactivity in this kind of reaction. In a noted mechanism for this type of reaction, inversion of stereochemistry occurs as a nucleophile forces out a leaving group in a single step. For 10 points, name this type of reaction in which one ligand or functional group is replaced with another one.

ANSWER: substitution [or ligand substitution; or nucleophilic bimolecular substitution; or SN2]

14. In a 1929 case, a senator from Missouri with this surname successfully defended Myrtle Bennett after she shot and killed her husband over a game of bridge. An Idaho law stating that “males must be preferred to females” as administrators of probate estates was overturned by a 1971 Supreme Court case where the opposing parties were husband and wife with this surname. The most famous Congressman with this surname was depicted in a Harper’s Weekly cartoon falling asleep on a keg of gunpowder with the phrase “Financial Question” on it. That man, who was succeeded by Charles Crisp in his highest office, put a stop to the “disappearing quorum” tactic by counting all members present even if they didn’t respond to roll call. That politician from Maine thusly became the namesake of a set of Congressional rules. For 10 points, give this surname of that Speaker of the House whose power at the end of the 19th century caused him to be dubbed “the Czar.”

ANSWER: Reed [or Thomas Brackett Reed; or James Alexander Reed; or Reed v. Reed]

15. The protagonist of this novel reminisces about the time he spent an entire night on his bicycle attempting to find an escaped mental patient who thought that dogs were the devil, only to find that he had hung himself. This novel contains an extensive description of William Blake's *Pestilence: Death of the First Born*, a copy of which hangs in a character's messy apartment. Another character in this novel is constantly compared to the wounded Apollinaire because of his bandaged head. That character is named after the owner of a gay bar, Kikuhiko, and his appearance causes the protagonist to get drunk and throw up while teaching cram school. This novel's protagonist is encouraged to follow through on his dream of traveling to Africa by his mistress Himiko, with whom he hides out after his wife gives birth to a child with a serious brain hernia. For 10 points, name this autobiographical novel about Bird, a 1964 work by Kenzaburo Oe.

ANSWER: A Personal Matter [or Kojinteki na taiken]

16. This philosopher distinguished between "all-things-considered" and "unconditional" types of judgment to solve the problem of incontinence. In a different paper, this philosopher used the example of someone sinking the *Bismarck* to illustrate the Principle of Causal Interaction. In another paper, this philosopher argued that rationalizations were causal explanations for actions. This author of "How is Weakness of the Will Possible?" and "Actions, Reasons, and Causes" argued for token identity theory in a paper that states that there are no strict deterministic laws that allow for the prediction of mental states from physical states. He proposed a theory of understanding an unknown language works called "radical interpretation" in his paper "Truth and Meaning." For 10 points, name this philosopher who authored "Mental Events," which proposed a theory of "anomalous monism."

ANSWER: Donald Davidson

17. This quantity's associated polynomial is often calculated using the deletion-contraction algorithm. Heinrich Tietze was the first to determine this quantity for the projective plane, since he found that the graph " $K_{sub 6}$ " was the largest graph that could be embedded onto it. If a graph has a value of n for this quantity, then it will contract to the complete graph of n , possibly with some extra adjacency edges, according to Hadwiger's conjecture. For a surface, this quantity is less than "seven plus the square root of 49 minus 24 times the Euler characteristic, all over 2." Removing the critical edge of a graph will decrease this quantity. Kenneth Appel and Wolfgang Haken proved that this quantity is equal to four for planar graphs. For 10 points, name this quantity, which is the minimum number of colors needed to color a graph so that no two adjacent vertices have the same color.

ANSWER: chromatic number [prompt on "the number of colors needed to color a graph"]

18. During this conflict, one side's army had two females appointed as canteen carriers or medics in each regiment, including figures like the 13-year old Irene Morales, who rose up military ranks after trying to pass as male. Partly chronicled by native historian Benjamin Mackenna, this conflict involved the failed expedition of Ambrosio Letelier, whose soldiers were all court-martialed for illegal profiteering. Prior to that expedition, the fighting was nearly ended when minister Isaac Christiancy organized the Lackawanna Conference, but the losing side's demands for territory led to a retaliatory raid by the "Red Prince" Patricio Lynch. Miguel Grau became the hero of the battle at Cape Angamos, while the *Esmeralda* was sunk at the Battle of Iquique during this conflict. This war saw a clash over the provinces of Tacna and Arica and was partly ended by the Treaty of Ancon in 1883. For 10 points, name this war where the forces of Bolivia and Peru lost to Chile.

