

Harvard Fall Tournament XII

Edited by Raynor Kuang

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Round 3

Tossups

1. **The proportionality constant in a generalization of this statement is equal to the product of electron density, charge squared, and mean free time divided by mass, and that generalization happens in the Drude model. One form of this statement sets the current density equal to the product of conductivity and the electric field, and it can be used to derive a description of Joule heating where the (*) power dissipated is proportional to the current squared. A term in this law is replaced with impedance in AC circuits, and materials following this law exhibit a linear I-V curve. For 10 points, name this law that states that voltage is equal to current times resistance.**

ANSWER: Ohm's law <Xiong>

2. **In one myth system, a deity of this domain was married to the summer maid Hine-raumati, and in another system, a god of this domain was the son of Viracocha and father of Manco Capac. Tane-rore and Inti were gods of this entity, and Maui angrily caught a god of this entity using ropes. A goddess of this entity exiled her brother (*) Tsukuyomi, and was the ancestor from whom the emperors of Japan claimed descent. Amaterasu was a goddess of this entity, and the Egyptian god of this entity used a barge to travel across the sky daily. For 10 points, name this entity associated with gods like the Roman Helios and the Egyptian Ra.**

ANSWER: the sun (accept Sol or solar deities or other word forms) <Cohen>

3. **In one play by this writer, the Marshal's decision to kill Dr. Galen leads the entirety of Europe into being subsumed by a form of leprosy. This author of *The White Disease* wrote a novel in which a sea captain's discovery of some beings exploited for pearl farming near the island of Sumatra leads to the title (*) *War with the Newts*. This author wrote a play in which Helena learns Sulla is not human and a revolt by the title beings brings an end to humanity, and that play coined a common term for a humanlike machine. For 10 points, name this Czech author who wrote the play *R.U.R.*, or *Rossum's Universal Robots*.**

ANSWER: Karel Čapek <Cohen>

4. **Early observations of this phenomenon were caused by the flavonoid matlaline, and Edman degradation generates molecules exhibiting it. Concentrations of conjugated cyclic compounds like anthracene can be measured using this phenomenon. The intensity of this phenomenon can be decreased through quenching, and it is the basis of a (*) namesake compact lamp. This phenomenon's short lifetime distinguishes it from phosphorescence, though it also involves the absorption of photons. For 10 points, name this type of luminescence in which a molecule absorbs light and quickly re-emits it at a lower wavelength.**

ANSWER: fluorescence (accept word forms) <Pendyala>

5. After complaining about a man who “preach nothin’ but golden candlesticks,” a character in this play struggles to remember the Ten Commandments. A girl in this play pretends to be frightened by a yellow bird while in court, and Mary Warren gifts a (*) poppet to Elizabeth later found to have a needle in it. Giles Corey dies in this play crying for “more weight!” as he is crushed with rocks. Abigail Williams instigates the main events of this play after accusing the slave Tituba of helping her and others to cavort with the Devil. For 10 points, name this Arthur Miller play in which John Proctor fights against the Salem Witch Hunt.

ANSWER: *The Crucible* <Horton>

6. On one morning of this holiday, worshippers traditionally walk around the perimeter of the place of worship while reciting seven *hoshanot* [“HO-shah-NOTE”]. The Great Supplication takes places on the seventh day of this eight day festival. The *etrog* fruit and the (*) *lulav* [“LOO-lav”] frond, which is made of the Four Species, are among the items traditionally waved during this harvest festival, and it commemorates the Israelites’ forty-year wandering and living in temporary structures in the desert. For 10 points, name this Jewish holiday in which many daily functions are performed in specially constructed, three-walled huts.

ANSWER: Sukkot (or Sukkos; or I guess reluctantly some English translation, like Feast of Tabernacles, Feast of Booths, or Feast of the Ingathering) <Cohen>

7. Ambroise Vollard commissioned this artist to illustrate the Old Testament, and he painted a “white collar” on his wife Bella Rosenfeld, whom he met in his hometown of Vitebsk. This artist showed the Eiffel Tower in the background of a self-portrait depicting him with (*) “Seven Fingers,” and a synagogue burns in the background of his *White Crucifixion*. Imagery like a milkmaid, a man holding a scythe, and an upside down woman appear in this artist’s most famous painting, in which a horse looks into the face of a green-skinned man holding the Tree of Life. For 10 points, name this Russian-French artist who painted *I and the Village*.

