

ACF Fall 2014: *Nemo auditur propriam derpitudinem allegans*

Packet by Lawrence A (Ian Stone, Alex Damisch, Alec Masson, John O'Neill)

Edited by Jordan Brownstein, Jacob Reed, Max Schindler, Richard Yu, and Ben Zhang

Head-editing by Gautam Kandlikar and Gaurav Kandlikar

Tossups

1. This war was opposed by William Thomas Stead's "Stop the War" Committee. Emily Hobhouse's investigations into conditions following this war led to the establishment of the Fawcett Commission. Thanks to public support for this war, Lord Salisbury won the khaki election. Robert Baden-Powell used deception tactics to hold the city of Mafeking during this war, which also included the Siege of Ladysmith. This war was partly caused by the failure of a plan to encourage revolt among the uitlanders known as the Jameson Raid. It was ended by the Treaty of Vereeniging. For 10 points, name this war fought between the British and the Afrikaans-speaking inhabitants of South Africa.

ANSWER: Second Anglo-**Boer** War [do not accept "First Anglo-Boer War" but, to be clear, do accept "the **Boer** War"]

2. This river flows past the only walled city in the Americas north of Mexico. Another city on this river is home to a "Biodome" with replicas of four ecosystems, as well as an Olympic stadium nicknamed the "Big O." This river empties into a massive estuary that contains the Magdalen Islands and Anticosti Island after flowing past to the Gaspé Peninsula. This river flows through the Thousand Islands. The Ottawa River drains into this river. The opening of this river's eponymous Seaway made the Erie Canal completely obsolete. For 10 points, name this river that flows northeast from Lake Ontario through Montréal and Québec City before emptying into its namesake Gulf.

ANSWER: **St. Lawrence** River

3. A character in this play repeatedly exclaims "Poor man!" as he is told that another character ate two partridges and had a good sleep. In this play, a bailiff announces that the house has to be vacated and given to a man who carried off a box of forged letters. This play opens with Madame Pernelle scolding the sharp-tongued servant Dorine. In this play, Elmire hides her husband under a table while the title character attempts to seduce her. At the end of this play, Orgon and his family are saved from the title character when the king orders his arrest. For 10 points, name this play whose title character is a religious fraud, a work of Molière.

ANSWER: **Tartuffe** [or *The Imposter*; or *The Hypocrite*]

4. In one movement of this work, fast sections alternate with a section with a prominent castanet part that gradually speeds up. An aria from this work begins with a very high bassoon solo and, in it, a tenor sings from the perspective of a swan being roasted on a spit. The penultimate section of this work is about "Blanziflor" and "Helena," and its other sections include one called "In the Tavern." This choral work begins and ends with a song that laments the cruel tyranny of Fate and imagines it as a monstrous Wheel of Fortune. For 10 points, name this 1936 work that is bookended by the monumental "O Fortuna", a "scenic cantata" by Carl Orff.

ANSWER: **Carmina Burana** [accept **Songs of Beuern**]

5. This non-diatomic compound is produced with the help of copper and zinc in several dismutases to avoid the damaging effects of one of its components. When threatened, bombardier beetles use enzymes to break down a mixture of hydroquinone and this compound. This compound binds to the heme group of an enzyme that is extracted from horseradish roots. It is produced from the oxidation of fatty acids in organelles that are named for this compound. The liver produces an enzyme that converts 40 million molecules of this compound into water and oxygen per second. For 10 points, name this substance which is broken down by catalase and has the formula H_2O_2 ["H-2-O-2"].

ANSWER: **hydrogen peroxide** [or **H2O2** before mentioned]

6. This thinker defined a concept consisting of "manners of acting, thinking, and feeling external to the individual" as the primary focus of his area of study, and emphasized that that concept should be thought of as a "thing." This man argued that a shift from mechanical to organic solidarity was caused by industrial society's use of the division of labor. This man wrote a book outlining altruistic, egoistic, anomic, and fatalistic forms of a phenomenon he found to be more common among Protestants than among Catholics. This thinker argued for applying the scientific method to social facts in his *The Rules of Sociological Method*. For 10 points, name this French sociologist who wrote *Suicide*.