ANSWER: War of the Pacific [or Guerra del Pacifico]

19. A panicked horse in this film kicks a barrel of gunpowder into a fire, which is then thrown into the water as it explodes. As a man in this film counts to ten, he is beheaded by Perucho, though his decapitated head finishes the count. The haunting music first heard in its opening sequence comes from a "choir-organ" played by Florian Fricke's band. It took nearly two weeks to film the 30 second sequence in which "feverish" men see a boat hanging in the trees. At its conclusion, the title character gives a speech stating that he'll marry his own daughter and found the world's purest dynasty while standing on his raft, which is overrun by monkeys. The star of this film, who was apocryphally threatened at gunpoint by the director, also starred in this film's companion piece *Fitzcarraldo*. For 10 points, name this film about the title character's failed expedition into the South American jungle, directed by Werner Herzog.

ANSWER: Aguirre, the Wrath of God

20. While lying in a bed on a train, the protagonist of this novel imagines that he is in a coffin and recalls the funerals of his grandfather and two younger brothers, one of whom died in a mowing accident. The protagonist of this novel follows a man and his daughter to give her a potato peeler that she was unable to afford earlier. A character in this novel frequently watches a woman from the bushes at the public swimming pool, and later on steals a mummy from a museum. Its protagonist visits the prostitute Leora Watts during his first night in Taulkinham, where he buys an Essex automobile with which he runs over Solace Layfield. One of this novel's major characters kills a man wearing a gorilla suit, then steals the suit and disappears. After meeting Asa Hawks and Sabbath Lily, the protagonist establishes the Church Without Christ, and he later blinds himself with lime. For 10 points, name this book about Enoch Emery and Hazel Motes, the first novel by Flannery O'Connor.

ANSWER: Wise Blood

TIEBREAKER

21. This poem describes a group that "fashion the birth-robcs for them who are just born, being dead" and that group are the handmaidens of Mary, "whose names are five sweet symphonies". The title character of this poem declares that "I myself shall teach to him... /The songs I sing here" and "I'll take his hand and go with him/ To the deep wells of light... And bathe there is god's sight". This poem describes its subject as being surrounded by lovers who "spoke evermore among themselves/ Their heart-remember'd names", and it was first published in 1850 in *The Germ*. Its title character's hair "was yellow like ripe corn" and "her eyes were deeper than the depth/ Of waters still'd at even", and in the first stanza she "lean'd out from the gold bar of heaven" and "had three lilies in her hand". For 10 points, name this poem by Dante Gabriel Rossetti that inspired a similarly titled painting.

ANSWER: "The Blessed Damozel"

BONUSES

1. Hans Werner Henze's *Five Scenes from the Snow Country* was written for this instrument, which is often played by people using the Burton or Musser-Stevens grips to hold multiple mallets at once. For 10 points each:

[10] Identify this largest of the idiophones, which generally has three to five octaves of wooden bars with metal resonators under them. Its earliest recorded origins were among African slaves in Guatemala.

ANSWER: marimba [do NOT accept "xylophone(s)"]

[10] This member of Les Six, who taught Dave Brubeck at Mills College, wrote *Concerto for Marimba, Vibraphone and Orchestra* in 1947. Perhaps his most famous work is the jazz-inspired ballet *La creation du monde*.

ANSWER: Darius Milhaud

[10] This 1976 composition requires five marimba players, as well as multiple pianos, female voices, and an assortment of percussion instruments. Its eleven "Pulses" are each based around a different chord.

ANSWER: Music for 18 Musicians [by Steve Reich]

2. The recurrence of a "patch of rainbow light on the pavement transmitted through a lamp in the shape of a star" shocks the protagonist of this novella, which was published in the same year as its author's novel *Adam Bede*. For 10 points each:

[10] Name this novella in which a maid revived by the protagonist's blood asserts that Bertha plans to poison him. Its protagonist, Latimer, believes that he can see into the future and read other people's minds.

