

**2020 WORKSHOP:** We Oughtta pRopose aKronymS aHead Of Ptime

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**Packet 12**

**Tossups**

1. **Partial deficiency of an enzyme in the salvage pathway of these compounds is known as Kelley–Seegmiller syndrome. The first committed step in the biosynthesis of these compounds transfers the amino side chain from a glutamate, thereby converting PRPP to PRA. During biosynthesis of these compounds, the first intermediate to have their characteristic structure is (\*) inosine monophosphate.** The last step in the degradation of these compounds is the oxidation of xanthine to produce uric acid. Thus, blocking the degradation of these compounds is a common mechanism for gout medications. Adenine and guanine are examples of—for 10 points—what class of compounds that fuse an imidazole ring to pyrimidines?

ANSWER: **purines** [prompt on “nucleotides”, “nucleosides” or “nucleotide bases”] <VD>

2. **A U.S. general in charge of operations in this country began referring to its leader as “peanut” and “the little dummy” in cables after a dispute over lend-lease aid. Bettis Garside led a coalition of organizations formed to assist this country named for its “United Relief.” A notoriously difficult route called “the hump” was used by American pilots to supply this country’s forces. That route was replaced by a (\*) road sometimes named for General “Vinegar Joe” Stillwell that connected Ledo to a city in this country. Claire Chennault led a group of American air force volunteers who fought for this country before the US entered World War II, the “flying tigers.”** For 10 points, name this country that was grouped with Burma and India in the “CBI” theater of World War II.

ANSWER: Republic of **China** [accept **Zhōngguó**, do NOT accept “People’s Republic of China”] <JM>

3. **A song directed at one holder of this political office accuses him of thinking that Paolo Coelho authored *One Hundred Years of Solitude* and features a chorus that translates to “weeds must be removed from the plantation.” In January 2020, a group of protestors carried a guillotine to the residence of the current holder of this political office, who is a member of the New (\*) Progressive Party.** That holder of this office, Wanda Vasquez, assumed it in August 2019 after its previous holder resigned amid a scandal involving the messaging app Telegram. The holder of this office requested that the United States waive the Jones Act in order to provide aid in the aftermath of Hurricane Maria. For 10 points, name this political office whose holders rule from San Juan.

ANSWER: **Governor of Puerto Rico** (the song is Bad Bunny’s “Afilando los Cuchillos”, which criticized Gov. Ricardo Rosselló) <WHM>

4. **A character with this profession becomes “a notable singer in church on Sundays and saints’ days” after spending a thousand pounds in nineteen days. While hiding in an apple barrel, a boy realizes that a story about “gentlemen of fortune” refers to this profession. O’Brien is killed by a character with this profession named (\*) Israel Hands.** During his stay at the Admiral Benbow Inn, a character with this profession dies of a stroke after a visit from Black Dog. Characters with this profession signal that they intend to depose their leader by presenting a black spot. After fighting characters with this profession, Squire Trelawney and Dr. Livesey ask Jim Hawkins to write about their adventures. For 10 points, name this profession of Billy Bones and Long John Silver in *Treasure Island*.

ANSWER: **pirates** [accept **buccaneers**; prompt on sailors or sea captains or seamen or sea cook or coxswains] <CMA>

5. The idea that this book's publication marked the beginning of philosophy, which then ended twenty-five years later, gives the title to a "systematic reconstruction" by Eckart Förster. This book claims to seek a "safe passage" between the "fanaticism" and "skepticism" of two earlier philosophers. Headings like "Relation" and "Modality" are included in a recurring four-part schema from this book. This book claims that "substance," "causality," and other (\*) "categories of the understanding" structure our experiences. This book argues that space and time are pure intuitions in its "Transcendental Aesthetic," and it argues that synthetic *a priori* judgments are possible by contrasting objects of experience with things-in-themselves. For 10 points, name this first Critique by Immanuel Kant.

