

Michigan Fall Tournament (Written by Will Nediger, Kurtis Droge, Cody Voight, Saul Hankin, Ben Forster, Siddhant Dogra, and Peter Jiang)

Editors Round 1

Warm-Up Tossup (Optional)

Governor Scott Bone is most remembered for ordering an important event this animal participated in. Controversy surrounds this animal's claim to fame, because Gunnar Kaasen neglected to wake up Ed Rohn at Port Safety. This animal's namesake travelled with Nansen in the *Jason*. Along with Togo, this animal participated in the Great Race of Mercy, which was preceded by Curtis Welch misdiagnosing a Native American child, and consisted of transporting diphtheria antitoxin. This canine's efforts are commemorated by a dog race stretching from Anchorage to Nome, the Iditarod. For 10 points, name this animal that inspired an animated film voiced by Phil Collins as the polar bears Muk and Luk, a Siberian husky.

ANSWER: **Balto**

Tossups

1. This country is the setting of the novella *Lust, Caution*. A novel set in this country is about three brothers nicknamed the Tiger, the Landlord, and the Merchant. One character from this country is called "Poor Fool" because of a mental disability caused by malnutrition. That character appears in a novel which was followed by the sequels *Sons* and *A House Divided*. Olivia is told stories from this country by her sister in the novel *The Hundred Secret Senses*. Immigrants from this country living in San Francisco are also the subject of the novels *The Kitchen God's Wife* and *The Joy Luck Club*, by Amy Tan. For 10 points, name this country which is the setting for many novels by Pearl S. Buck, including *The Good Earth*, which is about characters like O-Lan and Wang Lung.

ANSWER: **China**

2. One synthesis for these molecules often uses MAO as a co-catalyst. The second virial coefficient for these molecules is zero at the theta temperature. The intrinsic viscosity for these molecules is equal to some constant times molecular weight raised to another constant according to the Mark-Houwink equation. Dynamic mechanical analysis of these molecules can be used to generate a plot of modulus versus temperature, which contains a knee at the glass transition temperature. The configuration of subsequent R and H groups determines the tacticity of these molecules. Very few branches are observed when they are synthesized from alkenes with Ziegler-Natta catalysts. For 10 points, name these long molecules made of small, repeating structural units that include polyethylene and polypropylene.

ANSWER: **polymer**s [prompt on **plastics**; prompt on **viscoelastic** materials]

3. Though not Max Scheler or Henri Bergson, this philosopher used the term *Homo faber* to refer to man's ability to control his environment through tools in one work, which sought to contrast the *vita activa* with the *vita contemplativa*. This thinker also wrote a work which posits that certain anti-utilitarian institutions are inexplicably stable from their shapelessness, and that one man only had to resort to violence because of Ernst Röhm's homosexuality. That work also coined the term "secret societies in broad daylight" and dedicated a section to the secret police. This author of *The Life of the Mind* and *The Human Condition* also used the phrase "banality of evil" to help explain the Holocaust. For 10 points, who is this author of *The Origins of Totalitarianism* and *Eichmann in Jerusalem*?

ANSWER: Hannah **Arendt**

4. The anti-Soviet militia group P-26 was outlawed in this country. A man from this country tried to end the eastern front of World War One in the Grimm-Hoffman Affair. Henri Guisan was in charge of this country's troops during World War Two, and it was the target of the never-executed Operation Tannenbaum. Tensions between Protestants and Catholics in this country manifested in the Sonderbund War and in the First and Second Kappel Wars. During Napoleonic times, it briefly united under the Helvetic Republic, while a city here had its Grand Council elect the protestant reformer John Calvin as its leader. It only voted to join the United Nations in 2002, despite being home to the largest UN office in Europe. For 10 points, name this country comprised of many cantons and noted for its historical neutrality.

ANSWER: Switzerland

5. In 2012, this artist was confirmed to have been the painter of *Off Margate*, *Margate Jetty*, and *The Beacon Light*, three works previously believed to have been fakes. Two tall trees appear to the right while two mythical figures look out to sea in this artist's *The Bay of Baiae with Apollo and the Sibyll*. The Tomb of Sychaeus is visible on the right bank of a dividing river in a canvas by this artist that shows a scene from the Aeneid. This artist of *Dido Building Carthage* used a wave of darkness to represent a snow storm assailing the army of Hannibal. He depicted a small rabbit in the bottom right of a painting depicting a train crossing the Maidenhead Railway Bridge, and he showed struggling captives being thrown overboard in a painting whose light source comes from a characteristically fiery sunset. For 10 points, name this British painter of *Rain*, *Steam and Speed* and *The Slave Ship*.