ANSWER: The Lifted Veil

[10] The hunchbacked Philip Wakem appears in this other novel by George Eliot, which ends with the siblings Tom and Maggie Tulliver reconciling shortly before they drown in a flood of the title river.

ANSWER: The Mill on the Floss

[10] This George Eliot collection is primarily set in the town of Milby, and deals with men of cloth like Amos Barton, Maynard Gilfil, and Tryan.

ANSWER: Scenes of Clerical Life

3. Answer the following about Potidaea, the birthplace of Gabrielle from Xena: Warrior Princess. For 10 points each:

[10] The Battle of Potidaea is often cited as the start of the major Peloponnesian War, together with this large naval battle fought in 433 BC between Corinth and its former colony of Corcyra, which allied with Athens, leading to an inconclusive clash at the namesake islands.

ANSWER: Battle of Sybotia

[10] Potidaea paid tribute to Athens as a member of this association of city-states, which had its treasury moved to Athens from its namesake island by Pericles.

ANSWER: Delian League

[10] The Athenian commander Callias died at the Battle of Potidaea. Previously, Callias had negotiated several peace treaties including this one between Athens and Sparta in 446 BC, which ended the First Peloponnesian War. This treaty did not last nearly as long as its name promised, thanks to the Samian revolt.

ANSWER: Thirty Years' Peace

4. General relativity and particle physics have opposite sign conventions for this space's metric tensor. For 10 points each:

[10] Name this simplest type of Lorentzian manifold, which represents flat spacetime. Elements of this space are called four-vectors, and it is the setting of special relativity.

ANSWER: Minkowski space [or Minkowski spacetime]

[10] This group consists of all 10 isometries of Minkowski space. Like the Lorentz group, this group contains rotations and boosts, but unlike the Lorentz group, this group also contains translations.

ANSWER: Poincaré group

[10] Lorentzian manifolds are a special case of these manifolds. Unlike a similarly-named type of manifold, the metric tensor for one of these manifolds is not necessarily positive definite, but it must still be symmetric and nondegenerate.

ANSWER: pseudo-Riemannian manifolds [do NOT accept or prompt on "Riemannian" without the "pseudo-" prefix]

5. This collection includes the five Megillot or scrolls which begin with Canticles. For 10 points each:

[10] Name this third section of the Tanakh that consists of eleven books in three sections written under influence of the holy spirit. It also includes the books of Psalms, Lamentations, and Daniel.

ANSWER: Ketuvim [or Sacred **Writings**; or **Hagiographa**]

[10] The five scrolls end with the Book of Esther, which is read aloud on this Jewish holiday, involving baskets of food called *mishloach manot* given to the poor, family and friends. It's also called the Feast of Lots.

ANSWER: Purim

[10] This 8th century Persian Jew is widely believed to be the founder of the Karaite movement, which rejects the Talmud and accepts only the Tanakh as authority on Jewish Law. This author of the "Book of Precepts" declared himself to be the "anti-exilarch," claiming he'd founded a new religion from his brother.

ANSWER: Anan ben David

6. Robert F. Kennedy compared the conditions at this institution to a snake pit, and during its early years, 100% of its residents were found to have Hepatitis A. For 10 points each:

[10] Name this Staten Island facility for children with mental disabilities, whose conditions were exposed to the public by a young Geraldo Rivera.

ANSWER: Willowbrook State School

[10] In the mid-1970s, this New York neighborhood near Niagara Falls was found to be the site of 22,000 tons of buried toxic waste produced by the Hooker Chemical Company.

ANSWER: Love Canal

[10] The raid of detectives Charles Smythe and Seymour Pine into a Greenwich Village bar sparked these 1969 riots in New York, which became a landmark event for gay rights.

ANSWER: Stonewall riots

7. An eight-year-old girl named Lenny observes this event in a novel that was originally titled for her nursemaid Ayah's suitor, the Ice-Candy Man, and was written by Bapsi Sidhwa. For 10 points each:

[10] Name this 1947 event that also inspired a short story in which a man lies on a land surrounded by barbed wire on two sides, naming it after his former city, "Toba Tek Singh."