ANSWER: Critique of Pure Reason [or Kritik der reinen Vernunft, accept Immanuel Kant's First Critique until it's mentioned] <CS>

6. A series depicting *these* objects was copied exactly in 1965 by Elaine Sturtevant. A 1925 photo by Imogen Cunningham shows a white one of these objects in extreme close-up. A 1964 issue of *Modern Photography* featured a photo of these things by Patricia Caulfield, who later sued Andy Warhol for copying that photo. One artist claimed to hate these things, but noted "they're cheaper than models and they don't (\*) move." Hokusai and Hiroshige's *kachō-e* prints are named for depicting birds and these objects. Several yellow objects of this kind were depicted in a series by Vincent Van Gogh. According to a sexist theory spread by Alfred Stieglitz, one artist's paintings of these objects actually represent female genitalia. For 10 points, what plants did Georgia O'Keeffe depict in *Petunia No. 2*?

ANSWER: flowers [or blossoms; accept specific types of flowers before "*Petunia*"; prompt on plants before it is said] <WG>

7. One character forbids his friend from telling him about portions of these works that will arouse him or make him think of food. That man prefers an unassuming assistant to the protagonist of one of these works because she resembles his girlfriend. One character receives a nickname based on a (\*) "panther woman" from one of these works. One chapter of another novel consists of an essay by Jose Casals titled "The [one of these works] I Like Best." The transgender woman Molina collects information on the leftist group that her cellmate, Valentin, belongs to by telling him about the plots of these works. The novel *Betrayed by Rita Hayworth* is titled for a woman who became famous for her role in these works. For 10 points, name these works that Manuel Puig incorporated into the text of his *The Kiss of the Spider Woman*.

ANSWER: films [accept movies, answers that mention descriptions of movie plots] <JM>

8. In a concerto by this composer, the pianist comes in with the descending sixteenths [read slowly] "C, F," followed by a long G, and then sixteenths back up to C. The slow movement of this composer's G-major second violin concerto opens with *pizzicato* strings slowly arpeggiating up second-inversion triads. The extremely virtuosic last movement of this composer's B-flat seventh piano sonata is marked "Precipitato." A solo (\*) clarinet plays an *andante* melody at the start of this composer's third piano concerto, which is in C Major, while his fourth piano concerto is for the left hand alone. This composer wrote two violin sonatas for David Oistrakh, as well as a ballet that includes the "Dance of the Knights." For 10 points, name this Soviet composer of the ballet *Romeo and Juliet* and *Peter and the Wolf*.

ANSWER: Sergei (Sergeyevich) Prokofiev <VD>

9. This man's life was reportedly saved during a military purge due to James Hausman and W. L. Rogers' intervention on his behalf. One elector purposely left a letter off this man's name on his ballot, preventing his Democratic Republican party from being elected unanimously under his one-party Fourth Republic. This leader decreed the Export Day holiday as part of his program of industrial development. This leader was assassinated by the head of his country's (\*) Central Intelligence Agency, which he had established himself. This leader set up the state-owned Pohang Corporation with Japanese help to provide steel for chaebols. The economic "Miracle on the Han" was achieved by—for 10 points—what South Korean dictator whose daughter became its first female president?

ANSWER: Park Chung-hee [accept in either order; accept Okamoto Minoru or Takagi Misao; prompt on Park, do NOT accept "Park Geun-hye] <PJO>

10. Up to a third of the material used to form these entities comes from microorganisms and fungal spores, with INA+ strains of *Pseudomonas syringae* being particularly useful. Examples of these entities containing nitric acid can provide surfaces for the activation of chlorine compounds during the polar winter. These entities form under conditions of convective instability when the adiabatic (\*) lapse rate outpaces the rate that the ambient temperature drops. These entities can form when a parcel is forced up by orogenic lift and falls below the dew point. The formation of these entities requires sites for nucleation that can be provided by silver iodide. For 10 points, name these atmospheric bodies formed from the condensation of water, which produce precipitation.

ANSWER: clouds [accept nacreous clouds; accept cumulus, nimbus, or cumulonimbus clouds; accept ice nuclei, cloud condensation nuclei, or cloud seeds before "nucleation"; prompt on ice crystals, rain drops, drops of water, or hail with "Where are those formed?"] <KW>

11. The fronting or raising of back vowels in languages of this family is often described with the term "mutation." In many languages from this family, the present-tense conjugation of modal verbs takes the form of the preterite. Fricatives after unstressed syllables in these languages became voiced according to Verner's law. These languages have inherited a form of ablaut in their stem-vowel-changing (\*) strong verbs. The transition of stops in P·I·E into other consonants in this family's proto-language is described by Grimm's law. Starting around 1400, long vowels in one of this family's languages changed drastically in the Great Vowel Shift. For 10 points, name this language family that includes Scandinavian languages and English.