ANSWER: Joseph Mallord William Turner

6. When discretizing these particles on a lattice, one gets twice as many for every dimension one has. These particles are the quanta of the Dirac field. When these particles are their own antiparticle, they are termed Majorana. The distribution function for these particles is given by one over quantity one plus e to the quantity capital E minus capital E sub F over $k T$. Two of this class of particle are coupled over short distances in Cooper pairs. These particles cannot have identical quantum numbers according to the Pauli exclusion principle. For 10 points, name these particles which have half-integer spin, unlike bosons, and thus follow Fermi-Dirac statistics.

ANSWER: fermions [anti-prompt on electrons or leptons]

7. One deity in this myth system cured a princess of an illness to earn her hand in marriage only to have her father try to kill him by sending him into a hopeless battle at the command of a battalion of dwarves. Another deity in this myth system transformed into a black ant so that he could follow a red ant to a stash of crops beneath a mountain. Nine was considered an unlucky number in this myth system, as their underworld had nine levels. Figures in this myth system include four hundred rabbits who preside over inebriation and a woman who was impregnated by a ball of feathers. Two rivals in this myth system have names translating as "Smoking Mirror" and "Feathered Serpent." For 10 points, name this myth system including Tezcatlipoca and Quetzalcoatl, held sacred by a pre-Columbian empire in Mexico.

ANSWER: Aztec mythology

8. A loutish character in this novel kills a waiter for bringing his wine too slowly, and also kills a man over a slave girl named Lotus. Several characters in this novel are given Latinate names like Sapientia and Adamantina in David Hawkes' translation. In a popular scene from this novel, one character buries some flower petals and then writes an elegiac poem in their honor. Many scenes in this novel take place in the fictional Prospect Garden. There is some controversy over whether the last 40 chapters of the so-called Cheng-Gao version of this novel are later additions. The contrasting characters Xue Baochai and Lin Daiyu are rivals for the romantic interest of this novel's protagonist, who is born with a piece of jade in his mouth. For 10 points, name this novel about Jia Baoyu, written by Cao Xueqin.

ANSWER: *The Dream of the Red Chamber* [or *The Story of the Stone*; or *Hong Lou Meng*]

9. In Jacobus de Voragine's *Golden Legend*, this man kills his half brother and becomes conflated with the Oedipus story by killing his father and marrying his mother. Nils Runeberg writes three texts about this man in a Jorge Luis Borges story about "Three Versions" of this person. A Gnostic gospel named after this man contains an account of a temple at which animal sacrifices are performed and asserts that creation began with a "luminous cloud." The Cainites asserted that this man acted in accordance with Jesus to bring about the proper series of events. According to Acts, he dies when his body bursts apart after he buys the Field of Blood. He identifies Jesus with a kiss in the Garden of Gethsemane, leading to Jesus's arrest by the Sanhedrin. For 10 points, name this disciple who received thirty pieces of silver for his betrayal of Jesus.

ANSWER: Judas Iscariot

10. One politician with this name caused a stir in France when he claimed that U.S. foreign policy would need to undergo an "agonizing reappraisal" if France did not join the European Defence Community. Another politician with this surname was the handler of Fritz Kolbe as the director of the OSS office in Switzerland during World War Two; that man later worked with Cord Meyer to influence the media through Operation Mockingbird and he organized Operation 40 in Cuba. The best known politician with this surname used the phrase "massive retaliation" to describe the policy of brinkmanship and aggressively opposed communism during the later years of the Eisenhower presidency. For 10 points, give the surname of CIA director Allen Welsh and Secretary of State John Foster, who names a Washington airport.

ANSWER: Dulles [accept more specific answers]

11. Other than Wagner's *Kaiser-Marsch*, the only march that Carl Tausig transcribed was by this composer. In the last movement of one of his song cycles, the piano imitates a hurdy-gurdy. His "Trockne Blumen" variations are based on a movement of one of his song cycles. This composer of *Three Marches Militaires* also wrote a setting of a song from Walter Scott's *The Lady of the Lake* which has been adapted as a setting of the *Ave Maria*. He wrote a piano quintet whose fourth movement is a set of variations on his song "Die Forelle." This composer of *Winterreise* and *Die Schöne Müllerin* also composed a symphony whose planned finale may have become part of his incidental music to *Rosamunde*. For 10 points, name this composer of the *Trout Quintet* and the *Unfinished Symphony*.

