Spring Undergraduate Novice 2020

“Neo-Tournament Arrives from the Future”

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Packet 10

Tossups:

1. **The Paris Basis forms the guiding principles of this organization, which adopted "Challenge 21" to better address global issues. Mintonette was created by William G. Morgan at this organization for some of its older members. George Williams founded this organization in 1844 to promote a “Muscular” philosophy. While with this organization, James** **(\*)** Naismith was tasked with creating a "distraction" for rowdy youths during the winter months.Racquetball, volleyball, and basketball were all invented at this organization. A 1978 song addressed to a "young man" claims this organization allows you to "hang out with all the boys". For 10 points, a Village People song says that "it's fun to stay at" what community organization?
ANSWER: **YMCA** [accept **Young Men's Christian Association**; prompt on the Y] <Maharjan, Other Academic>

2. **One notion introduced in this work is criticized as a "metaphysical article of faith" by a philosopher who attacked Ayer's conventionalist theory of analytic truth. That delineation is made in this work between two classes of prepositions using the example of "all bodies are heavy" where the predicate concept is not contained in the subject. This work, which was summarized in its author's (\*)** *Prolegomena to Any Future Metaphysics,* aimed to save metaphysical objects such as God and causality from the skepticism of David Hume. For 10 points, identify this metaphysical and epistemological work which argues that synthetic a priori truths are possible: the magnum opus of Immanuel Kant.
ANSWER: ***Critique of Pure Reason***[accept **Kant's First Critique** or ***Kritik der reinen Vernunft***]
(lead-in refers to Quine's criticism of the analytic-synthetic divide) <Bunker, Philosophy>

3. **This man's father killed Heathloaf, a member of the Wulfing tribe, causing him to pledge loyalty to another man. A bard likens this man to Sigemund and contrasts him with the king Heremod. This man claims he killed nine sea monsters during a swimming contest with his friend Breca. The only one to help this man slay a (\*)** dragon angered by the stealing of his golden cup is Wiglaf. This man defeats a monster by ripping off its arm after fighting it with no weapons. This man, along with Hrothgar and others from Hall Heorot, ventures into the lair of that monster's mother to kill her too. Grendel is defeated by, for 10 points, what Geatish hero, the subject of an old English poem?
ANSWER: **Beowulf** <Maharjan, British Literature>

4. **For an ideal gas, this quantity is proportional to temperature raised to the three halves power divided by a constant plus temperature according to the Sutherland equation. By measuring the efflux time, cups named for Ford and Zahn can help calculate this quantity in certain coating applications. The Navier-Stokes equations expand on the Euler equations by accounting for thermal conductivity and this quantity. The (\*)** Reynolds number is the ratio of inertial forces to the forces from this quantity. Fluids at the lambda point have a value near zero for this quantity which allows them to creep up the sides of their container. Superfluids have a value of zero for, for 10 points, what quantity that represents a fluid's resistance to flow?
ANSWER: **viscosity** <Maharjan, Physics>

5. **Kerry Bentivolio, a former reindeer rancher, was elected to the House of Representatives for a district in this state after Thaddeus McCotter lied about how many signatures he got. Another politician from this state achieved notoriety for saying “fix the damn roads” during a recent election. Dr. Mona Hanna-Attisha wrote the book *What the Eyes Don't See* about her study on an event's effects on children in this state, where Marc Edwards and his team from Virginia Tech conducted a study that prompted Karen (\*)** Weaver to declare a state of emergency. In this state’s most recent gubernatorial election, former state attorney general Bill Shutte (“**shoot-ee**”) was defeated by Democrat Gretchen Whitmer. For 10 points, name this US state where the Flint Water Crisis occurred.
ANSWER: **Michigan** <Zhou/Bunker, Current Events>

