

Eisenhower Memorial Tournament 2017: Dunning-Kruger? I Hardly Know ‘Er!

Questions by Vasa Clarke, Ryan Humphrey, Alex Damisch, Jacob O’Rourke, Gabe Guedes, Charles Hang, and Alex Dzurick

Packet 4: Tossups

1. According to the main primary source about a state in this city, three brothers, including Sineus and Truvor, were invited to come and “rule and reign over us.” The first stone church in this city was the Church of the Tithes, which replaced a pagan temple in this city. This city was the center of a succession crisis between Sviatopolk the Accursed and Yaroslav the Wise. A ruler of this city decided not to convert to(*) Islam after hearing of Islam’s ban on alcohol, so he converted to Christianity and baptized the residents of this city in the Dnieper River. This city was the center of the state ruled by Rurik, and Nestor’s *Primary Chronicle* is the main primary source of that state. This city was home to the state of the Rus. For 10 points, name this modern-day capital of Ukraine.

ANSWER: Kiev [or Kievan Rus; or Kivey; or Kviv; or Kyviv] <JO, European History>

2. Two women in vibrant blue and red dresses play the title game in this artist’s *Croquet Scene*, one of five paintings he completed on that subject. A ship’s officer faces away from the viewer and takes a reading from an octant in this artist’s *Eight Bells*. Two ducks react chaotically to a shotgun blast, and a group of crows hunt a fox trapped in snow in two different nature scenes created by this artist. A red (*) schoolhouse is visible behind a group of children with hands linked together while playing the title game in this artist’s *Snap the Whip*. Another of his works shows a man and three boys riding in a ship named *The Gloucester* [“GLAW-ster”] while sharks harass an African-American man on a boat in a similar painting by this artist. For 10 points, name this American artist of *Breezing Up* and *The Gulf Stream*.

ANSWER: Winslow Homer <RH, Painting>

3. An argument from this text is compared unfavorably with some music and a lyre, and another is criticized through the example of a man who might wear many cloaks. The central character of this text notes that stones or sticks may look unequal but still remind us of the concept of equality. This dialogue condemns suicide because people are property of the (*) gods and are thus forbidden from dying without their consent. Arguments for the immortality of the soul such as the Theory of Recollection and the Cyclical Argument are proposed in this book whose central character is about to be executed. For 10 points, name this Platonic dialogue in which Cebes [“SEE-bees”] and Simmias witness the last hours of Socrates.

ANSWER: Phaedo <VC, Philosophy>

4. This singer collaborated with the Count Basie Orchestra on the album *One O’Clock Jump*, and with a full orchestra and Louis Armstrong on an album of solo and duet covers from *Porgy and Bess*. This artist covered the Gershwins again on a song from a 1924 musical that Nelson Riddle arranged for this singer as a ballad; that song is “Oh, (*) Lady Be Good!” This singer covered Cole Porter, Duke Ellington, and other artists in 19 “songbook” albums. This bebop and jazz singer displayed her signature technique on songs like “How High the Moon.” Chick Webb’s band accompanied this artist on her first hit, “A-Tisket, A-Tasket.” Nicknamed the “First Lady of Song,” for 10 points, name this artist known for her scat singing.

ANSWER: Ella Jane Fitzgerald <AWD, Other Art>

5. These programs may implement name mangling in order to avoid overloaded identifiers. The “man or boy?” test seeks to distinguish whether a program of this type is capable of handling recursion and non-local references. Frances E. Allen became the first woman to win the Turing Award in 2006 for her work in optimizing these programs, which may involve instruction selection and loop unrolling. (*) LCC and Clang are examples of these programs that perform bootstrapping because they are written in the same language that they intend to process. These programs which perform their function during execution are described as “just-in-time” examples of these programs. For 10 points, name these programs that translate high-level source code into lower-level machine code.

ANSWER: compilers <VC, Other Science>

6. This empire’s deliberative body was the “Great Assembly,” whose first meeting had 29 clans presided over by a belen-tigui, or master of ceremony. This empire’s first ruler did not walk until he was seven years old,

according to a history that was recounted orally by griots. The founder of this empire defeated the Sosso ruler Sumanguru at the Battle of Kirina. This empire was founded by (*) Sundiata, and a later ruler of this empire devalued gold all along his route during his hajj to Mecca. For 10 points, name this West African empire that was ruled by Mansa Musa, which shares its name with a modern-day country.