ANSWER: the partition of **India** and Pakistan [or obvious equivalents, such as the division of India and Pakistan; or Pakistani independence; prompt on "Indian independence"]

[10] "Toba Tek Singh" is by this Muslim writer, who moved to Lahore after spending much of his life in Mumbai. He wrote about a Sikh man who confesses to his wife about his attempted rape of a dead Muslim girl in "Thanda Gosht."

ANSWER: Saadat Hasan Manto

[10] This huge-nosed character, one of many who gained supernatural powers due to being born at exactly midnight on the date of the partition, is the protagonist of Salman Rushdie's *Midnight's Children*. He was switched at birth with Shiva.

ANSWER: Saleem Sinai [accept either underlined portion]

8. By this treaty, Spain ceded the western part of Hispaniola to the French, leading to the founding of the colony of St. Domingue. For 10 points each:

[10] Name this 1697 treaty which is commemorated by an obelisk in the Dutch city where it was signed, at the Huis ter Nieuwberg.

ANSWER: Treaty of Ryswick [or Peace of Rijswijk]

[10] At almost exactly the same time as the Treaty of Ryswick was signed, Eugene of Savoy smashed the Ottoman Empire in this 1697 battle where Elmas Pasha was strangled by his own troops with a bowstring. This battle forced the Treaty of Karlowitz.

ANSWER: Battle of Zenta [or Senta]

[10] The Peace of Ryswick ended the nine years of war fought by the Grand Alliance, which originated in 1686 as this league, prior to the joining of England and Scotland. This league provides an alternate name for the war.

ANSWER: League of Augsburg

9. First bite syndrome, which causes patients to suffer pain upon the first bite of every meal that diminishes with further bites, can result from surgery of this structure. For 10 points each:

[10] Identify this pair of structures located adjacent to the mouth, which can cause dry mouth if defective. They are connected to the mouth via the Stensen duct, and they lie on top of the masseter muscle.

ANSWER: **parotid** glands [prompt on “**salivary** glands”]

[10] One of the secretions of the parotid glands is this enzyme, which catalyzes the breakdown of starches into simple sugars.

ANSWER: salivary alpha-**amylase**

[10] Swelling of the parotid and lacrimal glands, dry eyes, and dry mouth are sicca symptoms for this chronic inflammatory autoimmune disorder. It is classified as “secondary” when it occurs alongside another autoimmune disorder such as rheumatoid arthritis or lupus.

ANSWER: **Sjögren’s** syndrome

10. This man stated that “the most beautiful *kosmos* is a pile of things poured out at random.” For 10 points each:

[10] Name this Presocratic philosopher from Ephesus who was sometimes called “The Weeping Philosopher” and who proclaimed that you cannot step into the same river twice.

ANSWER: **Heraclitus** of Ephesus

[10] Most of the known anecdotes about Heraclitus, such as the fact he renounced kingship to allow his brother to rule, are preserved in this man’s *Lives and Opinions of the Ancient Philosophers*.

ANSWER: **Diogenes Laertius** [or **Laertius Diogenes**; prompt on partial answers.]

[10] Fragment B119 of Heraclitus consists of the words *ethos*, “*anthropoi*” and this other Greek word, which is variously translated. Jonathan Barnes translates this word as “fate” in the aphorism “a man’s character is his fate,” but Kathleen Freeman suggested a translation of “destiny,” as in “a man’s character is his destiny.”

ANSWER: **daimon**

11. This is the only language in the world to produce the lateral alveolar-linguolabial double flap. For 10 points each:

[10] Name this language, whose concept of number is not understood, since its two words either mean “one” or “two” or a “small amount” and a “large amount.”

ANSWER: **Pirahã** language [or **xapaitíiso**; or Múra-**Pirahã**]

[10] Because the Pirahã language has an ill-defined concept of number, linguists, such as Daniel Everett use it to test this hypothesis, which basically states that language shapes thought.

ANSWER: **Sapir-Whorf** hypothesis [prompt on partial answers; prompt on “linguistic **relativity**”]

[10] Dan Everett claimed that the Pirahã language violates Noam Chomsky’s concept of a universal grammar since it is a finite language without embedding, and thus does not have this property.