ANSWER: [David] Émile **Durkheim**

7. A track on this artist's first solo album says that "in the midst of this insanity, I found my Christianity" and that "one day I plan to be a family man, happily married." One of this artist's collaborations on his sophomore album contains the line "see you in Hell for the sequel;" twelve years later, he released that album, *Hell: The Sequel*, with Royce da 5-9. The first single released from this rapper's most recent album was "Berzerk," and later singles from that album included "Rap God" and "The Monster," which features Rihanna. For 10 points, name this Detroit rapper known for songs like "Not Afraid," "Lose Yourself," and "The Real Slim Shady."

ANSWER: **Eminem** [or Marshall **Mathers** III; accept **Slim Shady** before it is read]

8. The wind aspect of this god fell in love with the goddess of the maguey plant. This god immolated himself after being tricked into drunkenly breaking his celibacy with a priestess. This god's dog-headed, skeleton-bodied twin brother assisted him when he created the humans of the fifth world cycle by gathering the bones of the dead from Mictlan and sprinkling them with his own blood. This rival of Tezcatlipoca sailed East on a raft made of serpents and was expected to return in a One Reed year, which allegedly caused an emperor to mistake the conquistador Hernán Cortés for this god. For 10 points, name this feathered serpent god worshipped in Aztec mythology.

ANSWER: **Quetzalcoatl** [prompt on "Ehecatl" until "exile," do not accept afterwards]

9. This artist used Claude Lorraine's *The Embarkation of the Queen of Sheba* as the model for a work with a very bright sun dead-center in the canvas. This painter of *Dido Building Carthage* also painted atmospheric scenes like *Eruption of Vesuvius* and *The Burning of the Houses of Lords and Commons*. Another of his paintings depicts sea monsters swimming near several drowning men in chains. He depicted a large black cloud obscuring a yellow sun in *Snow Storm: Hannibal Crossing the Alps*. This artist also painted a train of the Great Western Railway crossing a bridge during a storm. For 10 points, name this British painter of *The Slave Ship* and *Rain, Steam, and Speed*.

ANSWER: J. M. W. **Turner** [or Joseph Mallord William **Turner**]

10. One type of this property used in measure theory is denoted by a double-less-than sign, and means that whenever the μ of a set is zero, the ν of that set must also be zero. If a function with this property has compact domain, then it has the uniform variety of this property as well. Probability distributions with this property have a zero chance of producing any specific result. Despite having this property everywhere, the Weierstrass function is differentiable nowhere. A function f has this property if the limit of f -of- x as x approaches the point c is f -of- c . For 10 points, name this mathematical property possessed by functions whose graphs have no holes or breaks.

ANSWER: **continuity** [accept word forms, accept absolute or uniform **continuity**]

11. Some British examples of these objects were designated "K-class," and had a tendency to fail or otherwise get destroyed. One of these objects, which was supervised by Hyman Rickover, was used to carry out Operation Sunshine. During World War II, some of these vehicles traveled together in "wolf packs" and were part of the *Kriegsmarine*. Early American examples of them included the *Turtle* and the *Hunley*, and the *Nautilus* was the first nuclear-powered one. The United States entered World War I after the *RMS Lusitania* was attacked by several of these vehicles during a time when their use during warfare was "unrestricted." For 10 points, name these underwater vehicles exemplified by the German U-boat.

ANSWER: **submarine** [or **submersible**; or **U-boat** or **Unterseeboot** before they are read; prompt on "sub"]

12. In one of this composer's operas, the second act begins with the "Hagar Chorus"; that opera by this non-Satie composer includes the "Aria of the Falling Body (Gymnopédie)." Another opera by this composer begins with the chorus "We believed that matter can be neither created nor destroyed but only altered in form." In Act II of another of his operas, the title character and his wife watch the ballet *The Red Detachment of Women*; after the ballet, a coloratura soprano angrily shrieks "I am the wife of Mao Tse-Tung" at the title character. For 10 points, name this American composer of *The Death of Klinghoffer*, *Doctor Atomic*, and *Nixon in China*.

