Packet 4

Spartan Housewrite  
  
Questions by: Members of Michigan State’s Academic Competition Club, Conor Thompson, NourEddine Hijazi, Eric Mukherjee, Joe Su, and Saul Hankin  
  
Edited by: Jakob Myers, Evan Suttell, Eric Mukherjee, Harris Bunker, Conor Thompson, and Joe Su

Tossups:

1. **It's not in Malaysia, but this region's history was chronicled in Farsi in the *Riyazu-s-Salatin*. This region was the namesake of a sultanate ruled by the Turkic Ilyas Shahi Dynasty from the city of Gaurh. This region allied with the Chola Dynasty to cast off the suzerainty of the Delhi Sultanate. One ruler of this region, Mir Jafar, gained infamy for betraying his predecessor, Siraj-ud-Daulah, at the Battle of (\*)** Plassey. Winston Churchill accused this region's inhabitants of "breeding like rabbits" and refused to grant them aid during a deadly famine this region suffered during World War II. For 10 points, name this region that contains the cities of Kolkata and Dhaka, both of which are located on its namesake bay.  
ANSWER: **Bengal** [prompt on India; anti-prompt on Bangladesh or West Bengal]

2. **This equation is used to find the setting to eliminate the effect of a single ion in patch-clamp experiments. This equation is applied twice to find the equivalence point in the reaction between iron and cerium. One method of deriving this equation relies on taking the natural log of the ratio of two Boltzmann factors, then dividing by fundamental charge. The boundary lines on (\*)** Pourbaix diagrams can be found using this equation. One term in this equation can be replaced by 0.0592 at room temperature. This equation is commonly used to determine the point at which there is no net movement of a given ion across a membrane. This equation contains a term equal to negative *RT* over *zF* times the natural log of reaction quotient. For 10 points, name this equation used to calculate the reduction potential of an electrochemical reaction that is named after a German chemist.  
ANSWER: **Nernst** equation

3. **A character in one of this author’s plays asks whether the smell of sulfur is an intentional effect after the line “Satan, my mighty foe, advances” is spoken in a play she is watching. In another play by this author, a clumsy clerk is nicknamed "twenty-two misfortunes" and a family boasts that their estate is listed in the "Encyclopedic Dictionary". In a play by this author, an actress gives her love interest a medallion instructing him to open his most recent novel to page 121. In another of this author's plays, only Dr. Dorn enjoys a play written by an author who later shoots (\*)** himself twice, the last time fatally. Two men kiss at a party in one of this author's plays at which Charlotta does card tricks. This author wrote a play in which Firs and the businessman Lopakhin were both former serfs to the family of Madame Ranevsky in a play where a string breaks as the title property's namesake trees are cut down. For 10 points, name this author of *The Seagull* and *The Cherry Orchard*.  
ANSWER: Anton **Chekhov**

4. **In his capacity as UN special envoy, Bernardino Leon brokered an unsuccessful peace agreement in this country. Ethnic Toubou militias hold a significant portion of this country's Southwest, and Operation Dignity is a major military force active in this country. For a time when going onshore was unsafe, this country's House of Representatives met on a ship off the city of (\*)** Tobruk, and slave markets in this country target migrants who pass through it on their way to the Mediterranean. General Khalifa al-Haftar controls much of this country. The United States pioneered a "lead-from-behind" strategy in a military intervention in this country. For 10 points, name this country where forces under Fayez al-Sarraj control the city of Tripoli.  
ANSWER: **Libya**

5. **A choral number from this opera in 3/4 (three-four) time begins with the men singing a two eighth note two quarter note drone under the women singing the ascending eighth note melody D, G, A, B, then G, A, B, D. That number from this opera was adapted by John Macleod into the bagpipe standard “The Green Hills of Tyrol.” This opera's opening sees characters sing their own interpretations of a love song originally sung by the fisherman Ruodi. The overture to this opera includes an extended pastoral themed duet between (\*)** English horn and flute. At the end of this opera, its title character, now out of prison, is reunited with his wife Hedwige and son Jemmey. This opera's overture's four sections includes the prelude, storm, the ranz des vaches **(“raunz de vach”)**, and concludes with a march of the Swiss soldiers. For 10 points, name this Rossini opera where the titular character must shoot an apple balanced on his son's head.   
ANSWER: ***William Tell*** or ***Guillaume Tell***