ANSWER: Marc Chagall <Kuang>

8. This man escaped conviction after being put under house arrest for participating in the Eggnog Riot at West Point, and he once threw money from his pockets to pacify women who were rioting for bread. Judah P. Benjamin served multiple roles in this man’s cabinet, which also included Stephen Mallory as (*) Secretary of Navy. His government purchased ships such as the *Alabama* from Great Britain, and he allegedly fled Richmond in women’s clothing, after having years earlier ordered P. G. T. Beauregard to open fire on Fort Sumter. For 10 points, name this first and only president of the Confederacy.

ANSWER: Jefferson Davis <Suh>

9. Delaney Park Strip used to serve as this city’s airfield before it was replaced by Merrill Field. The Tony Knowles Coastal Trail can be found in this city, whose skyline is dominated by buildings named after Robert B. Atwood and Conoco-Phillips. This city’s boundaries encompass Fire Island, Elmendorf Air Force Base and much of (*) Chugach State Park. The Knik Arm and Turnagain Arm partially surround this city, whose suburbs include Wasilla. Parts of this city’s Northern Lights Boulevard runs north of Far North Bicentennial Park. Located on the end of the Cook Inlet, for 10 points, name this most populous city of Alaska.

ANSWER: Municipality of Anchorage <Park>

10. This man played one of the title roles in *The Ballad of Jack and Rose*, which was directed by his wife Rebecca Miller. He collaborated with Irish director Jim Sheridan in the films *In the Name of the Father* and *The Boxer*. This man played a role in which he could only move the title *My Left Foot*, and in one of his films with (*) Paul Thomas Anderson, this man viciously beats a man with a bowling pin after saying, “I drink your milkshake!” This man won Oscars for *There Will Be Blood* and a role as a president trying to ratify the 13th Amendment. For 10 points, name this notoriously stringent method actor who played the title role in *Lincoln*.

ANSWER: Daniel Day-Lewis <Kuang>

11. **Brian Kalt has argued this process is impossible in parts of Yellowstone due to his reading of the Vicinage Clause. “Witherspooning” is a method of creating a certain type of “qualification” during this process. Considering race during this process was deemed unconstitutional by *Batson v. Kentucky*, and (*) peremptory challenges happen during it. Participants in this process are subject to questioning in a practice called *voir dire* [“vwah dier”], and the Sixth Amendment guarantees this process’s result will be composed of one’s peers. For 10 points, give the term for this act of picking a group of people who determine the outcome of a legal trial.**
ANSWER: **jury selection** (accept any answer about **choosing** people to serve on a **jury**; prompt on **prosecution** or pre-trial procedures) <Chu>

12. **The photographer Dickey Chapelle was herself photographed in this country by Henri Huet as she received her last rites before dying. Sal Veder’s photo *Burst of Joy* shows Lorrie Stirm running to hug her father after he returned from this country. Eddie Adams captured the moment of a (*) gunpoint execution in this country, which was also the location of a grim photo showing a girl running naked down the road in terror after her village was napalmed. For 10 points, name this country where the Buddhist monk Thich Quang Duc’s self-immolation was photographed in the streets of Saigon.**
ANSWER: Socialist Republic of **Vietnam** (or Cộng hòa Xã hội chủ nghĩa **Việt Nam**; accept **South Vietnam**; accept the Republic of **Vietnam**; grudgingly accept **North Vietnam** or the Democratic Republic of **Vietnam** since Stirm was held prisoner there, although all the other photos were taken in South Vietnam; prompt on **Nam**) <Chu>

13. **Description acceptable. “Uncle Bill” Wilson and Henry “Birdie” Bowers died during one of these events. A journal covering one of these events notes, “The worst has happened,” and that Lawrence Oates said, “I am just going outside and may be some time.” The *Quest* and *Discovery* were notable vehicles in these actions, and the death of (*) Ernest Shackleton after previously using the *Endurance* marks the end of the “Heroic Age” of them. Shortly after discovering a Norwegian flag, Robert F. Scott perished during one of these actions, and Roald Amundsen led one of them. For 10 points, describe these attempts to reach the southernmost place on the Earth.**
ANSWER: **expeditions** to **Antarctica** (accept **South Pole** in place of “Antarctica”; accept any answer that generally conveys an attempt to go very, very south) <Kuang>