ANSWER: John Coolidge **Adams** [do not accept "John Luther Adams"]

13. This poem was inspired by a passage mentioning "beasts of chase and game" in Samuel Purchas's *Pilgrimage*. At the end of this poem's second stanza, "ancestral voices prophesying war!" are heard. This poem advises "all should cry Beware! Beware! his flashing eyes, his floating hair." The speaker of this poem has a vision of an "Abyssinian maid" playing a dulcimer. This poem's composition was allegedly interrupted by the appearance of a "Person from Porlock," and it mentions "caverns measureless to man" as well as "Alph, the sacred river". For 10 points, name this poem in which the title emperor decrees a "stately pleasure dome" at Xanadu, by Samuel Taylor Coleridge.

ANSWER: "**Kubla Khan**"

14. This person's death was celebrated with an annual dinner by the Calves' Head Club. Richard Brandon, or "Young Gregory," refused to kill this man, who was the alleged author of the spurious autobiography *Eikon Basilike*. For his role in this man's death, Henry Ireton's corpse was dug up and beheaded. This man wore two shirts to avoid appearing to shiver during an event which was allowed by the Rump Parliament after Pride's Purge. This king was killed after a war that began after his Eleven Year's Tyranny and included the defeat of his supporters at Marston Moor. For 10 points, name this monarch who was executed after the English Civil War.

ANSWER: **Charles I** [prompt on "Charles"]

15. The British ZETA machine attempted to cause this result by using Z-pinch to run an electric field through a plasma, creating a magnetic field which confined it. Because a certain lepton easily sticks to the alpha particles produced in this process, its muon-catalyzed variety is not currently viable. This process produces the energy in the CNO cycle. A setup involving electrolysis of heavy water was reported to have experienced this process in an experiment conducted by Stanley Pons and Martin Fleischmann, though that "cold" type of this process was later debunked. For 10 points, name this process in which two atomic nuclei join together.

ANSWER: nuclear **fusion** [do not accept "fission"]

16. One book about this subject defines "the duration" in order to argue against Kant's claim that this subject can only exist outside of time and space. Lucretius' poem *On the Nature of Things* posits that the "swerve" of atoms is the origin of this philosophical concept. Henri Bergson wrote his thesis about "Time and" this concept. Arthur Schopenhauer wrote an essay asserting that this concept exists outside of the realm of human actions. Compatibilism is a belief stating that this concept can be reconciled with determinism, which is distinguished from the extreme position of fatalism. For 10 points, identify this concept that humans have the ability to make conscious choices.

ANSWER: **free will** [or word forms like "**freedom** of the **will**"; prompt on "indeterminism" until "determinism" is read; prompt on "freedom" or similar answers]

17. One poem by this author instructs the reader to find a broken goblet in a ruined house and to "drink and be whole again beyond confusion." This author wrote of being "overtired of the great harvest I myself desired" in a poem that begins by describing "my long two-pointed ladder's sticking through a tree." A poem by this author of "Directive" describes a man grasping two stones "like an old-stone savage armed" and suggests "elves" as something that doesn't love the title thing. In that poem by him, the speaker's neighbor senselessly repeats the phrase "good fences make good neighbors." For 10 points, name this American poet of "Stopping By Woods on a Snowy Evening" and "Mending Wall".

ANSWER: Robert [Lee] **Frost**

18. This element can be extracted from its pollucite ore by dissolving it in hydrochloric acid, after which it is sold as an azide due to its reactivity. This metal's chloride is often added to a DNA solution to achieve a gradient in isopycnic centrifugation. Robert Bunsen and Gustav Kirchhoff named this element after the blue emission lines in its spectrum. Of the non-radioactive elements, this element's 133 isotope has the lowest electronegativity and the largest atomic radius. The oscillations of this element between two ground states is the basis for the SI unit of time and for atomic clocks. For 10 points, identify this alkali metal which reacts even more explosively with water than rubidium.