ANSWER: Franz Schubert

12. One member of this family jokes that a couple will be so generous that their servants will take advantage of them and cheat them to bankruptcy. Another member of this family muses that there is no praise higher than that of a housekeeper while looking at a portrait of her future husband. That member of this family accompanies the Forsters to Brighton to keep up the acquaintance of a regiment; it is later assumed that the Gardiners have paid over ten thousand pounds to convince the soldier that she elopes with to marry her. The youngest child in this family ends up marrying Wickham, while the oldest child marries Bingley. For 10 points, name this family including Lydia, Jane, and Elizabeth, who marries Mr. Darcy at the end of Jane Austen's *Pride and Prejudice*.

ANSWER: Bennet family [accept more specific answers]

13. This period was symbolized by a crest with three hollyhock leaves. Merchant ships trading in southeast Asia in this period were marked with red seals. During this period, territorial lords were required to alternate residence between the capital and their own estate, a policy known as *sankin-kotai*. In its later part, known as the Bakumatsu, the Treaty of Amity and Commerce and the Convention of Kanagawa were signed, as part of the reversal of its isolationist policy. Early in this period, the Siege of Osaka solidified the government's rule by destroying the remains of the Toyotomi clan. This period began after its founder's victory at the Battle of

Sekigahara, and lasted until the beginning of the Meiji Restoration in 1868. For 10 points, name this Japanese shogunate which was founded in 1600 by Ieyasu, a member of its namesake clan.

ANSWER: **Tokugawa** shogunate [or **Edo** period]

14. The root of a Fibonacci heap is one of these structures. The most common method of chaining to resolve collisions in hash tables utilizes this structure. Heapsort is generally avoided for sorting this structure due to its poor performance with it. This structure is notorious for its poor cache performance due to low locality of reference. The performance of algorithms working on these structures can be increased if, instead of terminating them with NULL, they are terminated with a dummy sentinel. When its consecutive nodes reference each other, it is described as "doubly". For 10 points, identify this data structure that contains a node with data and a pointer to the next node.

ANSWER: linked **lists**

15. This city's Tremont House was elevated with guests inside of it as part of a plan to install its sewer system by raising its street levels by over six feet. The architectural firm of Krueck and Sexton is based in this city in which they designed a ten story, faceted window for the front of the Spertus Institute as well as a fountain consisting of two glass towers with LEDs at either end of a black granite reflecting pool. The Burnham Plan revised the layout of this city. A great lawn under steel faceting is part of the Frank Gehry-designed Pritzker Pavilion in this city. This city is home to Anish Kapoor's Cloud Gate, a giant stainless steel bean. Ludwig Mies van der Rohe designed a pair of steel-and-glass apartment towers on this city's Lake Shore Drive. For 10 points, name this city in which the Crown Fountain can be found in Millennium Park, which also contains Frank Lloyd Wright's Robie House in Hyde Park.

ANSWER: **Chicago**

16. One discovery in this organism was small, non-coding regions of RNA that bind to the 3-prime untranslated region of mRNA; that discovery was microRNA, examples of which include let-7 and lin-4. Mutant types of this organism include roller and dumpy. Application of a form of sequence-specific gene silencing, triggered by double-stranded RNA, to this organism won Craig Mello and Andrew Fire a Nobel. In response to harsh environmental conditions, it can undergo dauer arrest, which bypasses the L3 stage. That gene silencing technique is RNA interference. This pseudocoelomate can only be male or hermaphroditic, and Sydney Brenner's work popularized its use as a model organism. For 10 points, name this nematode.