14. **One work for piano from this country contains four books and opens with an Evocation, and another contains a Conversation at the Window. A composer from this country wrote a ballet with a movement beginning with a low E-F trill in the strings that fluctuates as dancers circle a (*) campfire. Liszt incorporated the La Folia theme in his rhapsody depicting this country, and it was the home of the composer of *Love, the Magician*. Rimsky-Korsakov included an *Alborado* and *Fandango* in his Capriccio titled for this country. For 10 points, name this home of Manuel de Falla, a country portrayed by Emmanuel Chabrier’s *España*.**
ANSWER: **Spain** (accept **España** until mentioned) <Yue>

15. **A story about a character with this profession notes the importance of the phrase, “Everyone believed that the chess players had met accidentally.” Hermann Sörgel possesses the memory of a man with this profession, and one of these people attempts to identically emulate the work of a Spanish forebear. This is the profession of Adolfo Bioy Casares and (*) Pierre Menard. It’s not a spy or anything government-related, but in one story, Doctor Tsun is the descendant of Ts’ui Pen, a man who engaged in this profession by creating the title labyrinth of the “garden of forking paths.” For 10 points, give this profession of Jorge Luis Borges and Shakespeare.**
ANSWER: **author** (accept equivalents such as **writer**, and specific types of authors such as **novelist** or **playwright**) <Yue>

16. Early in this man's reign, John de la Pole revolted, trying to pass off Lambert Simnel as the Earl of Warwick. This man's son Arthur, Prince of Wales died of sweating sickness after earlier being married to Catherine of Aragon, who then married this man's (*) other son. After arriving from France in Pembrokeshire, this man came to power after winning the Battle of Bosworth Field against the hunchbacked Richard III to end the Wars of the Roses. For 10 points, name this man who founded the Tudor dynasty and was *succeeded* by a man of the same name who notably had six wives.

ANSWER: Henry VII (prompt on just Henry) <Kuang>

17. Some forms of this condition are treated with etanercept, a biologic containing soluble TNF receptor 2. Bouchard's nodes and Heberden's nodes are found in patients with one form of this condition, and ankylosing spondylitis is one form of this condition that primarily affects the spine. This condition is associated with inflammation of the (*) synovium and loss of articular cartilage. Uric acid crystallization causes one form of this condition known as gout, and this condition's rheumatoid type is an autoimmune disease. For 10 points, name this group of conditions characterized by joint pain and stiffness.

ANSWER: arthritis (accept specific types like gout) <Park>

18. In certain languages, this symbol can be used to spread an array into a function's parameters and is called the splat operator. A version of this symbol named for Kleene ["KLAY-nee"] can be used in regular expressions to denote one or more of the preceding expression, and pointer variables in C can be (*) dereferenced with this symbol. This symbol frequently serves as a wildcard symbol, and in many languages, a forward slash followed by this symbol indicates a block comment. On QWERTY-keyboards, this symbol comes above the eight. For 10 points, name this symbol that typically also represents multiplication.

ANSWER: asterisk (or star; Editor's note: accept _ if someone can somehow...verbally express that) <Horton>

19. A poem in this book describes "micturations" and rending "thee in the gobberwarts," and it opens with the protagonist attempting to prevent his house from being destroyed. Digressions in this book describe a character who becomes obsessed with finding lost ballpoint pens and one who thinks (*) "Oh no, not again." President Zaphod travels with Ford Prefect and this book's protagonist to "Magrathea" using the Improbability Drive, and the title entity of this book urges Arthur Dent "Don't Panic." For 10 points, name this work of comic science-fiction by Douglas Adams suggesting the "answer to life, the universe, and everything" is the number 42.

ANSWER: The Hitchhiker's Guide to the Galaxy <Horton>

20. During this period, one thinker first posited a "dual power" held between an illegitimate government and the people. Anna Anderson falsely claimed to be one person imprisoned during and executed after this war, and one leader was smuggled to the site of this conflict by train from Switzerland and explained his (*) April Theses upon his arrival. This war had "February" and "October" phases, the latter of which toppled a Provisional Government led by Alexander Kerensky. Nicholas II abdicated as a result of this conflict. For 10 points, give this general term referring to the conflict that led to the end of tsarist rule in Moscow.