ANSWER: **cesium** [or **Cs**]

19. Prior to this battle, the proclamation *An Mein Volk* announced the formation of the Landsturm and the Landwehr. The success of this battle's victors can be attributed to the Treaty of Ried and the tactics of the Trachtenberg Plan. Jozef Poniatowski drowned during the retreat from this battle after a bridge over the Elster river was prematurely destroyed. Crown Prince Charles John of Sweden led troops at this battle alongside the Prince of Schwarzenberg. The loser of this battle won the Six Day's Campaign in the months afterwards, but still was forced to sign the Treaty of Fontainebleau and exiled to Elba. For 10 points name this Battle of the Nations, an 1813 loss for Napoléon in Germany.

ANSWER: Battle of **Leipzig** [or Battle of the **Nations** before "the Nations" is read]

20. In one poem, this man exclaims that forty-eight thousand years have passed since two ancient kings last ruled in a region he is traveling to, the path to which is as difficult as climbing to the "blue sky". He wrote a series of ballads for each of the four seasons. Children often memorize this author's poem about seeing the moonlight in front of his bed, which reminds this author of his hometown. He wrote a poem in which "monkeys make sorrowful noise overhead" as the speaker laments how her husband has departed for five months to perform commerce. Ezra Pound translated one of his poems as "The River Merchant's Wife: A Letter". For 10 points, name this friend of Du Fu, a Tang dynasty poet.

ANSWER: **Li** Bai [or **Li** Bo; or **Li** Po]

Extra

In this city, ambassador Alan Lightner was detained while travelling to the opera. The Four Power Agreement concerned this city, where the Basic Treaty was signed. An image located in this city is entitled *My God, Help Me to Survive this Deadly Love* and depicts two world leaders kissing. Bricklayer Peter Fechter was shot and allowed to bleed to death in this city. This city was the location of an "Anti-Fascist Protection Rampart" that was built on the orders of Walter Ulbricht and was crossed by Checkpoint Charlie. For 10 points, name this city which was divided into East and West sections by its namesake wall, the current capital of Germany.

ANSWER: **Berlin** [or East **Berlin**; or West **Berlin**]

Note to Moderator: Do NOT read this tossup if the Illinois A + St John's A packet has already been read at your site.

A character created by this author is called an "eater of leftovers" by his son and refers to the fear of death as the "Not-I bird." A play by this author features a man who once told a surveyor that his land couldn't support the weight of a train and contains a scene in which some girls imitate the motorcycle driven by a photographer. In one of his plays, Sidi is wooed by the schoolteacher Lakunle but marries the chieftain Baroka instead. This author wrote about Simon Pilkings, who is unable to prevent Elesin from strangling himself with his chains. For 10 points, name this Nigerian author of *The Lion and the Jewel* and *Death and the King's Horseman*.

ANSWER: Wole **Soyinka** [or Akinwande Oluwale **Soyinka**]

Bonuses

1. This composer used cello and viola soloists to depict Don Quixote and Sancho Panza in a tone poem. For 10 points each:
[10] Name this German composer of works like *Death and Transfiguration* and *Also Sprach Zarathustra*.
ANSWER: **Richard Strauss** [prompt on "Strauss"]
[10] Strauss's first major tone poem is this one. Characteristically, although it is in E Major, it begins with the strings outlining a C Major arpeggio.
ANSWER: **Don Juan**
[10] Description acceptable. The programs for Strauss's *A Hero's Life* and *Sinfonia Domestica* are both about *this* subject matter.
ANSWER: they're both **autobiographical** [accept any reasonable equivalents, including answers like **Richard Strauss** or **himself**]
2. The mountain K k T be is the highest point of its largest city. For 10 points each:
[10] Name this large central Asian country with largest city Almaty. This country home to the saline lake Balkhash; in it, the Syr Darya river flows into the rapidly drying-up Aral Sea, which is to the south of this country.
ANSWER: Republic of **Kazakhstan**
[10] This city replaced Almaty as the capital of Kazakhstan in 1997.
ANSWER: **Astana**
[10] Kazakhstan is also home to Baikonur, the oldest one of these Soviet sites. Another major one of these sites is located in French Guiana.
ANSWER: **cosmodromes** [or **spaceports**]
3. *Note to moderator: The answer lines to the first and third part are very similar. Please take extra caution when accepting answers for this bonus.*
For two gases, the ratio of the rates of this process is equal to the ratio of the average velocities of the gas particles.
[10] Name this process in which gas molecules enter an empty chamber via an opening smaller than the gas molecules' mean free path.
ANSWER: **effusion** [or word forms]
[10] According to Graham's law of effusion, the ratio of the effusion rate for two gases can be found by taking the quotient of each gas's value for the square root of this quantity.
ANSWER: **molar mass** [prompt on "mass"]
[10] Effusion is not to be confused with this other process, which occurs when gas molecules move from an area of high concentration to low concentration without the presence of a small hole.
ANSWER: **diffusion** [or word forms]

