

Harvard Fall Tournament IX

Edited by Will Holub-Moorman and Raynor Kuang

Questions by Will Holub-Moorman, Raynor Kuang, Sriram Pendyala, Robert Chu, Mark Arildsen, Catherine Wu, Roger Jin, and Vimal Konduri



Round 14

Tossups

1. **The first step of this process can also occur by an alternate pep [“p-e-p”] mechanism based on electron capture. One part of this process releases 28.6% of its energy in neutrinos due to the production of neutrinos with energies up to 14 MeV; that is the third branch of this process, which produces beryllium-7 as an intermediate. The bimolecular rate-determining step of this process requires (*) quantum tunnelling across a classically-impenetrable Coulomb barrier. That slow step of this process is the fusion of its two namesake particles to generate a neutrino, a positron, and a deuteron. The end-product of this process is helium-4. For 10 points, name this fusion mechanism that dominates in the Sun’s core involving hydrogen nuclei.**

ANSWER: **proton-proton** chain [prompt on “fusion” before mention; prompt if mentioning “hydrogen” or “proton” in the answer, but not describing the chain]

2. **The narrator of this novel accidentally takes to squeezing his companions’ hands, and has a vision of a row of angels holding jars of a certain substance. Another character in this novel has his hat stolen by a hawk after refusing to help another character find his son. This novel’s protagonist is terrified when a man lights a tomahawk-shaped (*) pipe and jumps into bed with him. That character in this novel uses the infinity sign as his signature and is covered in patchwork tattoos, which he copies onto a coffin that saves the life of this novel’s narrator. For 10 points, name this work in which Queequeg and Ishmael sail aboard the *Pequod*, a novel by Herman Melville.**

ANSWER: *Moby-Dick*, or, *The Whale*

3. **A guardian spirit from this religion called a *fravashi* is depicted in a symbol showing a winged man carrying a ring. According to this religion, Saoshyant will resurrect the dead, after which Atar will make molten metal flow through the earth. The Kushti, a sacred girdle from this religion, is made of 72 threads to represent the 72 chapters of a collection which contains the (*) Gathas. In this religion, the evil daevas oppose the good Amesha Spentas. This religion worships in fire temples and exposes its dead to be eaten by birds in Towers of Silence. For 10 points, name this Persian religion that believes the evil Angra Mainyu is opposed by the supreme Ahura Mazda.**

ANSWER: Zoroastrianism

4. **One author from this country wrote a short story in which it is claimed that a roll dipped in blood is able to cure consumption, as well as one in which the title character confesses to robbery by signing his name as a circle. Those stories are included in the collection *Call to Arms*. Another author from this country wrote the short story collection *Buying a (*) Fishing Rod for My Grandfather*, as well as a novel in which a character is misdiagnosed with lung cancer and is simply named “I.” For 10 points, name this country of origin of the author of *Soul Mountain*, Gao Xingjian, whose Four Great Classical Novels includes *Journey to the West*.**

ANSWER: People’s Republic of China [accept Zhongguo; accept Zhonghua Renmin Gongheguo]

5. The narrator of this work describes himself as an “intermediate” between God and nothingness, and initially claims that while astronomy and physics are doubtable, arithmetic is not, before deciding that arithmetic is doubtable because God may be deceptive or might not exist. This work claims that perception is grounded on the intellect alone, which is what allows us to recognize a ball of (*) wax. The narrator of this work methodically doubts everything due to the possibility that an “evil demon” was responsible for creating it all. For 10 points, name this follow-up to the *Discourse on Method* which sought to prove the existence of God, a work by Rene Descartes.

ANSWER: Meditations on First Philosophy

6. This adjective combines with “Square” to name an Iraqi faction that supported a coup by Rashid Ali, and the psychoanalyst Mother Sugar and the Portmain family appear in a novel with this adjective in its title. An empire that bore this adjective fought the forces of Prince Dmitri at the Battle of Kulikovo and was led by Uzbek. This adjective appears in the title of a book in which Prince (*) Amerigo has an affair with Charlotte Stant. The meeting place of the Sea of Marmara and the Bosphorous Strait is a “horn” titled for this adjective. For 10 points, name this word which describes a “notebook” in a Doris Lessing novel and a “bowl” in a novel by Henry James.