ANSWER: Russian Revolution of 1917 (accept February Revolution until mention; accept October Revolution until mention; do not accept or prompt on "Russian Civil War" or "Russian Revolution of 1905") <Chu>

21. A sound in this story is described as that which "arises from the bottom of the soul when overcharged with awe," and at this story's end, one character yells, "Villains! Dissemble no more!" This story's narrator practices inching quietly closer and closer to his (*) victim over a week, whom he had begun to hate due to an "eye of a vulture" that's pale blue. The narrator of this story murders an old man, only to confess to the police as the title object drives him insane. For 10 points, name this story by Edgar Allen Poe in which the narrator hears the title organ beating under the floorboards.

ANSWER: "The Tell-Tale Heart" <Kuang>

Bonuses

1. The Zimmerman-Traxler model attempts to explain the stereochemical outcome of this reaction. For 10 points each:

[10] Name this addition reaction between two carbonyl compounds that produces a beta-hydroxy aldehyde or beta-hydroxy ketone. A similarly named “condensation” results when this reaction is followed by dehydration.

ANSWER: **aldol** reaction

[10] Aldol reactions described by this adjective are incredibly useful for synthesizing cyclic compounds. In general, this adjective describes things that happen on the same molecule.

ANSWER: **intramolecular** (do not accept or prompt on “intermolecular”)

[10] The aldol reaction goes through an enolate intermediate when these compounds are used as catalysts. Arrhenius defined these compounds as ones that produce hydroxide ions in aqueous solutions.

ANSWER: **bases** <Park>

2. You’ve been hired to produce the History Channel’s latest hit show on ancient astronauts. For 10 points each:

[10] You research the book *Chariots of the Gods?*, which interprets sarcophagus carvings from this culture as rockets. The Hero Twins and the ball game were elements of this Mesoamerican civilization’s mythos.

ANSWER: **Mayans**

[10] You air a segment on the planet Nibiru and how it suggests that Anunnaki gods from this city were aliens. Marduk was this Middle Eastern city’s patron deity, and it’s the site of the Ishtar Gate.

ANSWER: **Babylon**

[10] For your season finale, you propose an episode on how because these people came “in dark clouds” when invading Ireland, they were actually aliens. These people were led by Nuada and Lugh against the Fomorians.

ANSWER: **Tuatha** Dé Danann (or **Tuath Dé**) <Owen>

3. Answer the following about mass hysterias in history, none of which involve Pumpkin Spice Lattes, for 10 points each:

[10] This modern nation was home to a 1962 incident in which schoolgirls could not stop laughing for days on end. The victims lived in Tanganyika, which merged with Zanzibar to become this present-day country.

ANSWER: United Republic of **Tanzania** (or Jamhuri ya Muungano wa **Tanzania**)

[10] In 1518, residents of Strasbourg were afflicted with an inability to stop performing this action, which led many of them to die of exhaustion. Random outbreaks of people doing this thing used to be named for St. Vitus.

ANSWER: **dancing** (accept word forms)

[10] In 1938, unsubstantiated reports of a “slasher” paralyzed a British town of this name. Another city of this name was leveled in 1917 by a massive ship explosion and provides Boston a Christmas tree every year as thanks for its subsequent aid.

ANSWER: **Halifax** <Chu>

4. On this holiday, noisemakers called Groggers are used to drown out the name of a man who plotted to kill all Jews. For 10 points each:

[10] Name this Jewish holiday often compared to Halloween. During it, Jews don costumes and retell the story of the Book of Esther.

ANSWER: **Purim**

[10] During Purim, the story of Esther, Haman, and Mordecai is read from a document known by this term. This term is just Hebrew for “the Scroll.”

ANSWER: The **Megillah**

[10] On Purim, Jews are instructed to perform this many *mitzvot*, or commandments. This is also the number of horsemen who are said to announce the apocalypse.

ANSWER: **four** <Cohen>

5. This leader vowed to fight “tigers and flies” in an effort to reduce corruption in his country. For 10 points each:

[10] Name this current General Secretary of the Communist Party of China and President of the People’s Republic of China. He oversaw an anti-corruption campaign that led to the conviction of Zhou Yongkang.

ANSWER: **Xi Jinping** (or **Xí Jīnpíng**)

[10] The “Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era” was added to this party document. Other parts of this document describe the Deng Xiaoping Theory and the Mao Zedong Thought.