6. **Chorismate undergoes a Claisen rearrangement to form prephenic acid in a pathway that synthesizes the aromatic class of these compounds. Trifluoroacetic acid removes the protecting group BOC from these molecules. Cyanide nucleophilically attacks an iminium ion in a step of the Strecker synthesis of these compounds. Dihedral angles between these(\*)** zwitterions can be visualized on a Ramachandran plot. Histidine and leucine are examples of the essential type of these molecules that aren't naturally synthesized by human metabolism. The general structure of these monomers includes a carbon atom bonded to a variable -R substituent, a Hydrogen atom, and C and N termini. For 10 points each, name these constituent monomers of proteins.
ANSWER: **amino acids** [accept **peptides** , poly**peptides**, di**peptides**; accept mono**peptides** before "histidine" is mentioned] <Puppala, Biology>

7. **One character in this novel says “I've often thought that had I been compelled to live in the trunk of a dead tree.” That character in this novel trades a cigarette for a cup of coffee with a man who is "interesting and makes sense" before falling asleep. At the end of this novel, the narrator expresses how he dislikes the (\*)** guillotine since it makes the convicted hope they are killed quickly. That narrator of this novel hopes to escape the "machinery of justice" after a trial in which he was questioned by a prosecutor about his extreme indifference towards other people. The narrator displays no emotion at his mother's funeral at the beginning of, for 10 points, what Albert Camus novel in which Meursault (**mer-SO**) shoots The Arab on the beach?
ANSWER: *The* ***Stranger***[or***L'Étranger***or *The* ***Outsider***] <Grossman, European Literature>

8. **Manannan Mac Lir gave three of these objects to King Cormac mac Airt, which produced music that put people to sleep when shaken. In a Slavic tale, the firebird steals some of these items from the king, who sends Ivan Tsarevich to retrieve them. In the form of an eagle, Thjazi (“Thee-azi”) carries off some of these items along with their keeper, (\*)** Idunn. Hercules steals some of these items in his 11th labor, which are guarded by a dragon named Ladon. Aphrodite gives three of these objects to Hippomenes to help him win a foot race against Atalanta. For 10 points, name these fruits grown in the garden of the Hesperides, a golden one of which labelled "to the fairest" is thrown by Eris at a wedding.
ANSWER: golden **apples** [prompt on fruits until mentioned] <Thomas, Mythology>

9. **A battle at this location during the second Latin War saw Titus Manilus executed by his own father for disobeying orders and general Publius Decius Mus sacrificing himself in combat. The forces of Gaius Glaber were ambushed by slaves rappelling from vines in this location at the beginning of Spartacus' Revolt. Artifacts excavated from towns next to this feature were confined to a Secret Museum due to their incredibly (\*)** erotic content. An event caused by this feature killed Pliny the Elder, while Pliny the Younger described "a dense black cloud coming up from" this feature, "spreading over the Earth like a flood" in a letter to Tacitus. For 10 points, name this mountain whose 79 AD eruption destroyed the city of Pompeii.
ANSWER: Mount **Vesuvius** [accept Battle of Mount **Vesuvius**] <Maharjan, Other History>

10. **In a model proposed by John J. McCall, this variable can differ between two value functions where the agent can receive a flat payment *c* based on this variable. Along with Edmund Phelps, Milton Friedman explained a version of this variable which occurs when aggregate supply reaches long-run levels. The (\*)** NAIRU is a level of this variable below which inflation is expected to rise. The "dual mandate" of the Federal Reserve is to limit both inflation and this economic variable, which are both included in the classical Phillips Curve. Typical measures of this quantity only consider workers actively participating in the labor force. For 10 points, name this economic variable that describes those unable to find jobs.
ANSWER: **unemployment** [accept **employment** status before "flat payment" is read] <Edmondson, Economics>