6. **In response to poor conditions at this event, Simon Pokagon wrote the "Red Man's Rebuke." The musical sequence "Streets of Cairo" was composed for this event. Mayor Carter Harrison was assassinated by a disgruntled office seeker during this event. Frederick Law Olmsted designed a Wooded Island as a centerpiece of this event. The serial killer H. H. (\*)** Holmes was active primarily during this event, as chronicled in a book by Erik Larsen. The Ferris Wheel was invented for this event. This event was conducted in a complex designed by Daniel Burnham called the "White City", now located near the grounds of the Museum of Science and Industry in Chicago. For 10 points, name this event that celebrated the 400th anniversary of its namesake explorer's arrival in the US.

ANSWER: World's **Columbian Exposition** [accept **Chicago World's Fair**, **World's Fair** of **1893**; prompt on World's Fair]

7. **In one novel, three men from this US state are taken to a prison in which "every man was judged by a single standard, and that was his readiness to kill." In another novel set in this state, a runaway teenager goes to a religious revival and later joins a group of men that includes an ex-priest named Tobin. In this state, a character allows himself to get captured by police to "to see if I could extricate myself by an act of will", and at that novel's end, (\*)** Sheriff Bell finishes telling his story to the reader. A different novel set in this state follows John Grady Cole from this state's city of San Angelo. While another book set in this state features the bald, demonic Judge Holden and the Glanton gang. For 10 points, name this common setting of novels such as *Blood Meridian* and *No Country for Old Men* by Cormac McCarthy.  
ANSWER: **Texas**

8. **A telescope array named after this phenomenon can be used to measure the Redshift of Fermi Blazars. This phenomenon is used by a device that has to identify circles from a short number of points and uses the principle that the cosine of the angle of emission is inversely proportional to the charged particle's velocity. For a given frequency, the (\*)** Frank-Tamm formula yields the amount of this phenomenon. In addition to RICH **(R-I-C-H)** detectors, detection of this phenomenon has been used for fast timing and time of flight measurements. When this phenomenon affects the phase velocity by period grating, the Smith-Purcell effect occurs. This phenomenon arises when a particle in a medium travels faster than the speed of light in the medium. For 10 points, name this type of radiation emitted by charged particles that appears as a bluish glow in the water of nuclear reactors.  
ANSWER: Vavilov-**Cherenkov** Radiation

9. **This Biblical book decries "those who hold the doctrine of Balaam," and those who let Jezebel "teach and seduce My servants." It also laments "you have left your first love." This book promises various rewards to "he who overcomes," such as receiving a white stone on which a new name is written. In its first chapter, the narrator is commanded to write letters to some churches in Asia Minor, then turns around and sees a vision of (\*)** seven golden lampstands surrounding Jesus, who has a two-edged sword coming out of his mouth and holds seven stars in his right hand. Jesus says "I am the Alpha and the Omega" in this book, which includes the opening of seven seals and the riding of four horsemen. For 10 points, what book that usually ends the New Testament describes the Apocalypse?  
ANSWER: Book of **Revelation** [or **Revelation to John**; accept **Apocalypse of John** before "Apocalypse"; do NOT accept nor prompt on "Apocalypse" or "Revelations"]

10. **A composer from this country wrote a solo piece in which the right hand enters with the following quarter note dyads: [read slowly] E-flat-G, C-E-flat, E-flat-G. Another piano suite by that composer, titled for a painter from this country, includes a piece that ends with several cycles of *Vivace* 32nd notes and *Lento* trills representing the title bird that a girl sings a duet with; that is (\*)** "The Maiden and the Nightingale." One of its native sons wrote a piano piece depicting the Gypsy quarter Triana. Another composer from this country wrote a ballet that includes a "Dance of Terror" and a "Ritual Fire Dance." That composer of *Love, the Magician* also wrote *Nights in the Gardens of* [this country]. For 10 points, what home country of Enrique Granados and Manuel de Falla **(FEYE-uh)** did Isaac Albeniz depict in *Ibéria*?  
ANSWER: Kingdom of **Spain** [or *Reino de* ***España***; accept *12* ***Spanish*** *Dances* or *12 danzas* ***español****as*; accept ***Nights in the Gardens of Spain*** or ***Noches en los jardines de España***]