ANSWER: Germanic languages [prompt on Indo-European] <JR>

12. Cremer and McLean showed that when groups of agents in these events exhibit statistical dependence, another agent can design mechanisms to force truthful revelation and therefore full surplus extraction. If there exists both a symmetric and increasing equilibrium in these events, full information results in a greater price according to the "linkage principle." William (\*) Vickrey designed a version of these events that employs sealed envelopes. The "Dutch" and "English" varieties of these events differ in the direction that prices move. These events do not result in a sale if the seller's reservation price is not met. For 10 points, name these events where goods and services are sold through a bidding system.

ANSWER: auctions [accept specific types of auctions like a Vickrey auction; Dutch auction; or English auction] <GE>

13. In this novel, a character remarks that the presence of English washstands indicates progress. That character in this novel spends more time with his love interest after she asks for the title of a textbook, though he recommends that she reads a book by Ganot instead. After a character in this novel criticizes Germans, his acquaintance claims “A good (\*) chemist is twenty times as useful as any poet.” A man who had earlier given a woman a ring with a sphinx on it duels with another character in this novel over a servant named Fenechka. In this novel, Arkady brings home a friend from college who later dies of blood poisoning after cutting himself during an autopsy. For 10 points, name this novel about the nihilist Bazarov by Ivan Turgenev.

ANSWER: Fathers and Sons [or Otcy i deti] <JMA>

14. Early on, this artist collaborated with Rouben Mamoulian on the two-color short film *The Flute of Krishna*. This choreographer had twelve women dress in black and one in white for the ballet *Heretic*. This choreographer had a seated, cloth-wrapped soloist rock back and forth before gradually standing up in one dance, and had four different dancers play aspects of Joan of Arc in another. This choreographer of (\*) *Lamentation* and *Seraphic Dialogue* emphasized “contraction and release” in a foundational “technique” of modern dance. A work by this choreographer features set design by Isamu Noguchi and uses the Shaker hymn “Simple Gifts.” For 10 points, who choreographed Aaron Copland’s *Appalachian Spring*?

ANSWER: Martha Graham <WG>

15. This entity times a constant is the *imaginary* part of the Riemann–Silberstein vector. In a plasma with negligible pressure, this entity is parallel to the current density and therefore to its own curl. When there’s no free current, this entity unusually has a scalar potential. For an infinitely conducting fluid, the surface integral of this quantity dot  $d\mathbf{S}$  is constant, since its (\*) lines of flux are “frozen into” the fluid by Alfvén’s theorem. By Helmholtz decomposition, this entity is the curl of the vector potential, since its divergence is zero. A material transitioning to the superconducting phase expels this entity in the Meissner effect. The force this entity exerts on a particle equals charge times the cross product of velocity and this entity by the Lorentz force law. For 10 points, name this field created by moving charges, the counterpart of the electric field.

ANSWER: magnetic field [or B field; or H field] <GH>

16. A law that triggered this event by imposing capital punishment for saying “decide” was named the Anti-Sacrilege Act. One man was king for less than 20 minutes during this event, before passing his throne to a count nicknamed the “miracle child”. Efforts to reduce the power of the Chamber of Deputies through the Charter of 1814 through the Four Ordinances of Saint-Cloud caused this event after newspapers, including one run by Adolphe (\*) Thiers, rebelled against press suppression. Violent riots occurred in this event’s Three Glorious Days, which brought to power a ruler nicknamed “the Citizen King” and ended with the end of the Bourbon Restoration in France. For 10 points, name this 1830 uprising in which Charles X abdicated in favor of the Duke of Orléans, Louis Phillippe.