11. **Ralph (“rayf”) Vaughan Williams's programmatic symphony of this number quotes the Westminster chimes on the harp. Frédéric Chopin's last chamber work is a G minor piece written for *this many* musicians that inspired a later work for the same ensemble by Sergei Rachmaninoff. The Neapolitan chord is a first-inversion chord built around the flat scale degree of this number. The (\*)** Dorian mode can be obtained by beginning a major scale on this number's scale degree, which is also referred to as the supertonic. In piano technique, the index finger is designated by this number. For 10 points, name this number of semitones in a whole tone and number of performers in a duet.
ANSWER: **two** (the Chopin and Rachmaninoff works clued are their sonatas for cello and piano) <Sims, Music>

12. **In this play, some characters develop a unit of measurement based on how far a flea can jump. The main character of this play refuses to pay a creditor because of the creditor's apparent arrogance and lack of knowledge about the gender of nouns. Earlier in this play, characters encounter the personified Unjust (\*)** Argument and Just Argument whose debate is settled after an audience survey reveals that the buggers were mostly taught by the Unjust Argument. One of the main characters in this play says a Socrates-led school encourages sophistry but tries to enroll his son in it anyway before Xanthias joins Strepsiades in burning it down. The Thinkery appears in, for 10 points, what Aristophanes comedy that parodies the intellectuals of ancient Athens?
ANSWER: *The* ***Clouds*** <Bunker, World/Other Literature>

13. **One monarch of this name concluded the Treaty of Joinville with one of the namesake leaders during the War of the Three Henries. Margaret of Parma was a local governor for a king of this name, who also employed her son, the Duke of Parma, as a general. A French king of this name expelled Jews from his country and eliminated the Knights Templar within the span of two years and was nicknamed "the (\*)** Fair". The second French king of this name was often known by the epithet "Augustus". A Spanish king of this name was a major supporter of the Catholic League and built the palace of El Escorial. The husband of Mary I of England was, for 10 points, a Spanish king of what name who launched the Spanish Armada against England?
ANSWER: **Philip** [accept **Philip** II; **Philip** IV "the Fair", **Felipe**, or **Philippe**] <Sims, European History>

14. **In 2006, a professor of dietary sciences became a sensation after publishing a series of popular reflections on a text from this religious tradition, translated as *[this tradition’s founder] from the Heart***. **The four functional occupations, as seen by this tradition, are farmer, scholar, artisan, and merchant, whose different social responsibilities are described in the *Book of Rites.* Adherents to this religious tradition may (\*)** revere different *shen*, which all emanate from *tian*, or heaven. The five constants of this religion are virtues that help find the middle way. This tradition's text *The Book of Documents* is one of its Five Classics, and emphasizes the importance of filial piety. For 10 points, name this ancient religious tradition from China whose central texts include the *Analects*.
ANSWER: **Confucianism** [accept neo-**Confucian**ism; accept **Ruism**; prompt on Chinese Folk Religion] (the lead in refers to Yu Dan) <Thomas, Religion>

15. **The *n*th power of this nonzero number is equal to the sum of the two immediately preceding powers. The ratio of two consecutive Lucas numbers converges to this specific number. This number is the larger root of the minimal polynomial *x* squared minus *x* minus one. The continued fraction one plus one divided by one plus one divided by one and so on can be used to recursively define this number. For a regular (\*)** pentagon, the ratio of a diagonal to each side is this number. This value corresponds to two side lengths whose ratio is equal to the sum divided by the larger one. For 10 points, name this quantity equal to one plus the square root of five divided by two which is often written as the letter phi.
ANSWER: **golden ratio** [accept **1.618**; accept **one plus the square root of five over 2** before mention; prompt on phi before mention] <Bunker, Mathematics>

16. **After this leader's brother-in-law was upset at this leader's open affair, he died in a helicopter crash that was caused by explosives planted by this leader’s forces. Early in his life, this leader escaped to Syria after participating in an unsuccessful assassination attempt on his country's prime minister. The army of this leader's country invaded its eastern neighbor after a dispute over the Shatt al-Arab waterway in a war in which (\*)** chemical weapons were used against the Kurds. Later, this leader's army invaded Kuwait which prompted a U.S. invasion under George H.W. Bush's administration. For 10 points, name this former Ba’athist dictatorial leader of Iraq.
ANSWER: **Saddam** **Hussein** [accept either] <Bunker, World History>