11. **A reverse halo sign is specific for the organizing form of this condition, which is often cryptogenic. It's not sepsis, but procalcitonin is most often used to *rule out* this condition. The PSI and CURB-65 scores are used to estimate mortality due to this condition. Empyema (em-pie-EE-muh) is a complication of this condition. Pentamidine, dapsone, or Bactrim is used for prophylaxis against a form of this condition caused by *P. jirovecii*. Using both ceftriaxone and (\*)** azithromycin to treat this condition covers both typical and atypical causes, the latter of which includes *Mycoplasma*, *Chlamydophila*, or *Legionella*. Infiltrates and consolidation are common signs of this condition on X-ray, and this condition can be caused by aspiration, bacteria, or viruses. For 10 points, name this inflammation of the alveoli in the lungs, whose atypical variety is sometimes called its "walking" type.  
ANSWER: **pneumonia** [accept **pneumonitis** or broncho**pneumonia**]

12. **The second section of this book notes the importance of tombs to Unknown soldiers by asking readers to consider a hypothetical "Tomb of the Unknown Marxist." Anthony W. Marx has criticized the author of this book for being "silent" on a conflict that results from spreading communication which no institution can resolve. One chapter of this book titled "The Last Wave" discusses how after the First World War, even the surviving imperial powers "came dressed in (\*)** national costume rather than imperial uniform." The author of this book identifies the vernacular language used in newspapers as "print languages." This book posits that nations in the post-Enlightenment era have "finite, if elastic boundaries" and are socially constructed. For 10 points, name this 1983 book subtitled "Reflections on the Origin and Spread of Nationalism" that was written by Benedict Anderson.  
ANSWER: ***Imagined Communities***

13. **At one outbreak of labor unrest in this country, striking female garment workers stripped naked to prevent police from entering their factory. One series of protests in this country began after the body of a boy who had been killed by a tear gas canister was discovered in a harbor. One dictator of this country declared an "export day" holiday as part of an industrialization policy that promoted companies such as Lucky (\*)** Goldstar. That leader survived an assassination attempt that killed his wife in the Blue House Raid. One invasion of this country was provoked by the suppression of an autonomous government on its island of Jeju. The Gwangju Massacre was committed by this country's military dictator, Chun Doo-Hwan. For 10 points, name this country in which Park Chung-Hee survived an assassination attempt by agents of Kim Il-Sung.  
ANSWER: **South Korea** [accept **R**epublic **o**f **K**orea]

14. **One character in this novel owns a copy of *Gray's Anatomy* that he compulsively turns to the page about the vagina. In this novel, one character becomes the owner of a factory that manufactures fake chocolate bars called "Amo." As a young girl, the narrator of this novel wrote a play titled "The Trials of Arabella." Another character in this novel is revealed to have died of sepsis on the beaches of (\*)** Dunkirk. In this novel's final section, the narrator reveals that she had invented a happy ending for her sister, who died in the Blitz, and her former lover. After accidentally giving a vulgar letter to a girl and being caught having sex with Cecilia in the library, Robbie Turner is accused of raping Lola in this novel. For 10 points, identify this novel about the author Briony Tallis that was written by Ian McEwan  
ANSWER: ***Atonement***

15. **One thinker born in this country thought that "mutual banks" would decrease interest rates and increase labor bargaining power. That thinker from this country considered private property in land use as one of the four great evils of capitalism and also translated much of the interest debate between Basitat and Proudhon. To test the "constitutional right of free competition", a different thinker started his own postal company to compete with this country's post service. An essay from here, titled "The Great (\*)** Debate" argues for women's equality. Another thinker from this home country of Lysander Spooner called "A foolish consistency" "the hobgoblin of little minds" in an essay that praises non-conformity. For 10 points, what country was home to thinkers like the transcendentalists Margaret Fuller and the author of "Self Reliance" Ralph Waldo Emerson?  
ANSWER: **U**nited **S**tates of **A**merica [accept **USA** or **America**] (The unnamed thinker at the was Benjamin Tucker)