4. These institutions were selected for their loyalty to the Democrats and not for their financial solvency; the failure of some of these institutions helped exacerbate the Panic of 1837. For 10 points each:
 [10] Give the nickname for these state institutions, into which the Treasury put federal funds after the closure of the Second Bank of the United States.
 ANSWER: **pet banks** [prompt on partial answer]
 [10] This Secretary of the Treasury delivered the killing blow to the Second Bank by withholding federal funds from it. This man later became Chief Justice, and delivered the *Dred Scott* decision.
 ANSWER: Roger Brooke **Taney** ["tawny"]
 [10] This Democratic president nominated Roger Taney as Secretary of the Treasury and engaged in a long battle with Nicholas Biddle to destroy the Second Bank of the United States.
 ANSWER: Andrew **Jackson**
5. This novel's protagonist finds a book about homosexuality, titled *Eros Himself*, in his son's bag, leading to him to suspect that his son is gay. For 10 points each:
 [10] Name this novel about a wealthy businessman named Mehring, who moonlights as a farm manager and muses on his collapsed relationships with his son Terry, his estranged wife, and his former mistress.
 ANSWER: *The **Conservationist***
 [10] The *Conservationist* was written by this recently-deceased South African author, who won the 1991 Nobel Prize in Literature. She also wrote the novels *Burger's Daughter* and *July's People*.
 ANSWER: Nadine **Gordimer**
 [10] *July's People* concerns the lives of Maureen and Bam Smales after they escape from a war-torn Johannesburg, during a war that overthrows this system of racial segregation in South Africa.
 ANSWER: **apartheid**
6. This matrix is composed of nine entries, denoted by I with a subscript of two letters from x,y,z, possibly repeated. For 10 points each:
 [10] Identify this symmetric matrix, whose top left element is the volume-integral of $y^2 + z^2$ dm. When applied to the angular velocity vector, it gives the angular momentum vector.
 ANSWER: moment of **inertia tensor** [prompt on partial answer, prompt on "moment of inertia matrix"]
 [10] The moment of inertia can be thought of as the rotational analogue of this quantity. That is, moment times angular acceleration equals torque is the rotational analogue of the equation *this quantity* times acceleration equals force.
 ANSWER: **mass** [prompt on **m**]
 [10] This theorem states that the moment of inertia about a given axis equals the moment of inertia about the center of mass plus m times the square of the distance between the given axis and a certain other axis.
 ANSWER: **parallel-axis** theorem [or **Huygens-Steiner** theorem]