ANSWER: Mali [or the Mali Empire; or the Malinke Empire; or the Mandingo Empire] <JO, Misc/Other History>

7. One depiction of this city features the lines “Bareheaded / Shoveling / Wrecking / Planning / Building, breaking, rebuilding.” That depiction of this city features three lines beginning with the three phrases “They tell me you are wicked,” “And they tell me you are crooked,” and “And they tell me you are brutal.” Those depictions appear in a collection named for this city, as does a poem which describes an entity which (*) “comes on little cat feet.” This city is described in its most famous poetic depiction as “Tool Maker, Stacker of Wheat” as well as “City of the Big Shoulders.” For 10 points, name this city described as “Hog Butcher for the World” in a Carl Sandburg poem because of its meatpacking industry, which is also where *The Jungle* is set.

ANSWER: Chicago <CH, American Lit>

8. This character brings water to a thirsty army by stabbing the ground and creating a spring in a story where this character falls in love with a daughter of Gewar. In order to learn more about this character, his father, who is disguised as “Vegtam,” rides past a bloody dog to visit a woman who is capable of interpreting dreams. Because this god is not (*) mourned by the giantess Thokk, he is forced to remain in the land of the dead. This god’s wife, Nanna, dies and joins this god on his funeral pyre. Every living thing in the world agreed to not hurt this god except for the mistletoe, which was used by this god’s blind brother to kill him. For 10 points, name this beautiful god in Norse mythology and brother of Hodr who died after a nasty trick played by Loki.

ANSWER: Baldr <VC, Myth>

9. In the early 1930’s, this animal was used by virologist Richard Shope to isolate his namesake papillomavirus. One of the first attempts at inducing the formation of squamous cell carcinomas came when Japanese pathologist Yamagiwa Katsusaburo applied coal tar to the inner surface of this animal’s ear. Either a guinea pig or this animal is used in the Anton test for the presence of *Listeria*. In 1998, one of these animals named Alba was controversial given the GFP gene. This animal is the most common (*) mammalian source of polyclonal antibodies for laboratory use, and long-term potentiation was discovered while studying the hippocampus of this animal. In the 1950’s, myxoma virus was released to control an invasive population of this animal in Australia. For 10 points, name this mammalian model organism known for its high reproductive rate.

ANSWER: rabbits [or oryctolagus cuniculus; accept hare, bunny, or basically any specific species of rabbits] <RH, Biology>

10. *Description acceptable.*

A *New Yorker* article by Adam Gopnik written after this event cites it as proof that we are all living in a computer simulation. Two central participants in this event were photographed at El Cabrillo for the cover of an issue of *Variety* that was released shortly after it occurred. A woman at this event told another man “You’re impossible” before performing its central action, which led to the firing of two (*) accountants from PricewaterhouseCoopers. During this event, one of the stars of *Bonnie and Clyde* hesitated while looking at an envelope before handing it to Faye Dunaway, who then instigated this event by reading what was on it. For 10 points, name this snafu in which a Damien Chazelle musical was mistakenly announced to have won an Oscar over a Barry Jenkins film.

ANSWER: La La Land “winning” Best Picture over *Moonlight* [accept any answer that mentions the 2017 Oscar for Best Picture going to the wrong film] <GG, Trash/Other>

11. A holy text in this religion ends with a declaration that the “mystic and wondrous Bride” has been made manifest. The writings of this religion’s founder addressing contemporary world leaders were collected in the *Summons of the Lord of Hosts*. Two stars on either side of an embellished word representing God appear in the ringstone symbol, which is sacred in this religion. The oldest surviving temple of this religion is in (*) Wilmette, Illinois. Members of this religion follow a calendar with nineteen months of nineteen days, plus some extra days. A leader of this religion, Shoghi Effendi, launched the Ten Year World Crusade. The headquarters of this religion are at the Universal House of Justice in Haifa, Israel. For 10 points, name this religion founded by Bahá'u'lláh.

ANSWER: Bahá'í Faith <VC, Religion>

12. This author described laurels as “equally appropriate for Caesars and poets” in his “Coronation Oration” accepting a prize for one of his works. That work by this author was based research done for his *On Illustrious Men* and contains the section (*) *Scipio’s Dream*. This author wrote about how “the Sun’s ray’s turned pale with grief” in a collection whose addressee is described as “You who hear the sound of scattered rhymes.” The best known work of this author of the epic poem *Africa* contains 366 poems about a figure whom he first encountered on Good Friday 1327. For 10 points, name this author whose *Canzoniere*, or *Songbook*, describes his love for Laura.