16. **An artist from this movement was nicknamed "Gypsy" due to the fact he frequently painted nudes of Romani people. The first exhibition arranged by members of this movement took place in a lamp factory. Another artist from this movement depicted himself as a soldier without hands. Another painting from this movement shows yellow women with red eyes and hair dancing around a purple and blue being. Prostitutes dressed in purple and black dresses with feathers walk down a street in a work from this movement set in (\*)** Berlin. Inspired by primitivism, this movement featured woodblock artworks such as a portrait of Jesus by the artist of *Dance Around the Golden Calf*, as well as its 1906 manifesto. For 10 points, name this group of expressionist artists founded in Dresden that included the artist of *The Prophet*, Emil Nolde, and Ernst Kirchner.   
ANSWER: **die Brücke** [or **The Bridge**] [prompt on German expressionism before mention]

17. **The Fieschi family led a conspiracy against one military leader from this city that ended in the murder of thathat leader’s nephew. This city was the smaller of two polities to sign the Treaty of Nymphaeum. One military leader from this city won the Battle of Pianosa. This city controlled colonies in the ports of Vosporo and Theodosia. This city's government established the Bank (\*)** of St. George. This city was led for much of its history by the Boccanegra family and was the home of admiral Andrea Doria. This city attacked one of its rivals in the War of Chioggia. This city controlled the island of Corsica to its South for much of its history. For 10 points, name this city, a center of trade on the Ligurian Sea and the birthplace of Christopher Columbus.

ANSWER: Republic of **Genoa**

18. **The rate of this process has been estimated by Chary and Elbaz using the spectrum of the cosmic infrared background and they argue that this process peaks at redshift values of .8 plus or minus .1. NASA will observe this process with its Webb Telescope in an object which contains the brightest star in the SMC, NGC 346. This process has been observed readily in an astronomical object named after an Elephant's Trunk. It was hypothesized that this process corresponded with (\*)** supernovae by Ernst Öpik. In one extremely cold location in the HII **("H Two")** region where this process may take place, Herbig-Haro objects may be found; those locations are Bok globules. This process is occurring in the region depicted in the photograph *The Pillars of Creation*. For 10 points, identify this astronomical process in which dense regions inside molecular clouds collapse to form objects like our Sun.  
ANSWER: **Star formation** [accept any answers which indicates **stars are being created** from interstellar matter]

19. **The Steese Highway terminates at the town of Circle on this river. The town of Bethel is a service center for this river's delta region, which it shares with that of the Kuskokwim River. One of the four permanent road bridges over this river crosses it in the town of Carmacks. The Top of the World Highway's eastern terminus is a car ferry across this river just north of (\*)** Dawson City. The damming of this river led to the submerging of White Horse Rapids, after which one of the largest cities on this river is named. This river's tributaries include the Tanana River, which flows past Fairbanks, as well as the Klondike River. For 10 points, name this longest river in Alaska, which shares its name with a territory of Canada.  
ANSWER: **Yukon** River

20. **In a poem titled for these people, the speaker reassures himself by noting that "calm seas often follow after the/squalling of a storm" after advising the addressee that some "thoughts should/not be in your head." That poem, whose fragmentary form was published in 2014 after being discovered by Dirk Obbink, ends by discussing how "this heavy-weighing depression we shall/lift up (\*)** ours and stand" once the speaker learns about the safety of one of these people. In another poem about one of these people, the speaker decries how "death has ravish'd half myself in thee" before praying that that figure shall "Receive the gifts, our fathers' ancient rite" and ends bidding him "hail and farewell!" Catullus 101 is addressed to a person of, for 10 points, what type, which include Kharaxos and Larikhos with respect to the author in a poem by Sappho?  
ANSWER: **brother**s [prompt on siblings]

Bonuses:

1. The work of this philosopher's middle period is sometimes referred to as the Philosophy of the Ages of the World which aims to avoid the fatalism of Spinoza. For 10 points each:  
[10] Name this 19th century philosopher whose lectures collected in his *Philosophy of Mythology* include a discussion of his "philosophical theology.” This philosopher also lectured on positive philosophy while holding a post at University of Berlin.  
ANSWER: Friedrich Wilhelm Joseph von **Schelling**  
[10] Schelling was known as an "objective" proponent of this philosophical movement of G.W.F. Hegel. This movement, focused in Jena **(yay-nuh)**, Germany, basically asserted that the physical world is mentally constructed.  
ANSWER: **Idealism** [accept any of **Jena idealism**, **transcendental idealism**, **subjective idealism** or **German** idealism]  
[10] This other German idealist philosopher was a mentor of Schelling. In this philosopher's *Wissenschaftslehre*, he introduced his concept of "tathandlung" **(tawt-hawnd-lung)** and included the principle of "the I posits itself as an I."  
ANSWER: Johann Gottlieb **Fichte**