ANSWER: golden [accept gold, accept Golden Square, *The Golden Notebook*, Khanate of the Golden Horde, Golden Horn, or *The Golden Bowl*]

7. A martial art from this country uses a triangular footwork called *ginga* to produce a constant rocking motion. An instrument from this country consisting of a gourd attached to a musical bow determines the pace of that martial art. A film from this country depicts a drug war between Carrot and Lil Ze and is narrated by the photographer Rocket. A musician from this country collaborated with Stan (*) Getz for a 1964 album. This country of origin of the *berimbau* and *capoeira* is the setting of the film *City of God*. For 10 points, name this country of origin of *samba* and *bossa nova*, in which a large statue of Christ the Redeemer overlooks Rio de Janeiro.

ANSWER: Federative Republic of Brazil [accept República Federativa do Brasil]

8. This modern-day region was ruled by the Phagmodrupa Dynasty, and its namesake empire lasted from the 7th to the 9th centuries and was founded by Namri Songtsen. Hundreds of soldiers from this polity were killed in the Massacre of Chumik Shenko during a turn-of-the-century expedition led by Colonel Francis Younghusband intended to resolve this polity’s border dispute with (*) Sikkim. This polity was incorporated into a country following the Battle of Chamdo, after which its leader Tenzin Gyatso fled to India from this polity’s capital of Lhasa. For 10 points, name this autonomous region of China whose spiritual leader is the Dalai Lama.

ANSWER: Tibet Autonomous Region [accept Tibetan Empire; accept Bod Rang Skyong Ljongs; accept Xizang Zizhiqu]

9. This composer drew from an abandoned piano concerto on Basque themes titled *Zazpiak Bat* for the 8/8 *Modere* first movement of his piano trio in A minor. This composer used a B-flat ostinato to depict a tolling bell throughout the second movement of a suite of three piano pieces based on poems by Aloysius Bertrand. That movement, “Le Gibet,” precedes an extremely difficult movement which depicts a goblin and is titled (*) “Scarbo.” This composer’s jazzy Piano Concerto in G Major opens with a whip crack. For 10 points, name this composer of *Gaspard de la nuit*, a Frenchman who utilized an extremely repetitive melody in his *Bolero*.

ANSWER: Maurice Ravel

10. Kholat Syakhl, or the “Dead Mountain,” is located in this mountain range, which is home to the Mansi people. The Manpupuner rock formations are a popular tourist attraction in the Komi Republic just west of this range, and Vaygach Island and Novaya Zemlya are a northern continuation of these mountains. The south of this mountain range is home to its country’s largest iron and steel works at Magnitogorsk in (*) Chelyabinsk Oblast. These mountains extend south from the Kara Sea to Kazakhstan. For 10 points, name this mountain range that traditionally divides Russia into Asian and European parts.

ANSWER: Ural Mountains [accept Uralskiye Gory]

11. In this novel, a character attempting to escape through a chimney is captured by a cross-dressing musician who is fleeing to Belgium. Another character in this novel commits suicide after being exposed for selling the wife and daughter of Ali Pacha into slavery. In this novel, a public prosecutor realizes that his father is the addressee of a treasonous (*) letter, leading him to sentence this novel’s protagonist to life in prison. While imprisoned in the Chateau d’If, this novel’s protagonist is tutored by the Abbe Feraud, and later exacts revenge on Baron Danglars and Fernand Mondego. For 10 points, name this novel about the sailor Edmond Dantes, a work by Alexandre Dumas.

ANSWER: *The Count of Monte Cristo* [or *Le Comte de Monte-Cristo*]

12. In one account, this figure was killed by the Furies for slaying his kin in the war against the Curetes. After his death, this hero met Heracles in the underworld and convinced him to marry this hero’s sister Deianira. This hero participated in an event caused by the failure of Oeneus to make a sacrifice to Artemis, and slew the (*) centaurs Hylaeus and Rhaecus for attempting to rape a woman. After this hero slew his brother Toxus and his uncle Plexippus in an argument over the spoils of a certain event, his mother Althaea threw a log in a fire, leading to this man’s death. For 10 points, name this hero who fell in love with Atalanta while hunting the Calydonian boar.