17. **It's not by Bosch, but a painting titled *The Conjurer* mocks a painter from this country for mimicking poses used by earlier artists. Figures representing Pity and Terror flank a woman based on Melpomene in another painting from this country, which depicts that woman "as the Tragic Muse". A husband catches his wife with her lover, Silvertongue, in a series of lithographs by an artist from this country, (\*)** *Marriage A-la-mode*. That artist also made a series of lithographs that depict the titular libertine going to debtor's prison and Bedlam Asylum. A portrait from this country shows a child holding a feathered hat wearing the titular color, *The Blue Boy*. For 10 points, name this home country of the artist of *A Rake's Progress*, William Hogarth.
ANSWER: **England** [or Great **Britain**; or United Kingdom; or **U.K.**] <Fleisig, Visual Arts>

18. **In one poem, this author wrote "How soon unaccountable I became tired and sick, / Till rising and gliding out I wander'd off by myself." Another poem by this author speaks of "Throwing myself on the sand, confronting the waves" before later describing "Up this seashore in some briers, / Two feather'd guests from Alabama, two together." This poet of "When I (\*)** Heard the Learn'd Astronomer" and "Out of the Cradle Endlessly Rocking" said in another poem wrote "I loaf and invite my soul, / I lean and loaf at my ease observing a spear of summer grass." That poem opens with the line "I celebrate myself, and sing myself." For 10 points, name this American poet who included "Song of Myself" in his collection *Leaves of Grass*.
ANSWER: Walt **Whitman** <Grossman, American Literature>

19. **Electrolysis and chlorination are used in the Wohlwill and Miller processes, respectively, to “part” this element from silver. Relativistic effects explain the appearances of cesium and this element. Particles of this element can be coated in hundreds of molecules during therapeutic drug delivery. This element and platinum can be dissolved in a mixture of** **(\*)** hydrochloric and nitric acid known as aqua regia. This most malleable metal commonly comes in a +3 oxidation state in compounds such as its chloride. The nucleus was discovered in an experiment where alpha particles were fired at a sheet of this metal. For 10 points, name this precious metal with the periodic symbol Au.
ANSWER: **gold** [accept **Au** before mentioned; accept word forms like **gold nanoparticles**] <Maharjan, Chemistry>

20. **In 1881, formerly-enslaved black women in this city organized the successful Washerwomen Strike. Sweet Auburn became this city's Black business district after dozens of African Americans were lynched in a 1906 race riot in this city, where the 1913 murder of Mary Phagan also led to the lynching of the Jewish American Leo Frank. One speech given in this city declares, "we can be as (\*)** separate as the fingers, yet one as the hand," urging its listeners to "cast down your bucket where you are." Spelman and Morehouse are two historically black colleges in this city. Booker T. Washington delivered an 1895 "Compromise" speech in, for 10 points, what Southern capital city burned down by General Sherman to begin his March to the Sea?
ANSWER: **Atlanta**, Georgia <Zhou, American History>

Bonuses:

1. This character attempts to murder the slaveowner Brandywine and is punished by being forced to sleep in a coffin and work in a chain gang. For 10 points each:
[10] Name this former Sweet Home slave who describes his heart as a rusted tobacco tin box and tells Denver's mother that "You your best thing."
ANSWER: **Paul** D
[10] Paul D goes to 124 to reunite with Sethe, who had earlier killed her own daughter to save her from enslavement in this novel that explores the psychological traumas of slavery.
ANSWER: ***Beloved***
[10] *Beloved* is a novel by the American Nobel Laureate who wrote *The Bluest Eye* and *Song of Solomon* before she passed away in August 2019.
ANSWER: Toni **Morrison** [or Chloe Anthony **Wofford** Morrison] <Zhou, American Literature>

