

# (MS) Academic Bee Final

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## Regulation Tossups

(1) **This process occurs once in eukaryotic organisms in a process controlled by spindle fibers. Beginning this stage of the cell cycle, an E3 ubiquitin [[yoo-BIK-wit-in]] ligase [[LY-gayss]] marks the protein securin [[seh-KYOO-rin]] for destruction. (+) which then prompts the formation of separase. Separase destroys cohesin during this phase that occurs after metaphase. Sister chromatids are formed and pulled to opposite (\*) sides of the cell in, for the points, what penultimate stage of mitosis?**

ANSWER: Anaphase

(2) **The character Darl in this novel is suspected of setting a barn fire that threatens the safety of his family. The phrase "My Mother is a Fish" begins and ends a short chapter in this novel given by Vardaman. The central family (+) in this novel travels to the town of Jefferson by wagon at the behest of their now-deceased mother and wife. A family's quest to bury their dead matriarch (\*) is at the center of, for the points, what William Faulkner novel?**

ANSWER: *As I Lay Dying*

(3) **This man became Peru's first ambassador to the Soviet Union after the establishment of diplomatic relations in February 1969. In 1995, this man lost a presidential election to Alberto Fujimori but later served as prime (+) minister in the wake of Fujimori's authoritarian regime. Holding an international office while overseeing the end of both the Iran-Iraq and Soviet-Afghan Wars, (\*) for the points, who was this Peruvian who served from 1982 to 1991 as UN Secretary-General?**

ANSWER: Javier Pérez de Cuéllar

(4) **One character in this story asks if there is "anything finer than beef stew" and is forced to part with money he had been saving for a gun and a hunting trip. The protagonist of this story attends a ball hosted by the Minister of (+) Education and fears having lost the title object in a cab. Written by Guy de Maupassant [[GEE duh moh-pah-SAHNT]], (\*) for the points, what is this story in which the titular diamond object is revealed to be fake?**

ANSWER: "The Necklace" (or "La Parure")

(5) **One of these projects contains Uppatasanti Pagoda, a replica of Shwedagon Pagoda, while another one of these projects was supported by Juscelino Kubitschek [[ZHOO-seh-LEE-noo koo-bih-CHEK]], whose namesake bridge connects to the Monumental Access. (+) One of these projects, home to Le Corbusier's [[kohr-boo-SYEHS]] *Open Hand* statue, is Chandigarh, shared between Haryana and Punjab, while other examples include Islamabad and Canberra. (\*) For the points, name these cities, specifically designed to be seats of government.**

ANSWER: **Forward Capitals** (accept reasonable equivalents like **Planned Capitals**; accept **Planned cities** before "seats" is mentioned)

(6) **Debates during this meeting got so heated that Nicholas of Myra was reported to have struck one person in the face. This meeting was likely presided over by Hosius [[HOH-syuss]] of Cordoba. A debate occurred during this meeting in which the (+) heresy of Arianism was denounced, resulting in the formation of this meeting's namesake "Creed." Convened by Constantine the Great (\*) in what is today Turkey, for the points, what was this first ecumenical [[eh-kyoo-MEH-nih-kul]] council?**

ANSWER: First Council of **Nicaea** [[nigh-SEE-uh]] (accept **Nikaia**; accept **Nicene** Creed; accept **Niceno**-Constantinopolitan Creed; do not accept or prompt on "Second Council of Nicaea")

(7) **Independent of Oliver Heaviside, this man invented modern vector calculus. This man coined the term "statistical mechanics" for a framework he developed alongside James Maxwell and Ludwig Boltzmann. This man names (+) a type of energy used to calculate the maximum reversible work in a thermodynamic system. (\*) For the points, name this American scientist who names a type of "Free Energy."**

ANSWER: Josiah Willard **Gibbs** (accept **Gibbs** Free Energy)