ANSWER: **Constitution** of the **Communist Party of China** (or **Zhōngguó Gòngchǎndǎng Zhāngchéng**; prompt on just **Constitution**; do not accept or prompt on “Constitution of the People’s Republic of China” or equivalents)

[10] Xi Jinping defined this two-word phrase as “the great rejuvenation of the Chinese nation.” Its American counterpart is the belief that every person should have the opportunity to achieve prosperity through hard work.

ANSWER: **Chinese Dream** (or **Zhōngguó Mèng**) <Park>

6. The Brady Bill was named after a man who was disabled after being shot by this man. For 10 points each:

[10] Name this American criminal who was released from a psychiatric hospital in September 2016. His most famous crime was allegedly concocted as a plot to impress Jodie Foster.

ANSWER: John (Warnock) **Hinckley**, Jr.

[10] Hinckley failed to assassinate this Republican in 1981, just two months after he was sworn in as president.

ANSWER: Ronald (Wilson) **Reagan**

[10] After Reagan was shot, Alexander Haig made this infamous statement during a press conference, apparently forgetting the Speaker of the House and President pro tempore’s positions in the line of presidential succession. We want the four or five words that preceded, “in the White House.”

ANSWER: “**I’m in control here**, in the White House” (accept **I am** in place of **I’m**) <Chu>

7. The primary rate-limiting factor of this process is the enzyme RuBisCo. For 10 points each:

[10] Name this process in which plants convert sunlight into chemical energy. This process takes place in the thylakoid membrane and stroma of the chloroplast.

ANSWER: **photosynthesis**

[10] RuBisCo is involved in this stage of photosynthesis, in which carbon dioxide, NADPH, and ATP is converted into glyceraldehyde-3-phosphate.

ANSWER: **dark reactions** (or **light-independent reactions**; or **Calvin**-Benson-Bassham cycle)

[10] In cyanobacteria, these protein-based organelles encapsulate RuBisCo and carbonic anhydrase to prevent photorespiration. These structures fall under the class of bacterial microcompartments and are icosahedral in shape.

ANSWER: **carboxysomes** <Park>

8. This event began with the posting of the 95 Theses on a church door. For 10 points each:

[10] Name this event in which multiple denominations of Christianity began breaking off. Martin Luther began this event, the first major breaking off from the Catholic Church since the Great Schism.

ANSWER: Protestant **Reformation**

[10] This convention was called as part of the Counter-Reformation by the Catholic Church. It solidified church teachings on prayer to saints and produced a banned books list.

ANSWER: Council of **Trent**

[10] Luther claimed that verse 17 of this book caused him to start thinking about changing the church. That verse of this book says the “just shall live by faith.”

ANSWER: **Romans** 1 <Horton>

9. A match cut in this film moves from a bone thrown by a gorilla to an orbiting satellite. For 10 points each:

[10] Name this film. It opens with a sequence depicting a “Dawn of Man,” and ends with David Bowman transformed into a fetus in a psychedelic sequence after reaching for a tall black monolith.

ANSWER: **2001: A Space Odyssey**

[10] This man directed *2001*. He also staged many of the scenes in his *Barry Lyndon* after 18th century paintings, and used a Steadicam to film much of *The Shining*.

ANSWER: Stanley **Kubrick**

[10] This Soviet director created a film set on a space station orbiting the title planet *Solaris* that marketed as the “Russian answer to *2001*.” This director’s other films include *Andrei Rublev* and *Stalker*.

ANSWER: Andrei (Arsenyevich) **Tarkovsky** <Yue>

10. Paul de Man analyzed the line “How can we know the dancer from the dance?” from this man’s poem “Among School Children.” For 10 points each:

[10] Name this poet. Some of the women in his life included his long-time unrequited love Maud Gonne, as well as his collaborator and peer Lady Gregory.

ANSWER: W(illiam) B(utler) **Yeats**

[10] Yeats wrote a poem about seeing some wild ones of these birds at Lady Gregory’s home at Coole Park. Hans Christian Andersen’s classic tale of puberty describes a duckling discovering it’s one of these animals.

ANSWER: **swans**

[10] Yeats also wrote this metaphorical poem about a journey to the title place. It opens by declaring “That is no country for old men” and calls an “aged man” “but a paltry thing.”