ANSWER: Meleager

13. Kurt Eisner was assassinated in this city in 1919 after leading a “Workers’ and Soldiers’ Council” here. This city was the site of the formation of the Catholic League. Eric Ludendorff was acquitted after one event in this city that led to the imprisonment of Rudolf Hess. This capital of a region ruled for centuries by the House of (*) Wittelsbach was the site of an agreement after which Neville Chamberlain proclaimed “peace in our time” upon allowing the annexation of the Sudetenland as part of the strategy of “appeasement.” For 10 points, name this site of the Beer Hall Putsch, as well as a massacre of Israeli athletes during the 1972 Summer Olympics, the capital of Bavaria.

ANSWER: Munich [or München]

14. Treatment of these compounds with bromine and catalytic phosphorous tribromide yields their alpha-brominated derivatives in the Hell-Volhard-Zelinsky reaction. In a proton NMR spectrum of these compounds, a broadened peak between 10 and 12 ppm will appear if traces of water are left in the solvent. These compounds dimerize in the gaseous phase (*) due to hydrogen bonding. The Fischer esterification reacts one of these compounds with an alcohol. The low pKa of these compounds results from the strong resonance stabilization of their conjugate bases. Examples of these compounds include formic and acetic acids. For 10 points, name these organic acids with a COOH group.

ANSWER: carboxylic acids [accept carboxylate salts]

15. A 1229 strike at one of these institutions was ended two years later by Pope Gregory IX's bull *Parens scientiarum*. One of these institutions located in Fes, Morocco, is recognized as the first *madrasah jami'ah*. Some of these institutions used the divisions of trivium and quadrivium, and two of them which notably use differing pronunciations of [MAG-da-lin] and [MAW-dlin] were granted charters by (*) Henry III. One of these institutions was founded in Salamanca in 1134, and many of the protests of 1968 were based out of these institutions. For 10 points, name these institutions which include the Sorbonne, Cambridge, and Oxford.

ANSWER: universities [prompt on "schools" by asking "What kind of school?"]

16. After a performance of "The Chaplet" distracts from a duckling dish, a chef created by this author drowns an orchestra leader in a vat of soup. Another character created by this author convinces J.P. Huddle that a local bishop is planning to massacre all of the Jews in his neighborhood as part of an "unrest cure." Two men trapped under a log realize that figures on a nearby hill are (*) wolves in a story by this author, who wrote about Mrs. De Ropp's death at the hands of a pole ferret worshipped by Conradin in another story. For 10 points, name this creator of Clovis Sangrail, who wrote the short stories "The Interlopers" and "Sredni Vashtar" using a one-word pen-name.

ANSWER: Saki [or Hector Hugh Munro]

17. The enzymes trimethyllysine dioxygenase and butyrobetaine dioxygenase can both use this molecule as a coenzyme. In the reaction catalyzed by dopamine monooxygenase, this molecule is used as a cofactor and is converted to its oxidized dehydro form. Although most organisms can internally synthesize this molecule, it is a required component of the diets of most bats and all guinea pigs, capybaras, and (*) simians, including humans. This vitamin is mostly required for prolyl and lysyl hydroxylases, which are involved in the synthesis of an important structural protein with a well-known triple helix structure. For 10 points, name this vitamin important in the synthesis of collagen, whose deficiency causes scurvy.

ANSWER: vitamin C [accept: ascorbic acid or ascorbate until mention]

18. Sweeping a magnetic field through one of these substances results in spin-flip collisions and a Feshbach resonance. In the non-interacting model, the critical temperature for one of these substances is proportional to the particle density over zeta of three-halves all to the two-thirds power. By the Hartree-Fock approximation, the wavefunctions of these substances obey the Gross-Pitaevskii equation. The (*) first instances of this substance were created by Cornell, Wieman, and Ketterle in 1995 by supercooling Rubidium-87 atoms. For 10 points, name this state of degenerate ultracold particles, whose namesakes are an Indian scientist and a man who related energy to mass.