2. The first bout of fighting centered in this region was ended by the Convention of La Jaunaye. For 10 points each:  
[10] Name this region, where the "Catholic Army" changed its name to the "Catholic and Royal Army." The name change was not enough to prevent defeats at this region's towns of Cholet **(shoh-lay)** and Savenay.  
ANSWER: the **Vendée**  
[10] The Vendée revolt prompted this "incorruptible" figure of the French Revolution to write that "one single will" was needed. This member of the Committee of Public Safety was guillotined in the Thermidorian Reaction.  
ANSWER: Maximilien(-François-Marie-Isidore) de **Robespierre**  
[10] Unrest in the Vendée began with the passage of this 1790 document, which attempted to subordinate the Catholic Church to the state through provisions such as oaths of loyalty. Pope Pius VI condemned it.  
ANSWER: **Civil Constitution of the Clergy** [or ***Constitution Civile Du Clergé***]

3. In one piece by this composer, the chorus repeats "And He shall reign forever and ever." For 10 points each:

[10] Name this German-British composer, who included the "Hallelujah Chorus" in his *Messiah*.

ANSWER: George Frideric **Handel** [or Georg Friederich **Händel**]

[10] This piece by Handel initially featured no string instruments, as it premiered at an outdoor festival. Its movements include "La Paix" and "La Réjouissance."

ANSWER: ***Music for the Royal Fireworks*** [or ***Royal Fireworks Music***]

[10] Handel had earlier celebrated the 1714 Treaty of Utrecht with a setting – in English translation – of this Latin hymn of praise. Handel later set this hymn to celebrate the victory at Dettingen; at the end of that setting, a 3/4 *Andante* section gives way to a last, common-time Grave declaration of "let me never be confounded."

ANSWER: ***Te Deum*** [accept ***You Are God***: we praise you or ***We praise thee, O God***, or similar answers; accept ***Utrecht Te Deum*** *and Jubilate* or ***Dettingen Te Deum***]

4. As the father of one of this author's protagonists is in a hospital contemplating heart surgery, the protagonist goes to a planetarium to try to get her mind off her father and her children Nichola and Judith. For 10 points each:  
[10] Name this short-story author of "The Moons of Jupiter" who wrote about how Fiona is moved into the Meadowlake medical facility after being diagnosed with Alzheimer's in "The Bear Came over the Mountain."  
ANSWER: Alice **Munro**  
[10] The Nobel Prize in Literature recipient Alice Munro is a native of this North American country that is also home to Margaret Atwood.  
ANSWER: **Canada**  
[10] In this book by the Montreal author Mordecai Richler, the title Jewish boy is told by his father that "a man without land is a nobody." That title character of this book leads a gang called the Warriors and sells Tijuana bibles as a boy.  
ANSWER: *The* ***Apprenticeship of Duddy Kravitz***

5. The Arrephoroi were a group of girls who spent a year weaving a peplos depicting the Gigantomachy while living at this location. For 10 points each:  
[10] Identify this location, home to temples dedicated to the "Polias" aspect of a deity, as well as the Erechtheion.  
ANSWER: **Acropolis** of Athens  
[10] This king of Athens judged a contest between Athena and Poseidon as to who would become the patron deity. His daughters Agraulos and Herse killed themselves by jumping off of the Acropolis after they opened a box with the baby Erichthonius inside.  
ANSWER: **Kekrops** I [or **Cecrops** I]  
[10] This man killed his nephew Perdix by throwing him off of the Acropolis after Perdix invented the saw. He is better known for creating the Labyrinth that housed the Minotaur.  
ANSWER: **Daedalus**