ANSWER: “**Sailing to Byzantium**” <Kuang>

11. Let’s talk about our favorite expatriate Polish-born military commanders, for 10 points each:

[10] Konstantin Rokossovsky was disgraced during the “Great Purge” of this dictator, but later became the Marshal of the Soviet Union. This dictator succeeded Lenin.

ANSWER: Joseph **Stalin**

[10] This Polish national and the “father of the American cavalry” died while leading a charge during the Battle of Savannah.

ANSWER: Casimir **Pulaski**

[10] While retreating from this battle, Józef Poniatowski drowned in the Elster River when the French prematurely blew up a bridge before he could cross it. The common nickname for this battle comes from the presence of Russian, Prussian, Austrian, Swedish, French, Italian, and German troops.

ANSWER: Battle of **Leipzig** (or Battle of the **Nations**) <Suh>

12. This work begins with a central C–E-flat–G–A-flat–B theme. For 10 points each:

[10] Name this work by J. S. Bach containing sixteen contrapuntal movements on a theme proposed by Frederick the Great. The theme also forms the basis of Sofia Gubaidulina's *Offertorium*.

ANSWER: *The Musical Offering*

[10] Frederick the Great's theme is particularly difficult to harmonize because it ends with a descending scale of this type. This scale contains all twelve possible notes and is comprised solely of half-step intervals.

ANSWER: chromatic

[10] *The Musical Offering* concludes with a four-movement work of this type for flute, violin, and continuo, which was popularized by composers like Arcangelo Corelli and Francois Couperin.

ANSWER: trio sonata (prompt on sonata) <Yue>

13. This group began using their most notable symbol after a member misspelled their name. For 10 points each:

[10] Name this feminist art group that prominently wears gorilla masks.

ANSWER: Guerilla Girls

[10] The Guerilla Girls published a poster asking if woman "have to be naked to get into" this New York art museum, noting the high proportion of nude art to actual female artists. The Cloisters are one branch of this institution.

ANSWER: the Met (or New York Metropolitan Museum of Art)

[10] The gorilla symbolism also alludes to this early RKO film in which the title gigantic gorilla captures a woman and takes her to the top of the Empire State Building.

ANSWER: King Kong <Kuang>

14. One work from this modern day country has alternative names like *A Mirror for the Romantic* and *The Story of the Stone*. For 10 points each:

[10] Name this country whose Four Great Classics include *Journey to the West*, *The Water Margin*, and *Romance of the Three Kingdoms*.

ANSWER: China (accept Zhongguo)

[10] The last of the Four Great Classics is this work, which centers on a boy born with an ancient piece of jade in his mouth. It was written by Cao Xueqin ["tsao SHUEH cheen"] and completed by Gao E.

ANSWER: *The Dream of the Red Chamber*

[10] This character is the protagonist of *The Dream of the Red Chamber*, and the work centers on him and the decline of his family. He is engaged in a love triangle with Xue Baochai ["shweh bao-TCHAI"] and Lin Daiyu ["leen DIE-yoo"].

ANSWER: Jia Biaoyu (accept either or both underlined parts) <Owen>

15. One essay by this man illustrates the example of a man who must choose between caring for his mother and fighting Nazis. For 10 points each:

[10] Name this thinker. One of his essays claims a certain movement "is a Humanism," and his essay *Being and Nothingness* uses the example of a too-precise waiter to illustrate the idea of "bad faith."

ANSWER: Jean-Paul (Charles Aymard) Sartre

[10] Sartre was a prominent thinker in this school of philosophy, whose other members include Albert Camus and Simone de Beauvoir. This often rather bleak school of thought concerns the human individual in an often absurd world.

ANSWER: existentialism (accept word forms)

[10] In "Existentialism is a Humanism," Sartre claims that "existence precedes" this other concept. In other words, unlike a paper cutter, whose meaning is defined before its creation, humans are free to create their own purpose.

ANSWER: essence (or l'essence; accept "existence precedes essence"; accept "l'existence précède l'essence"; do not accept or prompt on any other answers) <Yue>

16. For 10 points each, answer some questions about *The Adventures of Saul Bellow*:

[10] The title character of Saul Bellow's novel *Herzog* is best known for spending his free time producing these things. Bartleby the Scrivener formerly worked in an office processing these things in a Melville short story.

ANSWER: **letters** (accept dead **letter** office)

[10] Bellow opened his novel *The Adventures of Augie March* by stating, "I am an American, [this city] born." Bellow taught at its university, and Upton Sinclair scrutinized this city's meatpacking industry in his novel *The Jungle*.