ANSWER: Bose-Einstein condensate [prompt on "Bose gas" or "boson"]

19. A man climbs a ladder to the left of a flower girl holding a candle in this artist's etching *Minotauremachy*, and this artist created a "suite" of 100 neoclassical etchings for Ambrose Vollard. A monk representing Max Jacob holds sheet music and sits to the right of a Pierrot in a painting by this artist. In another painting by this artist, a light bulb produces an eye-shaped glow above a (*) horse head, and a bull stands above a woman grieving over her dead child. This artist of *Three Musicians* produced many depictions of harlequins during his Rose Period, including his *Family of Saltimbanques*. For 10 points, name this Spanish Cubist and painter of *Guernica*.

ANSWER: Pablo Ruiz y Picasso

20. **Claude Brown described growing up in this city in his autobiographical novel *Manchild in the Promised Land*, and this city provides the setting for the works in Joseph Mitchell's *Up In The Old Hotel*. William Shawn was the longtime editor of a publication in this city, and Jane Jacobs opposed an urban planner working in this city who was profiled by Robert (*) Caro in his book *The Power Broker*; that planner was Robert Moses. Slums in this city were photographed by Jacob Riis for his book *How the Other Half Lives*. For 10 points, name this American city home to Greenwich Village and Harlem.**

ANSWER: New York City

21. **Small armies in this state made forays between Sawpit Bluff and Talbot Island during the 1812 Patriots' War. This state was successfully defended by Mark Prevost in the Battle of Thomas Creek and the Battle of Alligator Bridge. James Gadsden negotiated a revision of the Treaty of Moultrie Creek in this state. A war in this state began with the destruction of the (*) Negro Fort, and this site of the Treaty of Payne's Landing was also the location of a massacre perpetrated by Micanopy against the forces of Francis Dade. For 10 points, name this state invaded by Andrew Jackson in the First Seminole War.**

ANSWER: Florida

Bonuses

1. In one novel by this author, the playwright Charles Arrowby re-encounters his childhood lover Mary Hartley Fitch after moving to a secluded house to pen his memoirs. For 10 points each:

[10] Name this author of *The Sea, The Sea*, who also penned a metafictional novel about the author Bradley Pearson heavily influenced by *Hamlet*, *The Black Prince*.

ANSWER: Iris **Murdoch**

[10] This other contemporary British author is best known for a novel in which Briony Tallis accuses Robbie Turner of raping her cousin Lola, *Atonement*.

ANSWER: Ian **McEwan**

[10] In *Atonement*, Robbie Turner is released from prison on the condition that he fight for the British in this war. This war also provides the setting for *Catch-22*.

ANSWER: **World War II**

2. These structures are the simplest repeating units of a crystal lattice. For 10 points each:

[10] Name these small boxes, containing one or more atoms, that can be described by their edge lengths and the angles between their edges.

ANSWER: **unit cell**

[10] This Bravais lattice in the cubic crystal system has the highest packing density, and contains four atoms per unit cell.

ANSWER: **face-centered cubic** [accept **cubic** **closest packed**]

[10] This ionic lattice structure has (8,8)-coordination and consists of interpenetrating primitive cubic unit cells. The radius ratio between anion and cation is close to unity for ionic compounds that crystallize in this structure.

ANSWER: **cesium chloride** lattice

3. In one story in this text, a man first asks if any people have been hurt after hearing some stables have burned down. For 10 points each:

[10] Name this text that includes the principle of the rectification of names, and argues that a ruler should possess *de* and follow the “five excellent practices.”

ANSWER: The **Analects** [or **Lunyu**]

[10] The Analects are a prominent text of this Chinese thought system whose later thinkers included Mencius, and whose namesake thinker developed an inverse of the Golden Rule sometimes called his “Silver Rule.”

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

[10] This fundamental concept of Confucianism characterizes the altruistic behavior of ethically mature members of society. It is often translated as “benevolence” or “humanity.”

ANSWER: **ren**

4. This function can be computed numerically with arbitrary precision using the Stirling approximation. For 10 points each:

[10] Name this meromorphic function that is a complex generalization of the factorial function. This function is present in the normalization factor for the beta distribution.