7. Omar's coming, Omar's coming! Name some things about *The Wire*, for 10 points each.
 [10] In the first scene of Season Four of *The Wire*, Snoop buys one of these items for \$800. The distinctive items it leaves behind at Snoop's body dump sites later become important clues.
 ANSWER: a **nail gun**
 [10] This Maryland city is the setting of *The Wire*. It is also the setting of many John Waters films, including *Hairspray*.
 ANSWER: **Baltimore**, Maryland
 [10] In season one, the Major Crimes Unit is set up to investigate this drug-dealing organization, which is taken over by Stringer Bell after its Wood Harris-portrayed namesake is imprisoned.
 ANSWER: the **Barksdale** Organization [accept Avon **Barksdale**]
8. The first of these events targeted a group of engineers from Shakty who were believed to be "wreckers." For 10 points each:
 [10] Name these events that began after the assassination of Sergei Kirov. These events, which were a central part of the Great Purge, were led by Andrei Vyshinsky and targeted people like Lev Kamenev.
 ANSWER: Moscow **show trials**
 [10] The show trials were part of this person's efforts to consolidate power. This mustachioed Soviet dictator also orchestrated a famine called the Holodomor and led the USSR through World War II.
 ANSWER: Joseph **Stalin** [or Iosif Vissarionovich **Stalin**; or Ioseb **Besarionis** Dze Jughashvili]
 [10] Along with Kamenev, this politician was executed after the Trial of the Sixteen. A letter purportedly sent by this man to the British Communist party may have cost Ramsay Macdonald's Labour party the 1924 election.
 ANSWER: Grigory Yevseevich **Zinoviev**
9. Quentin Daniels attempts to figure out how to repair this man's electricity-generating machine. For 10 points each:
 [10] Identify this character, the namesake of a line of Taggart Transcontinental's railroad. At the end of the novel in which he appears, he gives a very lengthy speech denouncing so-called "looters".
 ANSWER: **John Galt** [accept either name]
 [10] The question "Who is John Galt?" is often asked in this novel, in which various titans of industry abandon their jobs as society falls to ruin. Its title comes from a suggestion of what the title mythological figure ought do.
 ANSWER: **Atlas Shrugged**
 [10] *Atlas Shrugged* was written by this right-wing darling, who also penned *The Fountainhead* and the semi-autobiographical *We the Living*.
 ANSWER: Ayn **Rand** [or Alisa **Rosenbaum**]

10. Karl Barth gained fame by rejecting humanistic views of scripture in a 1916 commentary on a text that *this man* wrote with the help of his assistant Tertius. For 10 points each:

[10] Name this apostle from Tarsus who wrote many of the Epistles.

ANSWER: Saint **Paul** the Apostle [or **Saul** of Tarsus]

[10] Paul criticized this other apostle for an "incident at Antioch" in which this man refused to share a meal with Gentiles. This man was martyred on an upside-down cross, and shares a feast date with Paul.

ANSWER: **Peter** [or Simon **Peter**]

[10] The incident at Antioch is recounted in this Pauline epistle addressing adherence to the Law of Moses. This epistle to a group in central Anatolia includes the line "There is neither Jew nor Gentile, neither slave nor free."

ANSWER: Epistle to the **Galatians**

11. This woman returned to life after Heracles defeated Thanatos in a wrestling match. For 10 points each:

[10] Name this wife of Admetus, who offered to die after the Fates offered to spare Admetus's life in exchange for the life of another person.

ANSWER: **Alcestis**

[10] Out of all the daughters of this man, Alcestis was the only one who did not participate in his accidental killing. This king of Iolcus sent his nephew to retrieve the Golden Fleece.

ANSWER: **Pelias**

[10] This daughter of Aeetes and lover of Jason convinced the daughters of Pelias that they could rejuvenate him by chopping him up and throwing his remains in a boiling cauldron.

ANSWER: **Medea**

12. During a blackout in this play, one character steps in a drum and begins to drag it across the floor. For 10 points each:

[10] Name this play which ends with Goldberg and McCann taking Stanley away from Meg's boarding house after Stanley has a nervous breakdown during the title celebration.

ANSWER: *The **Birthday Party***

[10] This British playwright is known for his "comedies of menace", such as *The Birthday Party* and *The Dumb Waiter*.

ANSWER: Harold **Pinter**

[10] This Pinter play depicts the affair of Jerry and Emma in reverse chronological order, ending with their first encounter in Emma's bedroom.

ANSWER: ***Betrayal***

13. Types of studies employed by practitioners of this field include case-control and cohort. For 10 points each:

[10] Identify this field, in which one would use the Hill criteria to determine the causative agent of a disease outbreak.