ANSWER: Petrarch [or Francesco Petrarca] <CH, European Lit>

13. This non-Soviet leader enacted his country’s first Five-Year Plans, which promoted education by establishing the National Institutes of Technology. This leader signed the Panchsheel Treaty with a northern neighbor guaranteeing his Five Principles of Peaceful Coexistence. This leader gave an impromptu funeral oration which begins with the words, “Friends and comrades, the (*) light has gone out of our lives, and there is darkness everywhere.” During the Chinese invasion of Tibet, this leader offered political asylum to the Dalai Lama. Upon inauguration, this leader declared that his nation had made a “tryst with destiny,” and he mourned the death of Mahatma Gandhi. For 10 points, name this first Prime Minister of post-independence India.

ANSWER: Jawaharlal Nehru [or Pandit Nehru] <VC, World History>

14. One of these compounds is produced from the reaction of two alkyl halides and sodium in the Wurtz reaction. A lithium halide, an organo-cuprate, and one of these compounds is formed from the reaction of a lithium dialkyl cuprate and an alkyl halide in the Corey-House synthesis. Reacting an aldehyde or ketone with hydrazine under basic conditions produces one of these compounds in the (*) Wolff-Kishner Reduction. These compounds demonstrate a strong stretching peak near 2850 to 3000 inverse-centimeters in IR spec, and they typically possess a pKa of 50. Reacting one of these compounds with a halogen in the presence of light and high temperatures can produce an alkyl halide. For 10 points, complete hydrogenation of an alkyne produces what type of hydrocarbon with only carbon-carbon single bonds.

ANSWER: alkanes <RH, Chemistry>

15. The fourth movement of this composer’s second symphony is marked *sotto voce* [“SO-toe VO-chay”] and borrows a four-note “do-ti-do-mi” motive from the first movement of that symphony. The last movement of this composer’s fourth symphony begins with a chaconne on an ascending E minor scale; that chaconne may have been inspired by Bach’s cantata *For Thee, O Lord, I Long*. This composer’s third symphony opens with an (*) F-A flat-F motive, a minor variant of this composer’s “*Frei, aber froh*” [“FRAY AH-ber FROH”] motive. This composer took 20 years to complete his first symphony, and he said that “any ass could see” that the main theme in that symphony’s finale was reminiscent of Beethoven’s Ninth Symphony. For 10 points, name this German composer of *Academic Festival Overture* and *German Requiem*.

ANSWER: Johannes Brahms <AWD, Music>

16. In 2002, the Supreme Court ruled that an Ohio program using *these things* did not violate the Establishment Clause in the case *Zelman v. Simmons-Harris*. The first federally-funded program using these things was set up in D.C. in 2003 before the SOAR Act was proposed to renew it. The American Federation for Children supports programs that use these things, examples of which include the Milwaukee Parental Choice Program and Louisiana (*) Scholarship Program. A Trump campaign promise pledged 20 billion dollars toward these things, which are supported by Betsy DeVos. These things can be used by parents to send their kids to private schools rather than the public school in their zone. For 10 points, name these flashpoints in the debate over school choice.

ANSWER: school vouchers <GG, Geography/Current Events>

17. One omen in this novel is the crowing of a rooster on the afternoon of a wedding; that night, a woman learns that her husband had had a relationship with an older woman in London. One character in this novel is attacked by Car Darch, after which she is taken to a forest called “The Chase,” where she falls asleep. This novel’s second “phase” sees one character baptize her son herself after her father keeps the parson away, and is titled (*) “Maiden No More.” Parson Tringham tells a family in this novel that they may be related to Norman aristocracy. This novel’s protagonist is assaulted by Alec, who impregnates her with the baby Sorrow, and she is later abandoned by Angel Clare. For 10 points, name this novel about the title woman written by Thomas Hardy.

ANSWER: *Tess of the d’Urbervilles* <CH, British Lit>

18. With A. E. H. Love, this scientist names a two-dimensional extension of Euler-Bernoulli beam theory. This scientist also names a set of equations for calculating the hydrodynamic torque and force of a rigid body in an ideal fluid. He’s not Cauchy, but this scientist is the first alphabetical namesake of a pair of stress tensors, one of which is the transpose of the nominal stress tensor. A theorem named for this scientist relates the (*) emissivity and absorptivity of a body in thermal equilibrium. One law created by this scientist states that the sum of currents flowing into a node must equal the current flowing out of the node, and that law is frequently paired with his “loop rule”. For 10 points, name this German scientist who also coined the term “black body radiation”.