ANSWER: **gamma** function

[10] Although the gamma function is complex-differentiable almost everywhere, this function on complex numbers is differentiable nowhere. When taken on a complex number $a+bi$, this operation outputs $a-bi$.

ANSWER: complex **conjugation**

[10] Functions that are analytic on the complex plane are also solutions to this real partial differential equation in two variables. This equation sets the sum of the second derivatives of a field equal to zero.

ANSWER: **Laplace's** equation

5. In the Maori version, this device is made from a jawbone. For 10 points each:

[10] Name this device used to create various islands depending on the myth system. In the Maori version, it's used to create the North Island.

ANSWER: fish-**hook**

[10] This hero who appears in various Polynesian myths uses the fish-hook to haul up the islands. In another story, he manages to slow down the sun either by beating it with a jawbone or ensnaring it, depending on the people telling it.

ANSWER: **Maui**

[10] Maui is present in the myths of this island chain, happening to share a name with one of its constituent islands. This chain's mythology also includes the volcano goddess Pele.

ANSWER: **Hawai'i**

6. One poem by this author ends with the speaker seeing his friend Mike's painting, which is titled "SARDINES." For 10 points each:

[10] Name this author of the poems "Why I am Not a Painter" and "The Day Lady Died," as well as the collections *Meditations in an Emergency* and *Lunch Poems*.

ANSWER: Frank **O'Hara**

[10] Like O'Hara, this other American poet was influenced by Abstract Expressionism. He wrote about an object "glazed with rain water / beside the white chickens" in his short poem "The Red Wheelbarrow."

ANSWER: William Carlos **Williams**

[10] Williams' poem "This Is Just to Say" takes the form of an apology for eating some of these items left in an icebox, ending "Forgive me / they were delicious / so sweet / and so cold."

ANSWER: **plums**

7. During a 1975-1990 civil war, this city's Green Line separated its Muslim and Christian populations. For 10 points each:

[10] Name this city. A 1982 siege of this city by the Israeli Defense Forces forced the PLO out of this capital of Lebanon.

ANSWER: **Beirut**

[10] This Lebanese president-elect was assassinated in Beirut by a member of the Syrian Social Nationalist Party. An 2008 documentary about an Israeli soldier's experience in the 1982 War is titled after a "Waltz with" this leader.

ANSWER: **Bachir Gemayel** [accept either, also accept **Bashir al-Jimayyel**, accept **Waltz with Bashir**]

[10] This Israeli leader was held culpable for failing to prevent a massacre of Shi'ites at the Sabra and Shatila refugee camps after Gemayel's assassination. This longtime army commander served as Israel's prime minister in the early 2000s, before suffering a stroke in 2006.

ANSWER: Ariel **Sharon** [or Ariel **Scheinermann**]

8. Lumpkin County, Georgia, was the site of one of these events in the 1830s, though one in Cabarrus County, North Carolina in 1799 stakes a claim to being the first in the United States. For 10 points each:

[10] Name these events. Participants in a certain one of these events were nicknamed "forty-niners."

ANSWER: **gold rushes**

[10] The discovery of gold at Anvil Creek in this state started the Nome gold rush, which drew many prospectors away from the earlier Klondike discoveries in the Yukon Territory.

ANSWER: **Alaska**

[10] This route over the Coast Mountains was taken by prospectors traveling from the Alaskan port of Dyea on the Inside Passage to reach Canada's Klondike gold fields. Mounted Police established a border control post at its namesake pass, where they ensured that entering prospectors had at least a year's worth of supplies.

ANSWER: **Chilkoot** Trail

9. One of these artworks, *Pulled at 4 Pins*, consists of a chimney ventilator that turns in response to the wind. For 10 points each:

[10] Name these artworks, another example of which is a snow shovel with the phrase “in advance of the broken arm” written on it in French.

ANSWER: Marcel Duchamp’s **readymades**

[10] Those readymades were created by Marcel Duchamp, like this other readymade, which bears the signature “R Mutt” and consists of a urinal rotated ninety degrees.

ANSWER: **Fountain**

[10] This other artwork by Duchamp consists of two large, cracked glass panels and depicts a “chocolate grinder” and nine suit-like “Malic Molds” in its bottom half.