2. For 10 points each, answer the following about the history of the Nation of Islam.
[10] This man, who has both an unknown origin and an unknown fate after his disappearance in 1934, was the founder of the Nation of Islam. This man claimed to have been born in Mecca, but a 1960s smear article claimed he was actually of Maori descent.
ANSWER: Wallace **Fard** Muhammad [accept Wallace D. **Fard**]
[10] This most famous member of the Nation of Islam gave the speech "The Ballot or the Bullet." This man later renounced his membership in the Nation of Islam and was assassinated.
ANSWER: Malcolm **X** [accept Malcolm **Little**; or El-Hajj Malik El-**Shabazz**]
[10] Along with several civil rights organizations, the Nation of Islam helped to lead this 1995 protest march in Washington D.C. that coincided with a "Day of Absence" that encouraged Black Americans to stay home from work and school.
ANSWER: **Million Man March** <Knecht, American History>

3. You've been kidnapped by a herd of feral math majors who will only let you go if you give them the Fourier transform of cosine. For 10 points each:
[10] By computing a Fourier transform, you transform the function from the time domain to this domain.
ANSWER: **frequency**
[10] To make the computation easier, you use a generalized form of Euler's identity to rewrite the cosine function. According to the identity, "e-to-the-i-pi" equals this value, which is also what the cosine of pi equals.
ANSWER: **negative one** [do not accept or prompt on just "one"]
[10] After computing the Fourier transform of cosine, you find that it consists of two of this function that is zero everywhere except for an infinite spike at one point.
ANSWER: Dirac-**delta** [do NOT accept other named delta functions such as the "Kronecker delta"] <Maharjan, Mathematics>

4. Recently, the Booker prize for fiction has been awarded to numerous authors who reside outside of the United Kingdom. Answer some questions about some of those authors, for 10 points each.
[10] This American author won the the award for the satire *Sellout* about a character named Me who tries to reintroduce slavery and keeps a slave who sells marijuana and watermelon.
ANSWER: Paul **Beatty**
[10] Richard Flanagan won the Booker for his novel *Narrow Road to the Deep North*, which shares its name with a haibun by this Japanese author of a notable "Jumping Frog" haiku.
ANSWER: Matsuo **Basho**
[10] George Saunders won the award for a novel titled *[this president] In the Bardo*, which takes place after the death of his son Willy. This president was memorialized in Whtiman's "O Captain! My Captain!"
ANSWER: Abraham **Lincoln** <Bunker, World/Other Literature>

5. Art historian Richard Leppard describes this painting as a moment that is "special by not being special." For 10 points each:
[10] Name this painting that depicts a mother holding a little girl who is dipping her feet in water.
ANSWER: *The* ***Child's Bath***
[10] This artist of the *Child's Bath and Little Girl in a Blue Armchair* was the only American to exhibit with the Impressionists in Paris.
ANSWER: Mary **Cassatt**
[10] The girl in *Little Girl in a Blue Armchair* is the daughter of this artist. This French artist is best-known for his many paintings of ballerinas.
ANSWER: Edgar **Degas** <Oung, Visual Arts>

6. The ABC model uses three overlapping sets of homeotic genes to explain the development of these things. For 10 points each:
[10] Name these defining reproductive structures of angiosperms that are often brightly colored to attract pollinators and feature sepals, stamen, pistils, and petals.
ANSWER: **flowers**
[10] The ABC model was developed after extensive studies of homeotic gene expression in this organism—the first plant to be fully sequenced. This species can be genetically transformed if dipped into an *Agrobacterium* broth.
ANSWER: ***Arabidopsis*** *thaliana*
[10] Homeotic genes are analogous to these animal genes--mutations of which can cause organs to develop in wrong locations in *Drosophila*. These genes express transcription factors containing a DNA-binding homeobox and are regulated by gap genes.
ANSWER: **Hox** Genes <Puppala, Biology>