ANSWER: the July Revolution [or July Days; accept the Second French Revolution, but do not accept or prompt on French Revolution alone; accept the French Revolution of 1830 before 1830 is mentioned, accept Revolution de Juillet, prompt on Trois Glorieuses or the Three Glorious Days with “The Three Glorious Days were a part of what?”] <GE>

17. **This character’s “last moment” consists of an unspecified “word which made all clear.” The owner of a building tells this character that it’s named after an old word for bachelor. That building is supposedly the home of this character’s dress maker. This character recalls her role in a live performance of a Reynolds painting as she opens an envelope containing her (\*) inheritance.** This character’s social standing declines due to a rumored affair with George Dorset. Earlier, this character takes a job in a hat shop after Simon Rosedale sees her engage in suspicious behavior. Lawrence Selden discovers this character impoverished and dead of a chloral overdose. For 10 points, name this woman who is ostracized from New York society in Edith Wharton’s novel *The House of Mirth*.

ANSWER: Lily Bart [accept either underlined portion] <JMA>

18. **In a book about one of this country’s colonies, Ann Laura Stoler proposed writing history “along the archival grain”. One historian from this country began a work with a chapter describing “the passionate intensity of life” in its title era. Jonathan Israel is famed for a tetralogy of books on this country’s history. An author from this country who proposed that humans are defined by playtime activities in *Homo (\*) Ludens* also wrote *The Autumn of the Middle Ages*. In *The Embarrassment of Riches*, Simon Schama described the culture of this country’s “golden age”. Along with England, this country attacked Spain in “black legend” narratives after declaring its independence from them.** For 10 points, name this country where Johan Huizinga taught at Leiden University.

ANSWER: Kingdom of the Netherlands [accept Nederlanden, Dutch Republic, United Provinces of the Netherlands, do NOT accept “Holland”] <JM>

19. **Dancers would imitate the moves of pan·kra·ti·on in front of a statue of this god in the festival of Gymnopaedia. The Spartans refused to assist at Marathon because they were celebrating the festival of Carneia in honor of this deity. The cult of Hamaxitus tried to explain the foreign-sounding epithet “smintheus” for this god. That epithet appeared prominently in one text as part of a request that this god send a plague in the form of silver (\*) arrows after the seizure of Chryseis by Agamemnon.** The Hyakinthia festival celebrates the lover of this god, who founded the Pythian games to celebrate the founding of the oracle of Delphi. This god’s most common epithet comes from his grandmother Phoebe. For 10 points, name this Greek god of healing, prophecy and light, the twin brother of Artemis.

ANSWER: Apollo [accept Apollo Phoebus or Apollo Smintheus] <LW>

20. **The only oxo dehydrogenase complex that is not involved with cellular respiration uses its “swinging arm” to bind these compounds. Mutations in that enzyme cause sotoson to accumulate in the earwax, and are screened for by Guthrie tests that detect high levels of these compounds in the blood. Prephenate is formed by chorismate mutase to commit to making these compounds via the (\*) shikimate ["shiki-MATE"] pathway.** Failures to metabolize these compounds define maple syrup urine disease and PKU. Many of these compounds are synthesized in humans by transaminases acting on three-carbon alpha-keto acids like oxaloacetate, with the rest obtained from the diet. For 10 points, name these compounds divided into essential and non-essential groups that are joined together to form proteins.

ANSWER: amino acids [accept branched-chain amino acids or aromatic amino acids; anti-prompt on phenylalanine; do NOT accept or prompt on “proteins” or “peptides”] <GH>

## 2020 WORKSHOP

### Packet 12

#### Bonuses

1. Roger Ebert claimed that “You cannot know the history of silent film unless you know the face of” an actress best-known for playing this character. For 10 points each:

[10] Name this character that Maria Falconetti played in the second of her two film roles. That film mainly depicts this character through extreme closeups, often at odd, low angles.

ANSWER: **Joan** of Arc [or **Jeanne** d’Arc; accept *The **Passion of Joan of Arc*** or *La **Passion de Jeanne d’Arc***]

[10] This Danish director of *Ordet* and *Gertrud* also created *The Passion of Joan of Arc*.

ANSWER: Carl Theodor **Dreyer**

[10] Dreyer’s only film from the 1930s is about, and titled for, one of *these* beings. F.W. Murnau’s *Nosferatu* is a “Symphony of Horror” about one of these supernatural beings named Count Orlok.