ANSWER: **Caenorhabditis elegans**

17. Mullainathan and Shafir simulated this concept by providing fewer guesses to solve Wheel of Fortune puzzles as a follow up to paper they wrote about "A Behavioral-Economics View" of it. Oscar Lewis claimed that this concept was accompanied by a fundamentally different "design for living," which he dubbed a "culture of" this. Amartya Sen wrote "An Essay on Entitlement and Deprivation" titled after famines and this concept, which he argued should be determined by capabilities rather than wealth. Pierre-Joseph Proudhon inspired a Karl Marx response with a book about "The Philosophy of" it. Michael Harrington's book *The Other America* is subtitled after this concept "in the United States," and spawned a war against it conducted by Lyndon Johnson that included the development of the Office for Economic Opportunity. For 10 points, name this concept that refers to the lack of wealth.

ANSWER: **poverty** [accept equivalents; prompt on "scarcity" on the first sentence]

18. A king of this name was the older brother of Hugh of Vermandois and was nicknamed "the Amorous." Along with his son, Charles, the Count of Valois, a king of this name faced off against Peter III in the Aragonese Crusade. Another king of this name was advised by Guillaume de Nogaret and lost to the Flemish at the Battle of the Golden Spurs. The last French king of this name had his navy destroyed at the Battle of

Sluys. The second French king of this name was the last King of the Franks, and defeated the Angevins at the Battle of Bouvines. The Avignon papacy began due to the conflict between Boniface VIII and the fourth French king of this name, who suppressed the Knights Templar. For 10 points, give this name shared by six French kings, the fourth of whom was nicknamed “the Fair.”

ANSWER: Philip

19. This character is briefly attracted to a man named Théodule, but the object of her affections changes when she finds a long love letter left under a rock in her garden. For a time, she lives in the Gorbeau Tenement, though she later moves into a convent which follows the Rule of Martin Verga. Her father is an egotistical student named Félix Tholomyès. Her real name is Euphrasie, although another character refers to her as Mademoiselle Lanoire and Ursula before being introduced to her. As a child, she plays with a doll that belongs to her adoptive sisters, so the protagonist buys a doll for her. This character, who is nicknamed “The Lark,” marries Marius Pontmercy after being saved from the cruel treatment of the Thénardières, who buy her from her mother, Fantine. For 10 points, name this adopted daughter of Jean Valjean from *Les Misérables*.

ANSWER: Cosette [accept Euphrasie early]

20. Upon arriving near this city, one person witnesses a man with a drawn sword whom he recognizes as a divine captain, which causes him to remove one of his shoes. A group bound for this city leaves twelve stones behind as a monument after encamping at Gilgal. The destruction of this city is followed by the destruction of the city of Ai. One resident of this city hangs a red thread from her window after hiding two enemy spies on her rooftop. The family of the harlot Rahab survives the destruction of this city, which follows it being encircled on seven consecutive days by a group of people carrying rams’ horns. The fall of this city is central to the conquest of Canaan by Joshua. For 10 points, name this Biblical city famed for its walls.

ANSWER: Jericho

21. An author from this country wrote a novel about the rhetorician Gabriel Santoro harshly criticizing *A Life in Exile*, a book written by his son, also named Gabriel Santoro. That author of *The Informers* is named Juan Gabriel Vasquez. Another author from this country wrote a novella about a lonely retired military man who lives with his wife and a rooster which he is training for a cockfight. That author also wrote a novel in which the two brothers of Angela Vicario murder Santiago Nasar. This country is home to the author of *No One Writes to the Colonel*, whose most famous novel takes place in the town of Macondo and follows the Buendía family. For 10 points, name this country home to the author of *Chronicle of a Death Foretold* and *One Hundred Years of Solitude*, Gabriel García Márquez.

ANSWER: Colombia

Bonuses

1. A director from this country made the film *In the Realm of the Senses*, which is famous for its sexual explicitness. For 10 points each:

[10] Name this country, whose anime films include *Akira* and *My Neighbor Totoro*.

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

[10] Isao Takahata directed this incredibly depressing film which takes place during World War II. In it, Seita takes care of his sister Setsuko, but both of them end up dying of malnutrition.

ANSWER: **Grave of the Fireflies** [or **Hotaru no haka**]

[10] Another Studio Ghibli film is this Hayao Miyazaki movie about Chihiro, a girl who meets characters like the voracious monster No-Face and the giant-headed witch Yubaba after her parents are transformed into pigs.

ANSWER: **Spirited Away** [or **Sen to Chihiro no Kamikakushi**]

2. Answer some questions about the Crisis of the Third Century in the Roman Empire, for 10 points each.

[10] This emperor's reign marks the end of the crisis. He instituted the Tetrarchy and conducted harsh persecutions of Christians before retiring to Dalmatia.