7. The archipelago named for this man contains an uninhabited island named for telephone inventor Alexander Graham Bell. For 10 points each:
[10] Name this European monarch who names a Russian archipelago in the Barents Sea east of Svalbard and north of Noya Zembyla.
ANSWER: **Franz Joseph** I of Austria [accept **Franz Josef** Land; accept **Francis Joseph**]
[10] Franz Joseph also names a small town and glacier on this island located south of the Cook Straight. Its largest city is Christchurch.
ANSWER: **South** Island [or **Te Waipounamu**]
[10] A tiny island at the mouth of the Buna River in this Balkan country is also named for Franz Joseph. This country, whose capital is Tirana, was once led by King Zog.
ANSWER: Republic of **Albania** <Harvey, Geography>

8. This figure asks the title character if he thinks this figure is "not tormented with ten thousand hells / In being deprived of everlasting bliss?" For 10 points each:
[10] Name this demon who becomes the servant of a man who sells his soul to Lucifer for 24 years of pleasure on Earth.
ANSWER: **Mephistopheles**
[10] Mephistopheles and Lucifer appear in *Doctor Faustus*, which was written by this English playwright.
ANSWER: Christopher **Marlowe** [accept Kit **Marlowe**]
[10] When Faustus began to feel uneasy about the deal he made with Mephistopheles, Lucifer appears and summons a parade of these concepts to entertain Faustus, remarking to him that "in hell there is all manner of delight."
ANSWER: the Seven Deadly **Sins** <Lewis, British Literature>

9. Gordon Jacob compiled several of this composer's works, like the "Earl of Oxford March" and "The Bells" into a suite for wind ensemble. For 10 points each,
[10] Name this composer of *My Ladye Nevells Booke* who depicted a battle in a namesake suite.
ANSWER: William **Byrd**
[10] Byrd founded the English school of these types of secular compositions. These compositions often incorporate word-painting and are usually contrasted with religious motets.
ANSWER: **madrigals**
[10] Byrd also composed many works like the *Fitzwilliam Book* for the virginal, a harpsichord-like instrument named after this monarch of England. This queen granted Byrd and Tallis a 21-year monopoly on printing music.
ANSWER: **Elizabeth I** [prompt on Elizabeth or the Virgin Queen] <James, Music>

10. One immediate consequence of this law is that, for a constant temperature, the saturated vapour pressure of a solution is going to be lower than that of the pure solvent. For 10 points each:
[10] Name this thermodynamic law that states that, in an ideal mixture, the partial pressure of each component is equal to the mole fraction times the vapor pressure.
ANSWER: **Raoult's** law
[10] This other gas law, which states that the product of pressure and volume of a gas is constant, more commonly says that pressure is proportional to the inverse of volume.
ANSWER: **Boyle–Mariotte** law [or just **Boyle's** law or **Mariotte's** law]
[10] This thermodynamic equation relates the derivative of pressure with respect to temperature to specific entropy and specific volume. It is used to draw phase transitions on phase diagrams.
ANSWER: **Clausius–Clapeyron** equation [or **Clausius–Clapeyron** relation] <Madoerin, Chemistry>

11. This event described in Robert Conquest's *Harvest of Sorrow* featured grain quotas and other land redistribution and the Kharkiv Oblast was most affected by it. For 10 points each:
[10] Name this food shortage in the Soviet Union recognized as genocide by 16 countries.
ANSWER: **Holodomor** [or the **Ukrainian famine of 1932–33**]
[10] This leader of the Soviet Union approved the Holodomor. His first five-year plan instituted collective farming through the kolkhoz system.
ANSWER: Joseph **Stalin**
[10] During the Holodomor, this class of land-owning peasants had their property seized and many were murdered or deported to gulags. This class of people made up the largest percentage of victims of the Great Purge.
ANSWER: **kulaks** [or **kurkuli**] <James, European History>