ANSWER: *The **Bride Stripped Bare By Her Bachelors, Even*** [or *The **Large Glass***, more commonly]

10. Early on in this film, its protagonist sees a dog running with a human hand in its mouth. For 10 points each:

[10] Name this film in which a ronin played by Toshiro Mifune intervenes in a turf war between the crime lords Seibei and Ushitora.

ANSWER: **Yojimbo**

[10] This Japanese director of *Ikiru* and *Ran* also directed *Yojimbo*.

ANSWER: Akira **Kurosawa** [either order]

[10] Kurosawa’s best-known film is probably one in which *this many* samurai, led by Kambei Shimada, defend a farming village from bandits.

ANSWER: **seven**

11. One of these animals named Rico learned over 200 words by using fast mapping techniques. For 10 points each:

[10] Name these animals. Martin Seligman was criticized for administering electric shocks to them in an experiment that led to his theory of learned helplessness.

ANSWER: **dogs** [or **canines**]

[10] The Russian physiologist Ivan Pavlov used the “classical” form of this process to cause dogs to salivate upon hearing a bell.

ANSWER: Ivan **Pavlov**

[10] Some medical psychologists think that classical conditioning plays a role in causing this phenomenon, in which undergoing a medically useless treatment actually causes some patients to recover.

ANSWER: the **placebo** effect

12. Answer some questions about 21st-century tsunamis, for 10 points each:

[10] In 2011, the Tohoku earthquake led to a tsunami that destroyed this nuclear power plant in Japan, leading to fears of meltdown.

ANSWER: **Fukushima** Daiichi

[10] The 2004 Indian Ocean tsunami devastated this city located on the northern end of Sumatra. It serves as the capital of a namesake Indonesian province and is home to the Baiturrahman Grand Mosque.

ANSWER: **Banda Aceh**

[10] The 2004 tsunami also hit this country. The following year, this country with capital at Colombo elected the controversial president Mahinda Rajapaksa.

ANSWER: Democratic Socialist Republic of **Sri Lanka**

13. This function is of key interest in equilibrium statistical physics. For 10 points each:

[10] Name this function which is equal to the sum of the Boltzmann factors for each microstate, over all the microstates. It is a normalizing factor in the probability distribution over microstates.

ANSWER: **partition function**

[10] At this temperature, the partition function of a system goes to zero. This temperature is the lower limit of the thermodynamic temperature scale, and a perfect crystal's entropy at this temperature is equal to zero.

ANSWER: **absolute zero**

[10] This doubly-eponymous equation uses basic statistical methods to derive the entropy of a classical ideal monatomic gas at a given temperature and volume. Since the entropy predicted by this equation goes to negative infinity as temperature goes to zero, it is only valid in the high-temperature limit.

ANSWER: **Sackur-Tetrode** equation

14. Answer the following about the diplomatic redrawing of Polish borders in the 20th century, for 10 points each:

[10] Because the Greater Poland Uprising of 1919 occurred around the same time as the negotiations of this treaty that ended World War I, it allowed Poland to take the region of Posen from Germany.

ANSWER: Treaty of **Versailles**

[10] A 1921 treaty signed in this city, which ended the Polish-Soviet War, partitioned Ukraine and Belarus between Poland and the USSR. Bishop Albert founded the Order of the Livonian Brothers of the Sword in this city, which lies at the mouth of the Daugava.

ANSWER: **Riga**

[10] The eastern border of Poland was confirmed as the Curzon Line in this 1945 World War II conference in Crimea, which was preceded by the Tehran Conference and followed by the Potsdam Conference.

ANSWER: **Yalta** Conference

15. Ticking time bombs aren't only the domain of philosophical problems and formulaic action movies! Answer the following about explosive works of literature, for 10 points each:

[10] This fictionalization of the Greenwich bombing of 1898 centers on the anarchist Adolf Verloc and his pursuer, Chief Inspector Heat.

ANSWER: *The **Secret Agent**: A Simple Tale*

[10] In a novel named for this city, Andrei Bely depicted a revolutionary named Nikolai who is ordered to assassinate his father by putting a time bomb in his study. This city is the setting of Alexander Pushkin's "The Bronze Horseman."