ANSWER: **Diocletian**

[10] The crisis is said to have been set off by the assassination of Alexander, the last emperor of this dynasty. Its namesake founder, Septimius, emerged from the Year of the Five Emperors by defeating Albinus and Niger.

ANSWER: **Severan** dynasty [prompt on "Severus"]

[10] This emperor earned the title "Restorer of the World" by defeating the Gallic Empire and Zenobia's Palmyrene Empire, among other threats. He played a major role in ending the crisis.

ANSWER: **Aurelian**

3. A structure in this organ contains the renal corpuscle, which consists of a glomerulus surrounded by Bowman's capsule that is used to filter blood. For 10 points each:

[10] Name this organ whose functional unit is the nephron.

ANSWER: **kidney**

[10] This nephron structure, that passes through the medulla, has a descending limb, permeable to water, and ascending limb, permeable to sodium and chloride ions.

ANSWER: **loop of Henle** [prompt on **nephron loop**]

[10] This mechanism is used by the loop of Henle to create a very high concentration gradient between fluid in the medulla and urine in the collecting duct. The remarkable warm-bloodedness of tuna is also due to this mechanism.

ANSWER: **countercurrent** exchange [or **countercurrent** multiplier]

4. One section of this work considers its author's early sexual relationships as being a sinful way for him to manifest his desire for love and later discusses the purposeless theft of some pears. For 10 points each:

[10] Name this book that reconsiders its author's earlier book *The Beautiful and the Fitting* and details its author's religious experiences under St. Ambrose in Milan.

ANSWER: **Confessions**

[10] *Confessions* was written by this Bishop of Hippo, the son of Saint Monica who also wrote *The City of God*.

ANSWER: **Augustine**

[10] This Franciscan, called Doctor Seraphicus, died shortly after attending the Council of Lyon. He wrote a commentary on Lombard's *Sentences*, and his thought was influenced by Augustine and Alexander of Hales.

ANSWER: Saint **Bonaventure**

5. This novel's protagonist refers to her boyfriend Buddy Willard as a hypocrite, and Buddy spends much of this novel in a tuberculosis sanatorium. For 10 points each:

[10] Name this novel whose protagonist masquerades as Elly Higginbottom while on a literary internship in New York and later undergoes shock therapy at the behest of Doctor Nolan.

ANSWER: *The Bell Jar*

[10] This author created Esther Greenwood in *The Bell Jar*. She also wrote poems like "Lady Lazarus" and "Daddy."

ANSWER: Sylvia Plath

[10] Esther first discovers Buddy to be a hypocrite after they watch Mrs. Tomolillo doing this action. After losing her virginity, Esther associates her torrents of blood with fictional Victorian characters doing this action.

ANSWER: giving birth

6. This poem states that "The grave's a fine and private place, but none I think there do embrace." For 10 points each:

[10] Name this poem, one section of which describes the number of years that the speaker would spend adoring the various parts of his lover. It ends by saying "though we cannot make our sun stand still, yet we will make him run."

ANSWER: "To His Coy Mistress"

[10] This British poet who questioned why men build "unproportion'd dwellings" in "Upon Appleton House" wrote "To his Coy Mistress."

ANSWER: Andrew Marvell

[10] Marvell wrote four poems featuring this character. In one of them, he compares his labor to what Juliana did to his mind, while another of them refers to "Glow-Worms" as "Ye living Lamps."

ANSWER: the Mower

7. The capture of Corrientes occurred near the start of this war. For 10 points each:

[10] Name this war in which Francisco Solano Lopez launched an offensive against several neighboring countries. The turning point against Lopez came at the Battle of Riachuelo, where his navy was wiped out.

ANSWER: War of the Triple Alliance [or the Paraguayan War]

[10] One of Paraguay's enemies in the War of the Triple Alliance was this South American country, a former Portuguese Colony whose troops were commanded by Luis Alves de Lima e Silva, the Duke of Caxias.

ANSWER: Brazil

[10] The last major offensive that Lopez initiated was at this May 1866 battle. Despite the Paraguayan cavalry scoring a triumph over their Argentine counterparts, Lopez's flank attack was unable to overcome the Allied defenses.