(8) **One author from this country wrote the Booker Prize-winning novel *The Famished Road*. In addition to Ben Okri [[OH-kree]], another author from this country wrote *We Should All Be Feminists* and *Americanah*. (+) A Nobel Prize-winning playwright from this country wrote *The Lion and the Jewel*. The most populous (\*) nation in Africa, for the points, what is this country, the home of *Things Fall Apart* author Chinua [[CHIN-wah]] Achebe [[uh-CHEH-beh]]?**

ANSWER: Federal Republic of **Nigeria**

(9) **This island's Chamic Ustul people live in the city of Sanya, where Mosques were allegedly restricted in size in 2020. The Qiongzhou [[CHYONG-ZHOH]] Strait separates this island from the Leizhou [[LAY-ZHOH]] Peninsula. (+) and this island administers the Paracel and Spratly Islands. This island, east of the Gulf of Tonkin, has its largest city at Haikou. (\*)** For the points, name this southernmost province of the People's Republic of China, also its largest island.

ANSWER: **Hainan** Province (accept **Hainan** Island)

(10) **The largest museum dedicated to this man's works outside of Paris was funded by Jules Mastbaum and is a branch of the Philadelphia Museum of Art. The largest collection of this man's works can be found at Paris's Hotel Biron [[bee-ROHN]]. (+) where this man lived and worked from 1908 until his 1917 death. Depicting Francesca da Rimini and her brother-in-law, Paolo, in *The Kiss*, (\*)** for the points, who was this creator of *The Burghers of Calais* and *The Thinker*?

ANSWER: Auguste **Rodin** [[ro-DAH]] (or François Auguste René **Rodin**)

(11) **Within this modern state, the Keith Line was drawn to determine the boundary between its eastern and western "Provinces." This state, the third to ratify the Constitution, deposed its royal governor, William Franklin, in favor of William Livingston (+) who resided near this state's city of Elizabeth. Supreme Court Justice William Paterson served as this state's second governor. (\*)** For the points, name this state whose namesake plan was combined with Virginia's in the Connecticut Compromise.

ANSWER: State of **New Jersey** (accept Province of **New Jersey**, Province of **East Jersey**, or Province of **West Jersey**; accept **New Jersey** Plan; do not accept or prompt on "Jersey")

(12) **The Hulse-Taylor binary is the first binary example of these objects to be discovered. The central star of the Crab Nebula was the first of these objects to be connected with a supernova remnant. These objects can either be rotation (+) or accretion-powered, while those with powerful magnetic fields are called magnetars. Deriving their name from the radio (\*) waves they emit from their poles, for the points, what are these neutron stars?**

ANSWER: **Pulsars** (accept Binary **pulsar**; prompt on "Stars" or "Neutron stars")

(13) **This character marries a woman named after purple wisteria and the young Lady Aoi [[ah-OH-ee]]. This character's death is implied by the blank chapter "Vanished into the Clouds." This character's infatuation with Lady Fujitsubo [[foo-jee-TSOH-boh]] (+) results in him secretly becoming the father of an emperor. The title character of an early novel created by Murasaki Shikibu, (\*)** for the points, who is this prince from a Japanese "Tale"?

ANSWER: Hikaru **Genji** (accept in either order; accept *The Tale of Genji*; prompt on "Hikaru")

(14) **An early form of this thought experiment was introduced by Frank Chapman Sharp and involved a "switchman." This problem was analyzed by thinkers such as Judith Thomson and Peter Unger, and this problem was first (+) devised by Philippa Foot. Asking whether one should sacrifice one person to save a larger number, (\*) for the points, what is this problem involving pulling a lever to redirect an oncoming railed vehicle?**

ANSWER: **Trolley** Problem (accept descriptions before "sacrifice")

(15) **Linking two of these ions together gains the prefix "pyro." The enzyme hexokinase [[hek-soh-KY-nase]] attaches this ion to glucose in the first step of glycolysis. This ion forms a ring structure in the second messenger molecule cyclic AMP. (+) The backbone of DNA alternates sugars with this ion, which also mediates the function of the "energy currency" of the cell. ATP consists of adenosine bonded to three (\*) of, for the points, what ion with formula P-O-4 3-minus?**

ANSWER: **Phosphate** ion (accept **PO4 3-** before mentioned)