6. The three-spined variety of this fish was studied by Niko Tinbergen to understand fixed action patterns. For 10 points each:   
[10] Name this type of fish of family *Gasterosteidae*. The males of some types of this fish create elaborate nests glued together using the protein spiggin.  
ANSWER: **stickleback**  
[10] Tinbergen found that this feature on male sticklebacks serves as a sign stimulus to attract females and trigger aggression in other males.   
ANSWER: **red** underside [or **red** throat; do not accept any other color or any other part of the body]  
[10] Another animal that exhibits fixed action patterns is the "digger" type of this stinging insect, which along with ants and bees make up the suborder *Apocrita*. Their yellowjacket variety is common in many parts of the United States.  
ANSWER: **wasp**s

7. China claims almost the entirety of this state as "South Tibet". For 10 points each:  
[10] Identify this mountainous state bordering both Bhutan and Myanmar, led from Itanagar. It is the northernmost of the "Seven Sister States."  
ANSWER: **Arunachal Pradesh**  
[10] This state, its country's least populous and second-smallest by area after Goa, borders both Nepal and Bhutan. It was a monarchic protectorate until 1975, when its monarchy was deposed by referendum and it became a state.  
ANSWER: **Sikkim**  
[10] Arunachal Pradesh and Sikkim are both states in the northeastern part of this country, which also disputes ownership of Jammu and Kashmir with Pakistan.  
ANSWER: Republic of **India** [or **Bharat** Ganrajya]

8. The full text of this author's most famous work has been lost, but large parts of it are still present. For 10 points each:  
[10] Name this Seleucid ambassador to the Mauryan court who wrote *Indica* about his experiences.  
ANSWER: **Megasthenes**  
[10] Another *Indica* written by the historian Arrian describes this Macedonian king's campaigns against Indian rulers including Porous, who he defeated at the Battle of the Hydaspes.  
ANSWER: **Alexander** the Great  
[10] Another Greek historian who spent a lot of time in the East was this author of the *Anabasis* and *Cyropaedia*, who commanded a retreat of a party of Greek mercenaries from Persia after their patron was defeated.  
ANSWER: **Xenophon**

9. Answer some questions about modern pagan movements for 10 points each:  
[10] This pagan movement was introduced by Gerald Gardner in his 1954 book *Witchcraft Today*. This religion's namesake "Rede" states "an' it harm none, do as ye will", and this most common pagan religion often uses pentagram-related symbolism.  
ANSWER: **Wicca** [prompt on Witchcraft]  
[10] Ætsæg Din **(at-sag din)**, or Assianism, which worships a god named Xwytsau **(khwit-sao)**, is a modern religious movement based in North Ossetia, a region located in this mountain range. Another neo-pagan tradition in this mountain range, the Adyghe Habze **(ah-di-gheh haab-zeh)**, uses a T-shaped "hammer cross" as its symbol.  
ANSWER: **Caucasus** mountains  
[10] Vattisen Yaly, or "Tradition of the Old", is a neopagan revival movement among this Russian indigenous people. One of its symbols, the *Keremet*, or World Tree, is shown on the red-and-yellow flag of this Turkic people's federal republic within Russia.  
ANSWER: **Chuvash** people

10. Answer the following about David Garrick's reinterpretations of English drama for 10 points each.

[10] Garrick's version of this play completely removes the impotent Mr. Horner, therefore changing the entire plot. This explicit play by William Wycherley famously includes a "china scene," in which Horner and Lady Fidget speak solely in double entendres.  
ANSWER: *The* ***Country Wife***  
[10] Garrick cut this scene from his staging of Hamlet, which begins with two characters asking riddles such as "What is he that builds stronger than either the mason, the shipwright, or the carpenter?" Later in this scene, Hamlet says that "forty thousand brothers / Could not, with all their quantity of love, / make up my sum."  
ANSWER: **Act V, Scene 1** [accept **Gravedigger**s scene]  
[10] Garrick completely rewrote this Shakespeare comedy and removed the character of Christopher Sly. Garrick chose to re-title this play after its main characters *Catherine and Petruchio*.   
ANSWER: *The* ***Taming of the Shrew***