ANSWER: **vampires** [accept ***Vampyr***] <ES>

2. Answer the following about the trendy elite fashions of early twentieth-century Great Britain. For 10 points each:

[10] George V’s habit of wearing thicker cloth neckties popularized this wide knot and its “half” counterpart.

ANSWER: **Windsor** knot [Accept half-**Windsor**, full **Windsor**, or double **Windsor** as well]

[10] Starting in the 1920s, rowers at an English university developed this loose-fitting style of pants in order to dodge a ban on plus-four trousers.

ANSWER: **Oxford bags** [do not accept “Harem pants” or “Hammer pants”]

[10] British newspapers helped popularize the term “Panama Hats” for Ecuadorian straw in captions of a 1906 photograph of this leader. This leader wore that hat in a region his country gained in the Hay-Bunau-Varilla Treaty.

ANSWER: Theodore **Roosevelt** Jr. <GE>

3. This substance was said to be created when a drop of the *amrita* fell to the earth. For 10 points each:

[10] Name this substance that is associated with the worship of Shiva, who brought it from Mount Mandara. In the form of *bhang*, it is sometimes mixed into a lassi that’s often drunk in springtime.

ANSWER: **cannabis** [or **marijuana** or colloquial equivalents]

[10] *Bhang* is traditionally consumed during *this* Hindu festival. Participants in this festival also throw colored paint at one another.

ANSWER: **Holi**

[10] Although intoxicants are forbidden in Sikhism, members of *this* Sikh military order drink cannabis infusions to help in meditation. Their name comes from a Persian word for a sea monster, referring to their ferocity in battle.

ANSWER: **Nihang** [or **Akali**] <LW>

4. This group put out the “Ten-Point Program,” which included draft exemptions, full employment for African-Americans, and an end to police brutality. For 10 points each:

[10] That manifesto was released by this black nationalist and Marxist group founded in Oakland, California.

ANSWER: **Black Panther** Party

[10] The Black Panther Party was cofounded by Bobby Seale and this man, who allegedly killed John Frey and was assassinated by gang member Tyrone Robinson in 1989.

ANSWER: Huey P(ercy) **Newton**

[10] The Black Panther leader Eldridge Cleaver wrote this essay collection while in prison. This collection includes an allegorical reading of a Muhammad Ali fight in the context of black liberation as well as controversial homophobic and misogynist passages in its section “The Blood of the Beast.”

ANSWER: ***Soul on Ice*** <PJO>

5. At the end of one novel, the protagonist “pulled in” this concept “like a great fish-net. Pulled it from around the waist of the world and draped it over her shoulder.” For 10 points each:

[10] Name this concept. That protagonist tells Pheoby Watson that she has been to this place and now can “live by comparisons.”

ANSWER: the **horizon**

[10] That protagonist is inspired to pull in her horizon by “the kiss of” this character’s “memory.” She shoots this character after a rabid dog bites him during a hurricane in the Everglades.

ANSWER: **Tea Cake** [or **Vergible Woods**; accept either]

[10] “Ships at a distance” “sail forever on the horizon” in the opening paragraph of this Zora Neale Hurston novel about Janie Crawford.

ANSWER: ***Their Eyes Were Watching God*** <CMA>

6. The pinacol rearrangement, which occurs in acidic conditions, involves this functional group being converted to a carbonyl as one of the adjacent alkyl groups moves. For 10 points each:

[10] Name these compounds formed by hydrolysis of epoxides. The two-carbon compound with this functional group is a common antifreeze with a sweet taste.

ANSWER: **glycol** [accept ethylene **glycol**; or **vicinal diol**; prompt on **diol**]

[10] This compound bonds to an alkene to form a cyclic intermediate that’s then hydrolyzed, producing a glycol. In the Sharpless oxyamination, it catalyzes the addition of hydroxyl and amine groups to adjacent carbons of an alkene.

ANSWER: **osmium tetroxide** [or **OsO<sub>4</sub>**]

[10] The Lemieux–Johnson oxidation uses osmium tetroxide and sodium periodate to cleave alkenes. It produces two molecules containing ketones or this other carbonyl, which can also be made by oxidizing a primary alcohol.