ANSWER: **recursion** [or word forms]

12. This poem claims that “To have been brought / All the way down from London, and then be addressed / As a sort of mournful cosmic last resort / Is really tough on a girl, and she was pretty.” For 10 points each:

[10] Name this poem, whose author claims he “knew this girl” who had “read Sophocles in a fairly good translation” and thus “caught the bitter allusion to the sea” mentioned in the poem that this poem parodies.

ANSWER: “The **Dover Bitch**”

[10] “Dover Bitch” author Anthony Hecht and Paul Pascal invented this humorous verse form, sometimes known as a “higgledy-piggledy.” A poem in this form honoring Hecht ends “Went to his own with some / Counterintuitive / Logic; his legacy’s / This stupid form.”

ANSWER: **double dactyl** [do NOT accept or prompt on “dactyl”]

[10] Hecht developed a friendship with this Anglo-American poet of “Funeral Blues” and “Musee des Beaux-Arts,” whose work he analyzed in *The Hidden Law*.

ANSWER: W.H. **Auden** [or Wystan Hugh **Auden**]

13. In the Women's War of 1929, the people of this ethnic group revolted in response to European attempts to levy taxes based on their female population. For 10 points each:

[10] Name these peoples who celebrate the New Yam Festival and founded the Nri Kingdom.

ANSWER: Igbo peoples [or Ibo]

[10] The Igbo proclaimed this breakaway state under Colonel Ojukwu, which was put down after three years by Jack Gowon in 1970.

ANSWER: Republic of Biafra

[10] This confederacy formed by Igbo people, which allegedly practiced human sacrifice, was crushed as part of a namesake war by the British at the Battle of Bende in 1902. This trading network had an oracle known as Ibini Ukbapi, referred to as "Long Juju" by the British.

ANSWER: Aro Confederacy

14. This process is responsible for forming Mount Fuji, Mount St. Helens and the Mariana Trench. For 10 points each:

[10] Name this geological process that is hypothesized to occur at convergent plate boundaries in which one tectonic plate sinks into the mantle under another plate.

ANSWER: subduction

[10] This downward-slanted plane of seismic activity can occur beneath a subduction zone, corresponding to the downgoing oceanic plate. In some cases, such as along Honshu, it consists of two parallel surfaces.

ANSWER: Wadati-Benioff zone [or Wadachi-Benioff zone; accept names in either order]

[10] The presence of this isotope of a light element in some volcanic arcs is often cited as proof that subduction happens, since it is usually made by cosmic ray spallation.

ANSWER: beryllium-10 [prompt on "beryllium"]

15. A woman, an elderly man dressed in blue, and a red haired figure carry out the title action in this artist's *The Burial*. For 10 points each:

[10] Name this artist who also made the lithographic self portrait *Head with a Pipe*, as well as Expressionistic version of *The Last Supper* that removes all conception of space.

ANSWER: Emil Nolde

[10] Emil Nolde was a part of this artistic group for a year. Its other members included Ernst Ludwig Kirchner and Karl Schmidt-Rottluff.

ANSWER: Die Brücke [or The Bridge]

[10] After he criticized Max Liebermann for rejecting expressionism, Emil Nolde was banished from this art association, which formed in 1904. The sculptor Ernst Barlach and the symbolist Max Klinger exhibited with it.

ANSWER: Berlin Secession

16. After the *kurage* was tricked while trying to acquire a live monkey's liver for this god, this god beat him until his bones liquified, thus creating the jellyfish. For 10 points each:

[10] Name this sea god, who lives in an undersea coral palace and is sometimes known as Owatatsumi. This father of Otohime controls the tides with a pair of magical jewels.

ANSWER: Ryujin [do NOT accept "Raijin"]

[10] As his name suggests, Ryujin takes the form of one of these mythical animals. Another example of these creatures is the eight-headed Orochi, who was slain by Susano'o.

ANSWER: a dragon [or a serpent; prompt on "ryu"]

[10] This man descended to the bottom of the ocean and married Otohime after Ryujin helped him find his brother's lost fishing hook. Three years later Otohime gave birth to his child, who would later father the first Emperor of Japan.