11. For 10 points each, answer the following about important contributions to physics made by women.  
[10] In 1956, physicist Chien-Shiung Wu performed an experiment which resulted in the discovery that this quantity is not conserved during weak interactions.  
ANSWER: **parity** [prompt on p]  
[10] Lisa Meitner, the namesake of Meitnerium, helped discover this effect in which the filling of an inner-shell electron corresponds to electrons emission. In the spectroscopy named after this effect, bombardment with high energy electrons causes an electron vacancy.  
ANSWER: **Auger** **(Aw-JAY)** Effect  
[10] Danish physicist Lene Hau used a system of this state to stop a beam of light completely in 2001. This state of matter, partially named after an Indian physicist, occurs at temperatures close to absolute zero.  
ANSWER: **Bose-Einstein Condensate** [or **BEC**]

12. One section of this massive work depicts three men mourning a dead worker on a conveyor belt. For 10 points each:  
[10] Identify this world's largest mural that has both indoor and outdoor panels. This work is found in and around a twelve-sided building called the Polyforum.  
ANSWER: *The* ***March of Humanity*** [or *La* ***Marcha de la Humanidad***]  
[10] David Siqueiros, the artist of *The March of Humanity*, is from this Latin American country. Inside the Polyforum, there are paintings of artists from this country such as Jose Clemente Orozco and Diego Rivera.  
ANSWER: **Mexico**  
[10] Rivera painted Jose Posada staring at La Malinche and walking next to La Calavera Catrina in this mural that features many Mexican historical figures.  
ANSWER: ***Dream of a Sunday Afternoon in Alameda Park*** [accept ***Sueño de una tarde dominical en la Alameda Central*** or ***Dream of a Sunday Afternoon in the Alameda Central***

13. A disputed theory propounded by Arthur Koestler in *The Thirteenth Tribe* claims that Ashkenazi Jews are mostly descended from this people. For 10 points each:  
[10] Name this Central Asian people whose khagan, Joseph, apocryphally exchanged a namesake series of letters with the Caliphate of Cordoba foreign service after their conversion to Judaism.   
ANSWER: **Khazars** [accept **Kazaria**]  
[10] This city contains the Tughril Beg Madrasa, which was built under the rule of the Timurid Dynasty that had its capital at this silk road entrepot in modern-day Uzbekistan.  
ANSWER: **Samarkand**  
[10] Another early Khaganate was established by these people who created the Orkhon Inscriptions in their Runic script and are known in Chinese sources as the Tujue. They were ruled by the Ashina Clan for most of their existence.  
ANSWER: **Gökturk**s [prompt on Turks]

14. This novella contains a description of "shoggoths," beings that are capable of taking on any shape as needed. For 10 points each:  
[10] Name this novella in which William Dyer leads an expedition to Antarctica and encounters a civilization built by the "Elder Things."  
ANSWER: ***At the Mountains of Madness***  
[10] This author of *At the Mountains of Madness* wrote stories such as "The Shadow over Innsmouth" and "The Shadow Out of Time" as part of his Cthulhu Mythos.  
ANSWER: Howard Phillips **Lovecraft**  
[10] Dr. Dyer in *At the Mountains of Madness* is employed at this fictional university in Arkham, Massachusetts. This institution also employs Herbert West in "Reanimator," the first story to mention this university.  
ANSWER: **Miskatonic** University

15. The Online Encyclopedia of Integer Sequences compiles over 100,000 sequences of positive integers. Answer some questions about just a few of those sequences for 10 points each.  
[10] A000001, the first entry in the OEIS, counts the number of these algebraic objects of order n. These things consist of a set with a closed and associative binary operation with inverses and an identity element.  
ANSWER: **group**s  
[10] This sequence, also known as A005132, is defined by the rule that the nth term is equal to the previous term minus n, unless that number is negative or has already been used, in which case it is equal to the previous term plus n. Whether this sequence will eventually include every positive integer is an open problem.  
ANSWER: **Recamán** sequence  
[10] The Fibonacci sequence, number A000045 in the OEIS, can be expressed in a closed form according to this formula named for a French mathematician which expresses the *n*th Fibonacci number in terms of powers of the golden ratio.  
ANSWER: **Binet**'s formula