(16) **This ethnic group's flag displays an infinity symbol on a red or blue background, and this ethnic group that speaks the Michif [[MEE-cheef]] language fought at the Battle of Grand Coteau [[koh-TOH]] against the Sioux over buffalo hunting rights. (+) This ethnic group that fought for the North West Company in the Pemmican War against the Hudson Bay Company has members that speak Cree and French. Consisting of mixed Native American and (\*) French ancestry, for the points, what is this ethnic group primarily inhabiting Canada?**

ANSWER: **Métis** [[may-TEE]] (be lenient on pronunciation; accept **Michif** before mentioned)

(17) **The genus *Agrobacterium* contains one of these structures called "Ti" that can induce tumors in crown-gall disease. HFR strains have integrated one of these structures called the F-factor onto their chromosomes. Genes encoding (+) antibiotic resistance are often transferred on these structures which are the most common cloning vectors used for bacterial transformation. (\*) For the points, name these small, circular pieces of DNA.**

ANSWER: **Plasmids** (prompt on "DNA")

(18) **This composer, a pianist by training, composed two piano concerti and three piano sonatas. This composer was brought to prominence after fellow composer Robert Schumann wrote the article *New Paths* about him in 1853. This composer wrote four (+) symphonies, the first of which premiered in Karlsruhe under his conductor friend, Felix Otto Dessoff. *Hungarian Dances* and *A German Requiem* (\*) were creations of, for the points, what German composer who also wrote a namesake "Lullaby"?**

ANSWER: Johannes **Brahms** (accept **Brahms**'s Lullaby)

(19) **Procopius revealed that this royal created a convent for former prostitutes in a work titled the *Secret History*. A speech given by this royal includes the quote "In my opinion, flight is not the right course, even if it should bring us to safety." (+) That speech was given by this figure after factions of charioteers took up arms in Constantinople during the Nika [[NEE-kah]] Riots. A former theatre actress, (\*) for the points, who was this wife of Justinian the Great?**

ANSWER: Empress **Theodora** (accept **Theodora I**)

(20) **A tribute to this painting by photographer Alex Thompson was taken in front of the same setting in Cushing, Maine. Despite using his wife as a model, the artist for this painting was inspired by his neighbor, Anna Olson, who developed a (+) degenerative muscular condition that left her unable to walk. Created in 1948 by Andrew (\*) Wyeth, for the points, what is this work that depicts a woman in a pink dress lying in a field and leaning towards a farmhouse?**

ANSWER: **Christina's World**

(21) **Along one of these lakes, Israeli commandos rescued a hundred hostages in an airport in Entebbe. One body of water in this region has been threatened after the construction of the Gilgel Gibe III [[GEEL-gel GEE-beh Three]] Dam on the Omo. (+) This hydrological region includes Lake Turkana, Lake Malawi, and Lake Tanganyika. (\*) For the points, name this region in a continent's Rift Valley that includes the source of the Nile, Lake Victoria.**

ANSWER: **African Great Lakes** (prompt on partial answers; accept **Rift Valley Lakes** before mentioned)

(22) **This opera marked the first of seven collaborations between librettist Hugo von Hofmannsthal and composer Richard Strauss. The female protagonist of this opera sings "How strong you are" to her sister, an attempt to flatter her into committing matricide. (+) The story of this opera is based on a Sophocles tragedy of the same name, though with a different spelling. Taking place after the death of Agamemnon, (\*) for the points, what is this opera about his vengeance-seeking daughter?**

ANSWER: **Elektra**

(23) **The collapse of this dynasty began the Eighteen Kingdoms period. According to legend, one ruler of this dynasty ordered all Confucian scholars to be buried (+) alive as part of his implementation of Legalism. One ruler of this dynasty was buried in a tomb that contained a massive army (\*) of terracotta soldiers and horses. For the points, name this first imperial dynasty of China.**

ANSWER: **Qin** Dynasty [[CHIN]] (or **Qín** *cháo*)