ANSWER: Battle of Tuyuti

8. Name some linguists, for 10 points each.

[10] This man revolutionized modern linguistics by developing the idea of generative grammar. His major works include *The Minimalist Program* and *Syntactic Structures*.

ANSWER: Noam Chomsky

[10] This American structuralist wrote the 1933 textbook *Language*. He is known for his work on the Algonquian languages.

ANSWER: Leonard Bloomfield

[10] Structural linguistics began with the posthumous publication of this man's work. He distinguished *langue* from *parole* and synchrony from diachrony.

ANSWER: Ferdinand de Saussure

9. Commentaries on this set of texts are known as the Zend. For 10 points each:

[10] Name this collection of texts which includes the Yasna and the Vendidad. Another part of this collection, the Visperad, is recited along with the Yasna.

ANSWER: Avesta

[10] The Avesta is recited by priests of this dualistic religion whose practitioners worship Ahura Mazda.

ANSWER: Zoroastrianism

[10] This Avestan word is often translated as “truth” or “righteousness,” and stands in contrast to *druj*.

ANSWER: asha

10. This quantity cannot be measured directly for a system, so its change is measured instead. For 10 points each:

[10] Name this quantity which is kept constant in a throttling process.

ANSWER: enthalpy [or h]

[10] Enthalpy is the sum of internal energy and the product of these two quantities, which are also related by Boyle's law.

ANSWER: pressure and volume [or p and v]

[10] The enthalpy for moist air is normally determined by using one of these charts. One determines the thermodynamic state, and thus the enthalpy, on this chart by specifying any two intersecting values, such as dry-bulb and wet-bulb temperature.

ANSWER: psychrometric chart

11. Name some Napoleonic battles, for 10 points each.

[10] In this battle of the Second Coalition which took place in Piedmont, Louis Desaix was killed, though Napoleon still managed to defeat the Habsburg forces under Michael von Melas.

ANSWER: Battle of Marengo

[10] The Seventh Coalition, led by Blucher and Wellington, sealed Napoleon's fate at this 1815 battle, which undoubtedly left Marshal Grouchy grouchy.

ANSWER: Battle of Waterloo

[10] Pyotr Bagration was killed at this battle in the French invasion of Russia, in which the French won a Pyrrhic victory against Kutuzov.

ANSWER: Battle of Borodino

12. Answer the following about the compositions of Mozart, for 10 points each.

[10] Franz Xaver Süssmayr completed Mozart's composition of this type, since Mozart died before he could get past the first few bars of the *Lacrimosa*.

ANSWER: requiem mass

[10] Mozart wrote sixteen of these pieces. A number of them were written by Joseph Haydn, including sets of them nicknamed “Sun” and “Erdödy.”

ANSWER: string quartets

[10] Mozart also composed four concertos for this instrument, for his friend Joseph Leutgeb. Weber wrote a concertino for this instrument, which is the solo instrument in Ligeti's *Hamburg Concerto*.

ANSWER: natural horn [accept French horn]

13. Because the amplitude of these waves decreases with depth, they can be used to measure the thickness of the crust. For 10 points each:

[10] Name these surface waves that are formed by SH waves propagating in a low-velocity layer overlaying a halfspace, off which they reflect at a postcritical angle.

ANSWER: Love waves [or LQ waves]

[10] Love waves are surface waves with this property, which means particle motion is perpendicular to their direction of propagation. This type of wave is contrasted with a longitudinal wave.

ANSWER: **transverse** waves

[10] One obtains SH waves and SV waves by decomposing S-waves into two components: one with polarization parallel to a flat free surface and one perpendicular to that component. SV waves are coupled with these seismic waves that are refracted at the core-mantle boundary.

ANSWER: **P**-waves [or **primary** wave; or **pressure** wave]

14. For 10 points each, name these Chinese cities.

[10] The Yu Garden is found in this city, the largest in the world, which is found at the mouth of the Yangtze River.

ANSWER: **Shanghai**

[10] The main city in the region of the Pearl River delta is this city, China's third largest and the largest in southern China. It was formerly known as Canton.

ANSWER: **Guangzhou**

[10] This remote city is the largest in western China. Its name translates as "Beautiful Pasture" in the Dzongar dialect, and it is the capital of Xinjiang.