16. For 10 points each, answer the following about different theories of international relations.   
[10] In *The Lexus and the Olive Tree*, Thomas Friedman argued that globalization has reduced conflict which has been summarized to say that no two countries with this restaurant chain have attacked each other.  
ANSWER: **McDonald's** [accept **Mickey D's** or **Golden Arches** Theory of Conflict Prevention]  
[10] In some ways similar to Friedman's globalization thesis, this perspective in IR asserts that democratic nations are unlikely to go to war with each other. This IR theory, oft-contrasted with realism, also stresses the role of international organizations and free trade in state relations.  
ANSWER: **Liberalism** [also accept **neoliberalism**]  
[10] With Joseph Nye, this Princeton political scientist is considered one of the founders of neoliberalism. This man edited a book that summarizes Kenneth Waltz's neorealism and contains several critiques of Waltz.  
ANSWER: Robert **Keohane**

17. This film's namesake "Waltz" is first heard at the beginning played by a solo trumpet, and the melody of its "Love Theme" was later given lyrics and the title "Speak Softly, Love." For 10 points each:  
[10] Name this 1972 film, in which the Al Pacino-played Michael takes over as don of the Corleone crime family from his father, the Marlon Brando-played Vito Corleone.  
ANSWER: *The* ***Godfather***  
[10] The film's opening scene begins with a black screen and this four-word line spoken by the undertaker Bonasera, who goes on to request "justice" from Vito for an assault on his daughter.  
ANSWER: "**I believe in America**"  
[10] The last character seen in the film is Michael's wife Kay. The wipe transition from her face to the end credits is accomplished by Al Neri performing this action.  
ANSWER: **closing** the **door** to Michael's office

18. This author's quote "If they give you ruled paper, write the other way" serves as the epigraph to *Fahrenheit 451*. For 10 points each:  
[10] Identify this winner of the 1956 Nobel Prize in Literature who compared the title donkey to "steel and moon silver" in his prose poem "Platero y yo"  
ANSWER: Juan Ramón **Jiménez** Mantecón  
[10] Jiménez is from the same country as this author of the "nivola" *Mist*, published in 1914. A more famous work by this author describes Joaquin and Abel Sanchez, two feuding brothers.  
ANSWER: Miguel de **Unamuno** y Jugo  
[10] Unamuno was part of the Spanish Generation of '98 along with Antonio Machado, who described the murder of this Generation of '27 poet in "The Crime Was in Granada." This poet wrote *Gypsy Ballads*.  
ANSWER: Federico García **Lorca** [prompt on Garcia]

19. For 10 points each, answer the following related to the stereospecific field of click chemistry.  
[10] Click chemistry is championed by this American chemist whose namesake epoxidation reaction uses a *tert Butyl* hydroperoxide to yield 2,3-epoxyalcohols. He also names an asymmetric dihydroxylation reaction that produces 1,2-diols.  
ANSWER: Karl Barry **Sharpless**  
[10] Some research in click chemistry has concerned how to make the "strained" versions of these chemical species that all include a carbon-carbon double bond.  
ANSWER: **alkene** [also accept **olefin**]  
[10] Sharpless praised the Huisgen cycloaddition reaction as the "cream of the crop" of click chemistry. In it, an alkyne is reacted with an azide to form the 1,2,3-version of this heterocycle, which contains 3 nitrogens and 2 carbons in a ring.  
ANSWER: **triazole** [prompt on azole]

20. This man led his umbrella labor organization into a 1955 merger with one led by George Meany. For 10 points each:  
[10] Name this man, who led the CIO into its merger with the AFL.  
ANSWER: Walter Philip **Reuther**  
[10] Reuther led the UAW in the "Battle of the Overpass" against this man's company. This man pioneered the assembly line to make his Model T, and also ran the column "The International Jew" in his *Dearborn Independent*.  
ANSWER: Henry **Ford** [accept **Ford Motor** Company]  
[10] As Reuther's relationship with Meany worsened, he withdrew the UAW from the AFL-CIO and allied it with this union in an "Alliance for Labor Action." This union had been expelled from the AFL-CIO in 1958 because of its corruption, an unsurprising consequence of having James Hoffa as its president.  
ANSWER: **Teamster**s union [accept **International Brotherhood of Teamsters**, Chauffeurs, Warehousemen and Helpers of America or **International Brotherhood of Teamsters, Chauffeurs, Stablemen and Helpers of America**; prompt on IBT]