ANSWER: Gustav Kirchhoff <RH, Physics>

19. This man joked that “a statesman is a politician who’s been dead ten or fifteen years,” and once hilariously threatened to beat the shit out of Paul Hume for insulting this man’s daughter. The second-floor balcony overlooking the South Lawn of the White House is named for this politician. While staying at Blair House, this man was the subject of an assassination attempt by two (*) Puerto Rican nationalists. Congress overrode this President’s veto of legislation such as the McCarran Internal Security Act and the Taft-Hartley Act. Because of their printing time, the *Chicago Daily Tribune* incorrectly called the election of 1948 for Thomas Dewey instead of this man. For 10 points, name this failed haberdasher who became President following the death of Franklin Roosevelt.

ANSWER: Harry S. Truman <VC, American History>

20. One character in this play is chained to the hooves of a bull, only to escape by causing an earthquake. A second chorus of slaves was added to this play in an adaptation subtitled “a communion rite” by Wole Soyinka. One character in this play sees two suns in the sky and the horns of a bull on another character’s head after agreeing to put on a disguise that includes a (*) thyrsus. Agave presents the head of a mountain lion to Cadmus in this play, only to discover that it is actually her son’s head. A king in this play is killed after spying on the Maenads. For 10 points, name this play in which Pentheus is torn apart by the title followers of Dionysius, written by Euripides.

ANSWER: *The* *Bacchae* [or *The* *Bacchantes*] <CH, World Lit>

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Packet 4: Bonuses

1. The smell of bitter almonds indicates the suicide of Jeremiah Saint-Amour in this novel. For 10 points each:

[10] Name this novel in which Florentino Ariza persists in loving Fermina Daza through the entirety of their lives.

ANSWER: **Love in the Time of Cholera**

[10] *Love in the Time of Cholera* is a novel by this Colombian author of *The Autumn of the Patriarch*.

ANSWER: Gabriel José de la Concordia **García Márquez** [prompt on “Gabo” or “Gabito”]

[10] *Love in the Time of Cholera* ends with Florentino and Fermina traveling on a boat displaying one of these symbols that indicates the presence of disease.

ANSWER: **yellow flag** [prompt on “flag” with the question “of what color?”] <CH, World Lit>

2. This series of works was inspired by fertility idols like the Venus of Willendorf. For 10 points each,

[10] Name this series of paintings. The first entry in this series was only finished upon encouragement by art critic Meyer Schapiro, and Robert Rauschenberg notably erased a drawing of one work from this series.

ANSWER: **Woman** series (by Willem de Kooning)

[10] The creator of the Woman series, Willem de Kooning, is typically associated with this New York-based art movement. Jackson Pollock is almost certainly the most well-known artist from this movement.

ANSWER: **abstract expressionism**

[10] Helen Frankenthaler, another abstract expressionist, was also one of the most prominent exemplars of this style of painting, which was pioneered by a Latvian-American artist known for his *Black on Gray* and *Four Darks in Red*.

ANSWER: **color field** painting <RH, Painting> (the Latvian-American artist was Mark Rothko)

3. Answer the following about “the Napoleon of neuroses”, Jean-Martin Charcot. For 10 points each,

[10] Along with Pierre Marie and Howard Henry Tooth, Charcot names a common type of inherited neuropathy affecting this branch of the nervous system, often contrasted with the central nervous system.

ANSWER: **peripheral** nervous system [or **PNS**]

[10] It's not acute cholangitis, but Charcot also names a “triad” of symptoms associated with this demyelinating disease, which Charcot was the first to describe in 1868. Those symptoms of this disease are nystagmus, intention tremors, and dysarthria.

ANSWER: **multiple sclerosis** [or **MS**]

[10] Charcot also names a type of neuropathic arthropathy, also known as his namesake “joint”. Those joints are frequently found in the feet of patients with histories of mismanaging this disease.

ANSWER: **diabetes** mellitus [accept specific types: Type I, type II, juvenile, etc.] <RH, Biology>

4. This legislation inspired a political cartoon where the pants of a man holding a barrel are bitten by a turtle named “O-Grab-Me.” For 10 points each:

[10] Name this 1807 act signed by Thomas Jefferson, which limited trade with France and Great Britain after the Chesapeake-Leopard Affair.