ANSWER: **Chicago**

[10] Along with Bellow, this author is considered one of America's great Jewish writers. He wrote the collection *The Magic Barrel* and the book *The Fixer*, though his "non-Jewish" work includes one about a man who plays for the New York Knights.

ANSWER: Bernard **Malamud** (the unnamed book is *The Natural*) <Yue>

17. The Avogadro project is one effort to redefine this unit using a sphere of pure silicon. For 10 points each:

[10] Name this unit, the only SI unit to be defined based on a physical artifact.

ANSWER: **kilogram** (accept **kg**; do not accept or prompt on "gram")

[10] The instability of the mass of the platinum-iridium cylinder led the SI to take up a proposal to redefine the kilogram in terms of this physical constant, which has units $\text{kg}\cdot\text{m}^2\cdot\text{s}^{-1}$ ["kilogram meter squared per second"].

ANSWER: **Planck's** constant

[10] The NIST's attempt to develop an "electric kilogram" involves a Kibble balance, which measures mass by varying the intensity of this quantity. The SI unit of this quantity is the ampere.

ANSWER: electric **current** (accept **I**) <Xiong>

18. What happens when quizbowl writers get hungry? They write questions about Turkish food, of course! For 10 points each:

[10] Perhaps the most famous Turkish dish is this one, most often consisting of meat grilled on a stick. It comes in *shish* and *döner* varieties, among others.

ANSWER: **kebab** (accept shish **kebab**; accept döner **kebab**)

[10] This Turkish dish consists of layers of phyllo dough, together with chopped nuts and honey. Please don't confuse it (as this writer often does) with a Crimean War battle or a ski mask-like piece of headgear.

ANSWER: **baklava** (do not accept or prompt on "balaclava"; *Writer's note: and be slightly disappointed if anyone says it*)

[10] Kesserli and beyaz peynir are Turkish examples of this foodstuff. The EU has banned casu marzu, a Sardinian variety of this food which includes live maggots.

ANSWER: **cheese** (prompt on **dairy**) <Chu>

19. One story from this collection contrasts the peasants *Khor* and *Kalinych*. For 10 points each:

[10] Name this Russian short story collection. Its other stories include "Hamlet of the Shchigrovsky District" and "Bezhin Lea."

ANSWER: *A Sportsman's Sketches*

[10] *A Sportsman's Sketches* is a work by this author, who kills off his nihilist character Bazarov in his book *Fathers and Sons*.

ANSWER: Ivan **Turgenev**

[10] Bazarov dies from this disease, which he contracts while treating a patient. This old school "fever" also killed Anne Frank, and shouldn't be confused with typhoid.

ANSWER: **typhus** fever <Kuang>

20. Bertrand's postulate implies that the n th of these quantities is less than the n th prime number. For 10 points each:
[10] Name these quantities. Yitang Zhang was the first to prove a finite bound on these values, which Terence Tao and the polymath8 project subsequently worked on reducing.

ANSWER: prime **gap**

[10] This is the smallest prime gap, or difference between two consecutive prime numbers. This number is also the difference between the third and fourth Fibonacci numbers.

ANSWER: **one**

[10] The prime number theorem states that the average length of the prime gap between a prime p and the next prime is this function of p . In general, the antiderivative of this function of x is one over x .

ANSWER: natural **logarithm** (or **ln**) <Xiong>

21. In one novel by this author, Raphael Schlemilovitch is an antisemitic Jew who lives in Geneva and works for the French Gestapo. For 10 points each:

[10] Name this author of *La Place de l'étoile* and co-writer of the film *Lacombe, Lucien*. He won the 2014 Nobel Prize in Literature.

ANSWER: (Jean) Patrick **Modiano**

[10] In Modiano's novel *Missing Person*, Guy Roland is a detective with this condition. In the novel, when his detective agency is closed, Guy goes on a search for his identity, partially remembers his past life, and travels to Bora Bora.

ANSWER: **amnesiac** Syndrome

[10] Another notable example of memory loss in literature is in this author's *The Mysterious Flame of Queen Loana*, in which a Milanese book dealer loses his memory due to stroke. This author also wrote *The Name of the Rose* and *Foucault's Pendulum*.

ANSWER: Umberto **Eco** <Cohen>