ANSWER: **aldehydes** <GH>

7. This star dimmed a full magnitude in late 2019, causing speculation of an impending supernova. For 10 points each:

[10] Name this star whose usual changes in luminosity are much less pronounced than its recent ones. This red supergiant was the first non-Sun star to be resolved as more than a point from its combination of size and proximity.

ANSWER: **Betelgeuse** [accept **Alpha Orionis**]

[10] The uneven distribution of this process on Betelgeuse’s surface may explain its variability. This process of heat transfer happens outside the radiative zone of stars and, in general, happens via fluid transport.

ANSWER: **convection** [accept **convection** zone or **convective** zone]

[10] As a red supergiant, Betelgeuse approaches this scientist’s namesake limit on the size of a star with a given mass. This scientist also names a nearly vertical track on the HR diagram that is followed by pre-main-sequence stars below three solar masses until they either move onto the Heney track or initiate nuclear fusion.

ANSWER: Chūshirō **Hayashi** [accept names in either order; accept **Hayashi** limit or **Hayashi** track] <GH>

8. A painting by this artist depicts Emperor Rudolf II as Vertumnus, the Roman God of the seasons. For 10 points each:

[10] Name this painter whose *Four Seasons in One Head* features objects like branches, apples and flowers.

ANSWER: Giuseppe **Arcimboldo** [ar-cheem-BOL-doh]

[10] Arcimboldo is considered to be a late representative of *this* trend in sixteenth-century art. This style is exemplified by the elongated bodies and asymmetry in paintings by Parmigianino and Bronzino.

ANSWER: **Mannerism** [or **maniera**; accept word forms like **Mannerist**]

[10] This museum in Vienna houses half of Arcimboldo’s *Four Seasons*, along with Raphael’s *Madonna of the Meadow* and Vermeer’s *Art of Painting*. Give the museum’s German name.

ANSWER: **Kunsthistorisches** Museum <MJ>

9. According to this theory's formulator, it generally describes cultures in which "mobility and property [were] in contradiction." For 10 points each:

[10] Name this three-word theory arguing that hunter-gatherers took the "Zen" road of "want not, lack not" to meeting their needs.

ANSWER: **original affluent society**

[10] The notion of the "original affluent society" was introduced in this anthropologist's *Stone Age Economics*.

ANSWER: Marshall **Sahlins**

[10] Sahlins contrasted the "Zen" path toward affluence with one named for this economist, who argued for increased public spending in his 1958 book *The Affluent Society*.

ANSWER: John Kenneth **Galbraith** <ES>

10. This passage describes "the memory of past pleasures" as the first of a "triple sting" delivered by a "worm of conscience." For 10 points each:

[10] Name this event. Witnessing this event inspires the protagonist to have a vision of six "goatish creatures with human faces" circling him in a "field of stiff weeds ... and coils of solid excrement."

ANSWER: Father **Arnall's sermon** [accept the **sermon from A Portrait of the Artist as a Young Man**; prompt on anything about a **hell sermon**; prompt on partial]

[10] This character is traumatized by Father Arnall's sermon while at college, although he begins thinking about his lover Emma as he walks home from the sermon.

ANSWER: **Stephen Dedalus** [accept either underlined part]

[10] This creator of Father Arnall and Stephen Dedalus attended the Jesuit-run Clongowes Wood and Belvedere Colleges, which he depicted in his novel *A Portrait of the Artist as a Young Man*.

ANSWER: James **Joyce** [or James Augustine Aloysius **Joyce**] <CMA>

11. After he unexpectedly recovered from a cerebral hemorrhage in 1968, this leader's colleagues, who had already appointed a successor, continued to pretend he still ruled until 1970. For 10 points each:

[10] Name this leader whose successor, Marcelo Caetano, was overthrown in the Carnation Revolution.

ANSWER: Antonio de Oliveira **Salazar**

[10] Salazar ruled this country, where he established a regime called the *Estado Novo* and built a prison camp in its colony of Cabo Verde.