12. The founder of this theory, Herbert Blumer, said that "Most human and humanizing activity that people engage in is talking to each other." For 10 points each:
[10] Name this sociological theory that posits that people form beliefs based on their individual environment and engagement with other people. Supported by George Herbert Mead, this theory emphasizes qualitative research like participant observation.
ANSWER: **symbolic interactionism**
[10] The theory of symbolic interactionism can be used to explain an individual's place in society based on these concepts which vary depending on the social situation. Examples of these concepts include parent, teacher, or artist.
ANSWER: **role**
[10] A very important role concerns this concept that might influence familial or cultural attitudes. The social construction of this concept was developed by Judith Butler in her book on this concept's *Trouble*.
ANSWER: **gender** [accept ***Gender*** *Trouble*; do NOT accept or prompt on "sex"] <Bunker, Other Social Science>

13. This character taunts a former alcoholic into drinking again, steals his manuscript, burns it, and goads him into killing himself. For 10 points each:
[10] Name this character who grabs a gun from a table before being blackmailed by Judge Brack, implying that she was going to kill herself, regardless of Brack.
ANSWER: **Hedda** **Gabler** [accept either underlined portion; accept **Helga** Tessman, prompt on Tessman]
[10] Hedda Gabler was created by this playwright who also penned *The Master Builder* and *A Doll's House*.
ANSWER: Henrik **Ibsen**
[10] Hedda considered herself poor for her lack of influence, and this character rich for her influence on Eilert Lovborg, who she helped write his book. Hedda threatens to burn off this woman's hair.
ANSWER: **Thea** **Elvsted** [accept either underlined portion] <Kirksey, European Literature>

14. Conservative and more egalitarian Leveler members of this force discussed points of a new constitution in the Putney Debates. For 10 points each:
[10] Name this professional military force that fought for what they called the "Good Old Cause." It was led by George Monck and Thomas Fairfax.
ANSWER: **New Model Army**
[10] This cavalry commander of the New Model Army led a brutal invasion of Ireland. He was named "Lord Protector" after dissolving the Rump Parliament.
ANSWER: Oliver **Cromwell**
[10] This parliament was formed after the dismissal of the Rump Parliament. It was named for a leather seller with the first name Praise-God.
ANSWER: **Barebone**'s Parliament [or **Little** Parliament; accept the **Nominated Assembly or the Parliament of Saints**]
<Harvey, Other History>

15. With regards to this practice and drinking alcohol, a passage from the Qur'an notes "in them both lies grave sin, though some benefit, to mankind. But their sin is more grave than their benefit." For 10 points each:
[10] Name this practice referred to as *maisir* in Sharia law. In the Qur'an, it is always mentioned alongside wine as a vice.
ANSWER: **gambling** [accept equivalents like **games** of **chance**]
[10] Gambling is condemned in this sura named for an animal, the longest in the Qur'an. This is the second sura, following The Opening.
ANSWER: Al-**Baqarah** [accept The **Cow** or The **Heifer**]
[10] The Cow sura also features a prescription for fasting during this ninth month of the Islamic calendar. Fasting and refraining from sex during this period is the fourth pillar of Islam.
ANSWER: **Ramaḍān** [accept **Ramazan**, **Ramzan**, **Ramadhan**, or **Ramathan**] <Harvey, Religion>