ANSWER: **Embargo** Act of 1807

[10] The Chesapeake-Leopard Affair involved the impressment of American sailors, which was a cause of this war. This war included the Battle of New Orleans, which was won after this war had ended.

ANSWER: War of **1812**

[10] Due to Jefferson's lack of public speaking ability, he began the practice of submitting the State of the Union in this manner. The State of the Union would be delivered in this manner until 1917.

ANSWER: it was **written** [or descriptive answers, such as “he **wrote** it down”; or answers that involve **somebody else reading it for him**, delivering the address **by proxy**, or obvious equivalents] <JO, American History>

5. This term refers to a series of protests that began in Independence Square and coincided with the beginning of Yulia Tymoshenko's hunger strike in prison. For 10 points each:

[10] Name this campaign of civil unrest that included riots after protesters were assaulted by Berkut special police units. It culminated in a revolution that toppled the second Azarov Government and Victor Yanukovich.

ANSWER: **Euromaidan** [or **Yevromaidan**]

[10] The Euromaidan occurred in this country where shortly after, Russia invaded its Crimean Peninsula in a campaign that led to the establishment of the Donetsk People's Republic.

ANSWER: **Ukraine** [or **Ukrayina**]

[10] Along with the sanctions on Russia after its invasion of the Crimea, the ruble fell sharply in 2014 due to lower prices of this commodity. Rosneft is a state-run company in Russia that deals with this commodity.

ANSWER: **oil** [or **petroleum**] <GG, Geography/Current Events>

6. The new original song "Evermore" appears twice in this film, first performed by Dan Stevens and later over the end credits. For 10 points each:

[10] Name this 2017 film in which that song appears. Alan Menken and Tim Rice worked on new original music for this film, whose title song was performed by Emma Thompson as Mrs. Potts.

ANSWER: **Beauty and the Beast**

[10] This performer sang the version of "Evermore" that played over the credits. He previously guest starred in the *Glee* season 1 episode "Acafellas" as himself.

ANSWER: Josh **Groban**

[10] Recently, Groban has been starring on Broadway as one of the title characters of this musical based on a short portion of *War and Peace*.

ANSWER: *Natasha, Pierre, and the **Great Comet** of 1812* <ADZ, Trash/Other>

7. This formalism was proposed as a way to better explain an absorber theory that its creator co-names with John Wheeler. For 10 points each,

[10] Name this formalism from quantum mechanics that represents transition amplitudes as the weighted sum of a system's possible histories from the initial to final states. Brownian walk is the simplest of its namesake constructs.

ANSWER: **path integral** formalism

[10] The path integral formalism was created by this Caltech physicist whose namesake diagrams are used to model particle interactions. He also gave a notable set of "Lectures on Physics".

ANSWER: Richard **Feynman**

[10] While at Cambridge, Richard Feynman also proposed the parton model to explain deep inelastic scattering in this general class of particles. Baryons and mesons are two families of this general class of particles.

ANSWER: **hadrons** <RH, Physics>

8. This story's title protagonist names a series of pools "The Lucinda River" after his wife. For 10 points each:

[10] Name this story about Neddy Merrill, who travels home through suburbia only to find at the end of his trip that his home has become abandoned.

ANSWER: "The **Swimmer**"

[10] "The Swimmer" is a short story by this author of "The Enormous Radio" and *The Wapshot Chronicle*.

ANSWER: John William **Cheever**

[10] Though he was not a playwright, Cheever is sometimes described as this Russian author "of the suburbs." This author wrote *The Seagull* and *The Cherry Orchard*.

ANSWER: Anton Pavlovich **Chekhov** <CH, American Lit>

9. This character is surprised to see his friend Elpenor, who had died by accident, when this character visits the underworld. For 10 points each:

[10] Name this Greek hero who faced off against Laestrygonians and the Lotus-Eaters in his quest to return home to Ithaca and his wife, Penelope.

ANSWER: Odysseus

[10] Odysseus had travelled to the underworld to get advice from this long-dead prophet. While he was alive, this man was temporarily turned into a woman because he beat some snakes with his walking stick.

ANSWER: Tiresias

[10] The shades which Odysseus meet are unable to communicate with him until they have performed this action. Tiresias is an exception, as he is able to talk with Odysseus before having the chance to partake in this action.