ANSWER: Hoori [or Hohodemi; or Yamasachihiko; do NOT accept "Hoderi"]

17. A literary circle with this name met in the Petrograd House of Arts, was supported by Maxim Gorky, and counted Mikhail Zoshchenko and Yury Tynyanov among its members. For 10 points each:

[10] Give the name shared by that group and an earlier group that formed after the return of Adelbert von Chamisso to Berlin. The older group took this name from a collection that included “Mademoiselle von Scuderi.”

ANSWER: the **Serapion Brothers** [or **Serapion Brethren**; or **Serapion Brotherhood**; or the **Serapion Fraternity**; or Die **Serapionsbrüder**; or **Serapionovy Bratya**]

[10] This German author of *The Sandman* was the founder of the older Serapion Brotherhood. He wrote about Marie being saved from rats by her Christmas gift in *The Nutcracker and the Mouse King*.

ANSWER: E.T.A. **Hoffman** [or Ernst Theodor Amadeus **Hoffmann**]

[10] This title feline felon of a Hoffmann novel learns to read and write, but has his autobiography mixed with one in which the kapellmeister Johannes Kreisler struggles to fit into courtly life and eventually flees to a monastery.

ANSWER: the Tomcat **Murr** [or Kater **Murr**; or The Life and Opinions of the Tomcat **Murr**; or Lebensansichten des Katers **Murr**]

18. Answer the following about Raman spectroscopy, for 10 points each:

[10] This quantity can be calculated from the ratio of the intensities of the Stokes and anti-Stokes lines using the Boltzmann distribution. A Carnot engine contains two adiabatic steps and two steps where this quantity is held constant.

ANSWER: **temperature** [or **T**]

[10] According to the rule of mutual exclusion, normal modes found in molecules with this property cannot be both IR and Raman active.

ANSWER: **centrosymmetry** [or word forms, such as **centrosymmetric**; or answers that indicate the presence of a **center** of **symmetry** or an **inversion center**; prompt on “**symmetry**”]

[10] This type of Raman spectroscopy possesses the Jacquinot and Fellgett advantages, and it uses a high wavelength laser to cut down on fluorescence signals. The signal is measured using a Michelson interferometer, then the namesake operation is used to obtain the intensity vs wavenumber spectrum.

ANSWER: **Fourier Transform** Raman [or **FT-Raman**]

19. His opera *Nabucco* is based on stories from the Book of Jeremiah and the Book of Daniel. For 10 points each:

[10] Name this composer of *Aida* and *Rigoletto*.

ANSWER: Giuseppe Fortunino Francesco **Verdi**

[10] This chorus from the third act of *Nabucco* tells the story of the exiles in Babylon after the destruction of the First Temple in Jerusalem. Sung by a chorus of Hebrew slaves, it begins with words that translate as “Fly, my thought, on golden wings.”

ANSWER: **Va, Pensiero** [prompt on “**Hebrew Slaves** Chorus”]

[10] Giuseppe Verdi often collaborated with this librettist for his historical operas, such as *Nabucco*, *Giovanna d’Arco*, and *Atilia*. This man claimed that Verdi was a “tyrant” and would often lock him up in a room to write.

ANSWER: Temistocle **Solera**

20. Answer the following about great Americans named Anderson, for 10 points each.

[10] Alexander Anderson’s claim to fame was using one of these creatures named the “Ograbme” to parody the Embargo Act of 1807. This animal nicks the living crap out of a man making off with a barrel.

ANSWER: snapping **turtle** [or **tortoise**; or obvious equivalents]

[10] Robert Anderson could not resupply the base at Fort Sumter when this merchant steamer was shelled by the first shots fired in the Civil War. Its captain John McGowan abandoned Charleston harbor and later led the Mosquito Fleet.

ANSWER: **Star of the West**

[10] With Quantrill, Bloody Bill Anderson took part in the Lawrence Massacre which was a direct response to the sacking of Osceola by this Jayhawker general. Sterling Price beat up his namesake brigade at Dry Wood Creek.

ANSWER: James Henry **Lane** [or Jim **Lane**]