ANSWER: **Urumqi**

15. In this play, Eilert Lovborg determines not to contest George Tesman for a professorship, content instead to work on the manuscript of his life's masterwork. For 10 points each:

[10] Name this play whose title character commits suicide after destroying Lovborg's manuscript and then convincing Lovborg to kill himself.

ANSWER: **Hedda Gabler**

[10] Hedda Gabler was written by this playwright. In his play *A Doll's House*, Nora Helmer decides not to commit suicide when her narcissistic husband Torvald discovers that she once forged her father's signature on a bond.

ANSWER: Henrik **Ibsen**

[10] This Ibsen play is titled after the estate where Rebecca West falls in love with the widower of Beata, but they are both consumed by guilt and take their own lives rather than marry.

ANSWER: **Rosmersholm**

16. The most notable study of Eadweard Muybridge involved taking a series of pictures of one of these animals in motion. For 10 points each:

[10] Name these animals, a pale one of which accompanies death in Albrecht Durer's *Knight, Death and the Devil* and partially titles a painting by Albert Pinkham Ryder.

ANSWER: **horses**

[10] A black horse peers out from behind a red curtain at the main action of this painting, in which an incubus looks out towards the viewer and sits atop a woman in a long, white gown.

ANSWER: *The* **Nightmare**

[10] A line of trees stretch to the Hotel de la Salpetriere in the background of this artist's painting *The Horse Fair*.

ANSWER: Rosa **Bonheur**

17. This play takes place in the town of New Bethesda. For 10 points each:

[10] Name this play in which the artist Miss Helen is visited by Elsa Barlow, who tries to prevent her from moving into an old age home.

ANSWER: *The* **Road to Mecca**

[10] *The Road to Mecca* is a work by this South African playwright who also wrote *Master Harold... and the Boys*.

ANSWER: Athol **Fugard**

[10] In this Fugard play, the brothers Morris and Zachariah plan to have Morris pretend to be Zachariah in order to meet Zachariah's white pen pal, because Morris can pass as white.

ANSWER: *The* **Blood Knot**

18. For 10 points each, name the following about the southern theater of the American Revolutionary War.

[10] Henry Clinton left this man in charge of British forces after the surrender of Benjamin Lincoln in Charleston. He led troops to victory at Camden, but he later dispatched Charles O'Hara to surrender the British cause at Yorktown.

ANSWER: Charles Cornwallis

[10] In this battle, Daniel Morgan feigned retreat after placing his untrained militia in front of his continental regulars, defeating a British contingent commanded by Banastre Tarleton.

ANSWER: Battle of Cowpens

[10] Patrick Ferguson's Loyalist militia were killed or captured in this clash that prevented the British from launching an invasion of North Carolina. It was the first American triumph in the southern theater.

ANSWER: Battle of Kings Mountain

19. The Attic War was fought in the aftermath of this woman's death. For 10 points each:

[10] Name this queen who possessed a magical girdle.

ANSWER: Hippolyta

[10] Hippolyta was a queen of this group of female warriors. The only one who is known to have married is Antiope, who married Theseus.

ANSWER: Amazons

[10] Achilles fell in love with this Amazon right after killing her during the Trojan War.

ANSWER: Penthesilea

20. Pernicious anemia is caused by a deficiency in this vitamin. For 10 points each:

[10] Identify this B vitamin that contains cobalt.

ANSWER: vitamin B12 [prompt on cobalamin]

[10] The structure of vitamin B12 was first elucidated by Dorothy Hodgkin's lab using the X-ray type of this technique.

ANSWER: X-ray diffraction crystallography

[10] The first to produce vitamin B12 in a total synthesis were Eschenmoser and this scientist, who may be better known for some stereochemistry rules he names with Hoffman.

ANSWER: Robert Burns Woodward

21. For 10 points each, name these Italian composers.

[10] This composer of operas such as *Rigoletto* and *Aida* also composed a requiem mass in memory of Alessandro Manzoni.

ANSWER: Giuseppe Verdi

[10] This man's three *Ancient Airs and Dances* suites are based on Renaissance lute music. He is probably best known for his *Roman Trilogy*, in which he depicted that city's *Fountains*, *Pines*, and *Festivals*.

ANSWER: Ottorino Respighi

[10] This man composed over 100 string quintets. His 30th string quintet is subtitled "Night music of the streets of Madrid," and his 11th string quintet included a noted minuet.

ANSWER: Luigi Boccherini