ANSWER: drinking blood <VC, Myth>

10. The Ten Days Campaign failed to stop a revolution in this country. For 10 points each:

[10] Name this European country, whose neutrality is guaranteed by Article VII of the 1839 Treaty of London. This country's invasion started the Western Front of World War I.

ANSWER: Belgium [or the Kingdom of Belgium; or Konigreich Belgien; or Koninkrijk Belgie; or Royaume de Belgique]

[10] This king of Belgium claimed the Congo Free State as a personal colony. He organized the Force Publique under Leon Roger to collect rubber quotas.

ANSWER: Leopold II [or Leopold-Louis-Philippe-Marie-Victor; or Leopold Lodewijk Filips Maria Victor; prompt on Leopold]

[10] The Belgian Revolution started in 1830 after a performance of this Daniel Auber opera, which was the first "Grand Opera."

ANSWER: *The Mute Girl of Portici* [or *The Dumb Girl of Portici*; or *La muette de Portici*] <JO, European History>

11. This character's father Alfred becomes an instructor at a moral reform society after having tried to earn some money from Henry Higgins' patronage of his daughter. For 10 points each:

[10] Name this Cockney flower-seller whom Higgins teaches to speak like a lady.

ANSWER: Eliza Doolittle [accept either]

[10] Eliza Doolittle and Henry Higgins appear in this George Bernard Shaw play.

ANSWER: Pygmalion

[10] Higgins studies this subject, using it to determine where each character who berates him on the street is from in the play's first act. Give the exact term as described in the play.

ANSWER: phonetics <CH, British Lit>

12. Answer some questions about famous moments in Mahler symphonies, for 10 points each:

[10] Mahler's First Symphony opens with the strings playing ethereal "A"s played pianississimo in 7 different octaves, and its third movement turns this French nursery song into a minor-key dirge.

ANSWER: "Frère Jacques" [or "Brother John"]

[10] Depending on the edition, this Mahler Symphony's last movements contain two or three blows intended to be "short, powerful, but dully-reverberating stroke with a non-metallic character," which his wife Alma said foreshadowed later misfortune in his life.

ANSWER: Symphony No. 6 [accept "Tragic" Symphony]

[10] The penultimate movement of this Mahler symphony begins with a children's chorus imitating bells. Trumpet players like to argue about what modern instrument should be used for its pastoral third movement's post horn part.

ANSWER: Symphony No. 3 [Apparently mail carriers used to play a horn tune announce mail arrival.] <AWD, Music>

13. In March of 2017, Chinese artist Ai Weiwei ["EYE WAY WAY"] installed *Law of the Journey* at the National Gallery in Prague. For 10 points each:

[10] That work, made of rubber, features a 230 foot-long boat featuring 258 figures of these people. Weiwei called treatment of these people "both a tragedy and a crime."

ANSWER: **refugees** [accept answers about **people fleeing** because of a **conflict**, accept specific examples like **Syrian refugees**, prompt on anything like "**migrants**"]

[10] While under state surveillance at his home in Beijing in 2012, Ai said he regretted designing this venue for the 2008 Beijing Olympics, which had an Avian name.

ANSWER: **Bird's Nest** [accept the Beijing **National Stadium**]

[10] Ai installed 100 million sunflower seeds at the Tate Modern's Turbine Hall; although they looked incredibly lifelike, they were actually made from this material.

ANSWER: **porcelain** [prompt on "**ceramics**" or "**pottery**"] <AWD, Other Art>

14. Answer the following about Møller-Plesset perturbation theory, for 10 points each.

[10] Møller-Plesset theory improves upon this doubly-eponymous method from computational chemistry for approximating the wave function of a many-electron system.

ANSWER: **Hartree-Fock** method

[10] The theory is an improvement upon the Hartree-Fock method because it accounts for this phenomenon, which is completely negated in the Hartree-Fock method because the mean field approximation is an inherent assumption.

ANSWER: **electron correlation**

[10] Another quantity implicit to Møller-Plesset theory is the Slater determinant, which describes the wavefunction of systems satisfying both anti-symmetry and this other principle, which states that two or more identical fermions cannot occupy the same quantum state simultaneously.