ANSWER: **epidemiology** [accept word forms]

[10] One must watch out for these systematic sources of errors when designing an epidemiological study. The "selection" type of these errors occurs when the population studied is poorly sampled.

ANSWER: statistical **biases**

[10] This term refers to diseases which maintain a roughly constant presence in a population over time. This situation occurs when, on average, each infected person transmits the disease to exactly one new person.

ANSWER: **endemic** diseases

14. A suspect in this man's assassination was known as the "33-year-old" and was later found dead in some North Carolina woods. For 10 points each:

[10] Identify this Social Democratic prime minister whose unsolved assassination in 1986 was initially blamed on Christer Pettersson.

ANSWER: Olof **Palme** [or Sven Olof Joachim **Palme**]

[10] Olof Palme was a prime minister of this country. Centuries earlier, opponents of Christian II in this country were massacred in the Stockholm bloodbath.

ANSWER: Kingdom of **Sweden** [or **Sverige**]

[10] This West German terrorist group claimed responsibility for Palme's assassination. They kidnapped Hans Otto Schleyer and hijacked Lufthansa Flight 181 during the "German Autumn."

ANSWER: **Red Army Faction** [or **RAF**; or the **Rote Armee Fraktion**; or the **Baader-Meinhof** Gang/Group]

15. Schopenhauer called this activity a direct expression of "the will." For 10 points each:

[10] Identify this art form that is the subject of a chapter on "The Immediate Erotic Stages," in which a writer named "A" argues that it is the "absolute medium" of "sensuous immediacy."

ANSWER: **music** [prompt on "opera"]

[10] "The Immediate Erotic Stages or the Musical Erotic" is a section of this book that presents aesthetic and ethical ways of living. This book was written under the pseudonym Victor Eremita.

ANSWER: **Either/Or** [or **Enten – Eller**]

[10] *Either/Or* was written by this Danish philosopher whose other books include *Fear and Trembling* and *The Sickness Unto Death*.

ANSWER: Søren Aabye **Kierkegaard** [or Johannes de **Silentio**; or Victor **Eremita**; or William **Afham**; or Frater **Taciturnus**; or Constantin **Constantius**; or Vigilius **Haufniensis**; or Nicolaus **Notabene**; or A.B.C.D.E.F. **Godthaab**; or A.B.C.D.E.F. **Rosenblad**; or **Inter et Inter**; or **Procul**; or Captain **Scipio**; or Victor **Eremita**; or **Judge William**; or **A.F.**; or Hilarius **Bookbinder**; or Johannes **Climacus**; or **H.H.**; or **Anti-Climacus**; prompt on **A**; prompt on **B**]