ANSWER: **Portugal** [or the **Portuguese** Republic; or República **Portuguesa**]

[10] The Salazar regime suppressed dissent with this secret police force. In its most famous action, it worked with the OAS to set up Aginter Press, an anti-communist mercenary organization.

ANSWER: **Polícia Internacional e de Defesa do Estado** [or **PIDE**; accept **International and State Defense Police**; accept **Polícia de Vigilância e de Defesa do Estado** or **PVDE** or **Surveillance and State Defence Police**] <PJO>

12. The speaker of this poem desires to tell his lover, "I see your arms in vines, / Your glance in the gaze of a frightened deer ... but listen, / There is not a single place anywhere that resembles all of you." For 10 points each:

[10] Name this poem written in a "slow-stepping" meter. In a scene from this poem, the speaker describes Mount Kailāsa "extended in the sky with its lofty lotus peaks."

ANSWER: **Cloud Messenger** [or **Meghadūta**]

[10] Kālidāsa's *Cloud Messenger* inspired a whole genre of "messenger poems" or *sandeha kāvya*, including a poem by Vedanta Desika in which *this* legendary hero sends a swan to his wife, Sita, after her abduction by Ravana.

ANSWER: **Rama**

[10] In *Cloud Messenger*, the speaker tells the cloud "don't make her glances useless, jumping like" these animals. The curse on Shakuntala is finally broken when a signet ring is found in the mouth of one of these animals.



ANSWER: **fish** <CMA>

13. In one dimension, the solution to this partial differential equation is a line. For 10 points each:

[10] Name this equation that states that  $\Delta^2$  equals zero. Solutions to this simplest elliptic partial differential equation cannot have local minima or maxima, so extrema must occur on the boundary of the domain.

ANSWER: **Laplace's** equation

[10] This scalar quantity, often symbolized  $\phi$ , satisfies Laplace's equation in regions with no charge. The electric field is given by the gradient of this quantity, which is typically set to zero at an infinite distance away.

ANSWER: electric **potential** [or **voltage**]

[10] Green's reciprocity theorem states that for two charge distributions, the volume integrals over the product of electric potential and *this* quantity are equal. For a point electric dipole, this quantity equals the dipole moment dotted with the gradient of a delta function.

ANSWER: volume **charge density** [prompt on **rho**] <VD>

14. One ruler of this city sentenced two British diplomats to its prison's infamous "bug pit" after they tried to ride into his palace on horseback and arrived without a gift for him. For 10 points each:

[10] Name this city, the capital of an emirate that lost control of nearby Samarkand when it was attacked by Russia along with the neighboring Khiva and Kokand khanates.

ANSWER: **Bukhara**

[10] Before its annexation by the Soviet Union in 1920, Bukhara was a central object of dispute in this 19th-century diplomatic conflict between Britain and Russia over control of Central Asia.

ANSWER: The **Great Game**

[10] The Great Game also caused this country, which was ruled by the Qajar Dynasty, to be divided into Russian and British spheres of influence. The Qajars were later overthrown by this country's pro-British Pahlavi Shahs.

ANSWER: Sublime State of **Persia** [or **Dolote Eliyye Iran**] <GC>

15. This city was home to the early *galant* composer Leonardo Vinci, who wrote over thirty operas in twelve years before dying at the age of forty. For 10 points each:

[10] Name this city whose dialect was used in the song "O Sole Mio." This city, which is home to the Teatro di San Carlo, also lends its name to a pre-dominant chord commonly found in first inversion.

ANSWER: **Naples** [or **Napoli**; accept **Neapolitan** sixth chord]

[10] In any order, name the notes of a Neapolitan chord in the key of C.

ANSWER: **F** AND **A-flat** AND **D-flat** [do not accept enharmonic equivalents like "C-sharp" or "G-sharp"]

[10] "O Sole Mio" was frequently sung together by José Carreras, Plácido Domingo, and Luciano Pavarotti, a group of three singers with *this* vocal range. This male vocal range is above the bass in typical four-part harmony.

ANSWER: **tenors** [accept The **Three Tenors**] <EL>

16. In a book on its popularizer, Gilles Deleuze analyzed this concept as a "movement of differentiation." For 10 points each:

[10] Identify this philosophical term that was made famous in a 1907 book. That work uses this term to explain the self-organisation of matter into species and the continuous process of creative evolution.