ANSWER: Saint **Petersburg** [or **Petrograd**, or **Leningrad**]

[10] This Asian country's genre of "atomic bomb literature," the best-known example of which is Masuji Ibuse's *Black Rain*, arose after the end of World War II.

ANSWER: **Japan** [or **Nippon**]

16. The essay that reintroduced this school of ethics in the twentieth century compared duty-based systems to "law without a lawgiver." For 10 points each:

[10] Name this school of ethics advocated by the author of "Modern Moral Philosophy," G.E.M. Anscombe, that weighs ethical behavior on the basis of one's character.

ANSWER: **virtue** ethics

[10] This early thinker invented the state of *eudaimonia* as the product of a virtuous life, a notion which has been adopted by many virtue ethicists. This teacher of Plato also penned the *Nicomachean Ethics*.

ANSWER: **Aristotle**

[10] This early school of philosophy claimed that virtue was sufficient for happiness, meaning that external misfortunes could not affect happiness. This school of philosophy was founded by Zeno of Citium, and other philosophers from this school include Chrysippus and Cleanthes.

ANSWER: stoicism [or stoics]

17. In Soviet Russia, treaty sign you! For 10 points each, answer the following about diplomacy and the USSR:

[10] This Minister of Foreign Affairs during World War II signed a nonaggression pact with his German counterpart Joachim von Ribbentrop. His claim that the Soviets were not bombing Finland but instead dropping food supplies led to homemade explosives used during the Winter and Continuation Wars being called this man's "cocktails."

ANSWER: Vyacheslav Mikhailovich Molotov

[10] During this 13-day confrontation, Soviet UN Ambassador Valerian Zorin was admonished by Adlai Stevenson, who said, "Don't wait for the translation; answer yes or no!"

ANSWER: Cuban Missile Crisis [accept October Crisis, Crisis de octobre, The Missile Scare, The Caribbean Crisis, or Karibskiy Krizis]

[10] This man was the Minister of Foreign Affairs during the Cuban Missile Crisis and went on to serve in that post until 1985. He was nicknamed "Mr. No" by the Western press for his liberal use of the Soviet veto in the Security Council.

ANSWER: Andrei Andreyevich Gromyko

18. A character in this novel who attends a sewing school falls in love with a character who rescues her from a flood. For 10 points each:

[10] Name this novel centering on that character, Taeko, and her siblings Tsuruko, Sachiko, and Yukiko.

ANSWER: *The* Makioka Sisters [or Sasameyuki]

[10] *The Makioka Sisters* is a work by this Japanese author of *Some Prefer Nettles* and *In Praise of Shadows*.

ANSWER: Junichiro Tanizaki [either order]

[10] This other Japanese author wrote the *Sea of Fertility* tetralogy, as well as *The Temple of the Golden Pavilion*.

ANSWER: Yukio Mishima [either order]

19. This extremely prolific composer wrote three sets of pieces for banquets in which the performing ensemble gradually decreases in size from an orchestra to a solo performer. For 10 points each:

[10] Name this contemporary of Bach and composer of *Tafelmusik*, or *Musique de Table*.

ANSWER: Georg Philipp Telemann

[10] Telemann's four-movement concerto for this instrument in G major is the first known concerto for it. Along with two violins and a cello, this instrument forms a string quartet.

ANSWER: viola

[10] The viola has a significant solo part in this composer's second symphony, *Harold in Italy*.

ANSWER: Hector Berlioz

20. This structure produces erythropoietin and calcitriol. For 10 points each:

[10] Name this organ that is connected to the bladder through a ureter and creates urine.

ANSWER: kidney

[10] The cells of these structures in the kidney secrete renin in response to adrenergic stimulation or a decrease in renal perfusion pressure. This structure is found between the vascular pole of the renal corpuscle and the returning distal convoluted tubule of the same nephron.

ANSWER: juxtaglomerular apparatus

[10] These structures are responsible for excretion and osmoregulation in insects, arachnids, and tardigrades. These structures excrete waste into the intestine where they join the alimentary canal.

ANSWER: Malpighian tubules