16. Identify the following about chromatin immunoprecipitation, or ChIP, for 10 points each.
- [10] ChIP is often used to study the protein factors that facilitate this process, in which mRNA is produced from a DNA template by RNA Polymerase II. This step occurs before translation.
- ANSWER: **transcription**
- [10] ChIP can be used to study enzymes that add or remove these functional groups from histones. The addition of this functional group to histones in a segment of DNA *increases* gene expression in that segment.
- ANSWER: **acetylation** [or **COCH3**]
- [10] When preparing samples for chromatin immunoprecipitation, this small achiral amino acid is added to the mixture to prevent formaldehyde from crosslinking the chromatin too much.
- ANSWER: **glycine** [accept **Gly** or **G**]
17. In this novel, the examining magistrate of a murder case brandishes a crucifix at the protagonist and asks if he believes in God, to which the protagonist replies “no”. For 10 points each:
- [10] Name this novel in which Meursault shoots an Arab five times on a beach.
- ANSWER: *The **Stranger*** [or *L’**Étranger***]
- [10] *The Stranger* was written by this French novelist of works such as *The Plague* and *The Fall*. He received the 1957 Nobel Prize in Literature.
- ANSWER: Albert **Camus**
- [10] Six of Camus’ short stories are collected in this volume, including a story in which an engineer named d’Arrast goes to a town in Brazil whose inhabitants celebrate the miracle of a “growing stone”.
- ANSWER: ***Exile and the Kingdom*** [or *L’**Exil et le Royaume***]
18. A school of economic thought named after this man was founded by Piero Sraffa and attempted to improve this man’s labor theory of value. For 10 points each:
- [10] Name this British political economist who wrote *Principles of Political Economy and Taxation*. He opposed the Corn Laws and came up with the theory of comparative advantage.
- ANSWER: David **Ricardo**
- [10] This other 19th century British economist wrote about the supposedly-inevitable overtaking of the food supply by exponential population growth in his *An Essay on the Principle of Population*.
- ANSWER: Thomas Robert **Malthus**
- [10] This British economist made key contributions to the theory of marginal utility. He is also known for suggesting that coal extraction would reach a peak level in his book *The Coal Question*.
- ANSWER: William Stanley **Jevons**
19. This ruler’s “hell” was a torture chamber that was designed to look like a beautiful palace from the outside. For 10 points each:
- [10] Name this Mauryan emperor who converted to Buddhism after witnessing the bloody Kalinga war.
- ANSWER: **Ashoka** Maurya [or **Ashoka** the Great]
- [10] Ashoka’s son Mahinda became a monk and brought Buddhism to this island. This island was dubbed “Ceylon” by the English and has more recently been home to the Tamil Tigers terrorist group.
- ANSWER: **Sri Lanka**
- [10] This other Indian empire imitated Ashoka’s sandstone pillars by constructing the iron pillar of Delhi. Kalidasa lived during this empire, which was eventually overrun by White Huns.
- ANSWER: **Gupta** Empire

20. There's nothing better in life than horse statues except you identifying them for me. For 10 points each:
[10] This life-size bronze statue depicts the mercenary Erasmo da Narni on horseback. Three legs of the horse are on the ground in this statue, while the fourth rests balanced upon a small orb representing the earth.

ANSWER: *Equestrian Statue of* **Gattamelata**

[10] This sculptor of *Gattamelata* also created a bas-relief of *The Feast of Herod*. He also produced the first free-standing nude since antiquity, his bronze *David*.

ANSWER: **Donatello** [or **Donato** di Niccolo di Betto Bardi]

[10] Donatello studied Roman ruins for inspiration with this other Florentine artist. He is best-known for his work on the development of linear perspective and the design for the *Duomo* of Florence Cathedral.

ANSWER: Filippo **Brunelleschi**

Extra

The protagonist of this novel is carried out of the jungle on a tidal wave after having sex with a ghost in a ruined temple. For 10 points each:

[10] Name this novel narrated by the large-nosed Saleem Sinai, who is born with telepathic powers at the moment of India's independence but loses them during the Emergency.

ANSWER: ***Midnight's Children***

[10] *Midnight's Children* was written by this Indian author, who was the subject of a fatwa issued by Ayatollah Khomeini for his allegedly blasphemous novel *The Satanic Verses*.

ANSWER: Salman **Rushdie** [or Ahmed Salman **Rushdie**]

[10] In *The Satanic Verses*, Saladin Chamcha begins to turn into a goat after miraculously surviving one of these events with the protagonist, Gibreel Farishta.

ANSWER: the **explosion** of an **airplane** in midair [or the **hijacking** of an **airplane**; or obvious equivalents; don't accept "plane crash"]

Answer the following about Kepler's laws of motion, for 10 points each.

[10] Kepler's first law says that the orbit of planets around the sun is one of these conic sections, with the sun lying at one of the two foci.

ANSWER: **ellipses**

[10] Kepler's second law says that a line segment between a planet and the sun sweeps out a constant amount of this quantity in a constant time.

ANSWER: **area**

[10] Kepler's laws hold for forces like gravity and electric attraction, which have these two properties. The first is the distance proportionality, and the second is that the force always points towards the orbited body.

ANSWER: **inverse-square** and **central** forces [both answers required, accept descriptive replacements for inverse-square like "proportional to **one over the square** of distance"]