ANSWER: **élan vital** [accept **vital impetus** or any answer indicating something like **life force**]

[10] Deleuze drew heavily on Bergson in his two-volume philosophical analysis of *this* art form. André Bazin helped found the theory of this art form by editing a magazine titled for *Cahiers* [cah-YAY] of it.

ANSWER: **cinema** [or **films** or **movies**; accept **Cahiers du cinéma**]

[10] In 1922, Bergson debated *this* philosopher and scientist, claiming that this man's theory of special relativity was about "clocks" and not about human nature.

ANSWER: Albert **Einstein** <VS>

17. Answer the following about the Samuel Richardson novel *Clarissa*. For 10 points each:

[10] The novel's villain and Clarissa's rapist has this last name, which he shares with the Cavalier poet of "To Althea, from Prison."

ANSWER: **Lovelace** [accept Robert **Lovelace** or Richard **Lovelace**]

[10] Lovelace's last words, "Let this expiate!" follow one of these events, which ends the novel. In a Henry Fielding novel, Mr. Fitzpatrick is stabbed during one of these events.

ANSWER: **duels**

[10] Following Clarissa's rape, her letters take the form of the "mad papers," the last of which is this paper. This paper contains quotes from different English poets scattered about the page.

ANSWER: Paper **X** <OL>

18. *Description acceptable*. This procedure is the most common use of laparoscopy and is sometimes performed prophylactically if the target organ is calcified, or "porcelain". For 10 points each:

[10] Name this procedure performed to treat a condition that is medicated by urso-deoxy-cholic acid. Unlike another surgery, this procedure is indicated when pressure on the *upper* right quadrant causes a patient to catch *on inhale*.

ANSWER: **gallbladder removal** [or **cholecystectomy**; accept any answer indicating the **gallbladder** is **taken out**]

[10] Gallbladder removal is done to treat chronic pain from gallstones, which can cause inflammation and block the release of this substance to the intestine, where this substance is essential for the absorption of fat-soluble vitamins.

ANSWER: **bile**

[10] Before being secreted into the lumen, bile acids are conjugated with either glycine or this amino acid not found in proteins. This molecule is incredibly common in tissues across the body and acts as an osmoprotectant.

ANSWER: L-**taurine** [accept **2-aminoethanesulfonic acid**] <JS>

19. According to a theory that prevailed for much of the 20th century, light-skinned people given this name invaded Northern India in the 2nd millennium BCE, displacing its earlier inhabitants. For 10 points each:

[10] Give this term later reappropriated in Nazi racial ideology, which originally described early Indo-Iranians.

ANSWER: **Aryan** [accept **arya**]

[10] Racial hypotheses about the spread of Hinduism often derived from the Vedas' use of this term to describe "servants" or "enemies" in war, which may have referred to people from the Indus Valley Civilization.

ANSWER: **dasa**

[10] Similar theories about the occupation of Northern India often propose that survivors of the Indus Valley Civilization fled South to establish three kingdoms in the Deccan: Chera, Pandya, and this largest Tamil empire.

ANSWER: **Chola** <JM>

20. The goddess of this region would go from the mountain of Anboto to the surrounding peaks. For 10 points each:

[10] Name this region, where worship of Mari has been syncretized with the Virgin Mary. The Itxina Massif in this region contains the Eye of Atxular, an arch named for a son of Mari who converted to Christianity.

ANSWER: **Basque** Country [or **Euskal Herria**]

[10] The movement of Mari and her husband into and out of her various caves triggered this phenomenon, which was also linked to Orko. In other traditions, this phenomenon joined another caused by the descent of golden apples.

ANSWER: **rain** [or **weather**; accept **storms**, **thunder** or **lightning**; accept **hail**, or other forms of precipitation; accept **sunshine** or answers indicating a **lack of weather**]

[10] The girl Kattalin was rewarded for seven years of service to Mari with coal that caught the sunlight and became this substance. A lamiak would give you this valuable metal if you asked for coal, because they spoke in opposites.

ANSWER: **gold** <EA>

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