ANSWER: **Pauli** principle [or **Pauli exclusion** principle] <RH, Chemistry>

15. This empire called itself the Gurkhani, a term for "son-in-law" that referred to its descent from Genghis Khan. For 10 points each:

[10] Name this empire founded by Babur which ruled most of the Indian subcontinent from the sixteenth to the nineteenth centuries.

ANSWER: **Mughal** Empire [or **Mogul** Empire]

[10] Babur established the Mughal Empire after defeating this leader of the Delhi Sultanate at the First Battle of Panipat.

ANSWER: **Ibrahim Lodi** [prompt on partial answer]

[10] Babur was inspired to conquer India after losing this city for the third time. This city was ruled by Muhammad Shaybani Khan, the Uzbek founder of the Sultanate of Bukhara.

ANSWER: **Samarkand** <CH, Misc/Other History>

16. This practice may have started from Bethel Bible School in 1900, after students determined it was the only "indisputable proof" of the Holy Spirit. For 10 points each:

[10] Name this Charismatic or Pentecostal practice in which people spontaneously speak syllables that doesn't correspond to any known language.

ANSWER: **speaking in tongues** [or **glossolalia**]

[10] Mark 16 says that believers "will speak in new tongues" and pick up these live animals without being harmed. A few Appalachian churches still use these animals; those who are bitten usually refuse medical treatment.

ANSWER: **snakes** [accept **serpents**]

[10] This two-word term is sometimes pejoratively used to describe Pentecostals. The term refers to an activity sometimes seen on the floor of a church during moments of intense excitement in a service.

ANSWER: **Holy Rollers** <AWD, Religion>

17. Bernard Kouchner's involvement in this war inspired the founding of Doctors without Borders. For 10 points each:

[10] Name this bloody war in the late 1960s, which started after the oil-rich Igbo attempted to secede. This conflict's namesake breakaway state was led by Odumegwu Ojukwu.

ANSWER: **Biafran** War [accept, but do NOT reveal, **Nigerian Civil** War]

[10] The Republic of Biafra attempted to breakaway from this most populous African country. It moved its capital from Lagos to Abua.

ANSWER: **Nigeria** [or the Federal Republic of **Nigeria**]

[10] This president of the Movement for the Survival of the Ogoni People campaigned against Royal Dutch Shell's destruction of Ogoni lands. He was hanged on the orders of Sani Abacha's government.

ANSWER: Ken **Saro-Wiwa** [or Kenule Beeson **Saro-Wiwa**] <JO, World History>

18. You could construct one of these things by taking a strip of paper, twisting it half-way, and taping the ends together. For 10 points each:

[10] Name this famous surface in topology that seemingly only has one side.

ANSWER: **Möbius** strip

[10] Two mathematicians name this topological theorem about metric spaces, which says that a subspace is compact if and only if it is closed and bounded.

ANSWER: **Heine-Borel** theorem

[10] In knot theory, this term is defined as the number of double points in a knot, where the knot passes over itself. A trefoil is the only knot that has a value of 3 for this number.

ANSWER: **crossing** number <AWD, Other Science>

19. A man claims that the white spots he sees in this woman's throat recall the diphtheria contracted by her friend, the grave illness of his eldest daughter, and using cocaine to treat his swelling nose. For 10 points each:

[10] Name this woman who is administered trimethylamine by Otto, which reminds a man of a conversation with a friend who thought he found trimethylamine in one of the products of sexual metabolism

ANSWER: **Irma**

[10] "Irma's Injection" was described by this psychologist who wrote *The Interpretation of Dreams* and posited the existence of the Oedipus complex.

ANSWER: Sigmund **Freud**

[10] This two-word term, analyzed in the opening of *Civilization and its Discontents*, was suggested by Romain Rolland in a letter to Freud and describes a "sensation of eternity" that is the source of religious sentiments.

ANSWER: **oceanic feeling** <GG, Social Science>

20. This novel's protagonists wonder whether giving their female dog a male name will turn her into a lesbian. For 10 points each:

[10] Name this novel about the owners of the dog Karenin, Tomas and Tereza, who live through the Prague Spring.

ANSWER: *The **Unbearable Lightness of Being***

[10] *The Unbearable Lightness of Being* is a novel by this Czech author of *The Book of Laughter and Forgetting*.

ANSWER: Milan **Kundera**

[10] A repeated theme in *The Unbearable Lightness of Being* is this three-word phrase from Beethoven's last string quartet which represents the inevitability of fate.

ANSWER: **es muss sein** [or **it must be**] <CH, Euro Lit>