16. For 10 points each, answer the following about memorable walk-off home runs in the World Series.
[10] Joe Carter hit a walk off home run against the Philadelphia Phillies in Game 6 of the 1993 World Series which gave this team its second consecutive championship. This team currently plays its home games at the Rogers Centre in Canada.
ANSWER: **Toronto** **Blue Jays** [accept either underlined portion]
[10] The St. Louis Cardinals forced a Game 7 of the 2011 World Series after this then-Cardinals third baseman won Game 6 with an 11th inning walk-off home run. He would go on to be named World Series MVP.
ANSWER: David Richard **Freese**
[10] In 1975, Carlton Fisk "waved" his walk-off home run into fair territory, forcing a Game 7 in the World Series against this team. His Red Sox lost the series to this team, who won a second consecutive title in 1976 behind such players as Johnny Bench and Pete Rose.
ANSWER: **Cincinnati** **Reds** [accept either underlined portion] <Grossman, Trash>

17. One model that is part of this class of methods sets the initial velocity equal to the E field cross the B field and models the slow reconnection of substances studied by these methods. For 10 points each:
[10] Identify this set of computational physics methods pioneered by Hannes Alfven which studies substances such as electrolytes and liquid metals.
ANSWER: **magnetohydrodynamics** [accept **MHD**] (unnamed equation was from the Sweet-Parker model)
[10] These other substances studied in MHD have their gaseous ionization state modeled by the Saha equation. This fourth state of matter also comprises a large portion of stars.
ANSWER: **plasma**
[10] In plasmas, a length named after this scientist is defined as the distance in which mobile charge carriers can screen out electric fields. An equation named after this man and Hückel allows one to obtain activity coefficients for ionic solutes.
ANSWER: Peter **Debye** [accept **Debye-Hückel** equation or **Debye** length] <Bunker, Physics>

18. One film by this director depicts the interactions between pool hustlers played by Tom Cruise and Paul Newman. For 10 points each:
[10] Name this director of *The Color of Money* who also created the biographical film based on the early life of the Dalai Lama*, Kundun*.
ANSWER: Martin **Scorsese**
[10] This film by Scorsese describes Frank Sheeran's interactions with the Philadelphia mob and the Teamsters. This 2019 movie was based on Charles Brandt's book *I Heard You Paint Houses*.
ANSWER: *The* ***Irishman***
[10] This actor's first collaboration with Scorsese was in *The Irishman* where he plays a character who refuses to drink and hates when people are late. This actor's other film credits include *Serpico* and *Carlito's Way*.
ANSWER: Al **Pacino** <James, Other Visual>

19. Apocraphilly, the author of a text about this empire was hired at the rate of one gold coin per couplet produced. For 10 points:
[10] Name this empire whose history was celebrated and highly mythologized in the *Shahnameh*, or *Book of Kings*, which was written by Ferdowsi.
ANSWER: **Persia**n Empire [accept more specific answers such as Acmaneid **Perisa**s Empire; Parthian **Perisia**n Empire; accept **Ghaznavid**s]
[10] The second book of the *Shahnameh* focuses on heros like this man from Sistan. This hero goes on seven labors after unknowingly killing his son Sohrab in single combat.
ANSWER: **Rostam** of Sistan
[10] The last labor of Rostam involved killing a demon named for this color. Priests of the Eygpitan goddess Isis wore linens of this color, which was also used to wrap mummies.
ANSWER: **white** [accept the **White** Demon or Div-e **Sepid**] <Harvey, Mythology>

20. Following the end of this colony's personal rule in 1908, the Union Minière was granted exclusive copper mining rights in its Katanga region. For 10 points each:
[10] Name this African colony, where rubber harvesters with mutilation by *Force Publique*. The travesties of a personal rule of this colony by a European monarch were documented in the Roger Casement.
ANSWER: **Congo** Free State [accept but DO NOT otherwise reveal Belgian **Congo**]
[10] This European nation ruled the Congo colony following the end of its personal rule by their monarch, King Leopold II.
ANSWER: **Belgium** [accept **Belgian** Congo]
[10] This first post-independence ruler of the Democratic Republic of Congo took over following Belgian withdrawal, though his leftist polices led to killing in a CIA-orchestrated assassination six months into his presidency.
ANSWER: Patrice **Lumumba** <Harvey, World History>