(24) **This author wrote the *Tristia* while exiled to Tomis on the coast of the Black Sea. This author presented a series of instructional elegiac [[eh-LEE-jee-ak]] couplets in his *Ars Amatoria*, (+) or the *Art of Love*. The author of a work that ends with Julius Caesar becoming a god, (\*) for the points, who was this Roman poet who collected mythological stories about change in his *Metamorphoses*?**

ANSWER: **Ovid** (or Publius **Ovid**ius Naso)

(25) **These genetic structures are most commonly present in the DNA of eukaryotic organisms and are repetitive sequences. These long nucleotide sequences are at the end strands of the DNA and cannot be successfully (+) replicated completely. Continuously shortening, thus resulting in the aging of cells, (\*) for the points, what are these sequences at the ends of linear chromosomes?**

ANSWER: **Telomeres**

(26) **In one of this author's novels, the character Mr. Harper is actually George Washington in disguise. In another novel, this author of *The Spy* wrote about a character known as "Hawk-Eye." In that novel by this author, (+) Magua [[MAH-gwah]] is suspected of being a Huron scout by Natty Bumppo. (\*) For the points, name this author of *The Last of the Mohicans*, part of a collection called the *Leatherstocking Tales*.**

ANSWER: James Fenimore **Cooper**

(27) **Testing for the presence of Albert's Stain is common in diagnoses of this condition of which Edwin Klebs discovered the causative agent. In the Great Race of Mercy, a group of sled dogs led by Balto (+) travelled for five days across Alaska to deliver a serum that cures this disease. Caused by a member of the *Corynebacterium* [[koh-RY-neh-bak-TEE-ree-um]] (\*) genus, for the points, what is this now-rare contagious infection?**

ANSWER: **Diphtheria**

(28) **This figure's father was told by the Oracle of Delphi that she would be married to a beast that the gods feared. This figure was the mother of Hedone [[HEH-doh-neh]], the Greek goddess of joy. This figure had to endure four (+) trials, including giving some of Persephone's [[pehr-SEH-fuh-nees]] beauty to Aphrodite after disfiguring a lover. The Greek goddess of the soul, (\*) for the points, who was this figure who married Cupid?**

ANSWER: **Psyche** [[["SIGH"-kee]]]

(29) **Tales told by this man's father inspired his semi-fictional work *A Journal of the Plague Year*. This author wrote about a con woman's many affairs and subsequent redemption in the novel *Moll Flanders*. (+) A novel by this author describes a castaway who befriends a man he names Friday. (\*) For the points, name this English author of *Robinson Crusoe*.**

ANSWER: Daniel **Defoe** (or Daniel **Foe**)

(30) **One member of this family had a bomb thrown through his window after supporting the development of vaccines during a smallpox epidemic. That man and his father were both ministers who spoke out against the use of "spectral evidence" (+) after their involvement in the Salem Witch Trials. Including several New England preachers, (\*) for the points, what is this family that includes members named Increase and Cotton?**

ANSWER: **Mather** (accept Increase **Mather**; accept Cotton **Mather**)

### Extra Questions

(1) **A chapter in this work titled "The Impertinent Curious Man" is the origin of the word "Lothario." A priest in this novel reveals telling knowledge of low moral books while burning the title character's library. The main protagonist of this work rides (+) the horse Rocinante [[roh-see-NAHN-teh]] and recruits the farmer Sancho (\*) Panza as his squire. For the points, name this novel about a knight from La Mancha written by Miguel de Cervantes [[sehr-VAHN-tehs]].**

ANSWER: *The Ingenious Gentleman **Don Quixote** of La Mancha* (or *El ingenioso hidalgo **don Quijote** de la Mancha*; accept *El ingenioso caballero **don Quijote** de la Mancha*)

(2) **The Greek goddess representing this concept was Eirene, often depicted with the god of plenty. In *Romeo and Juliet*, Tybalt states that he hates this concept. One symbol of this idea originated from a 1958 movement (+) for British nuclear disarmament. Other symbols of this concept are doves, broken rifles, and (\*) olive branches. For the points, what is this concept which contrasts with "war"?**

ANSWER: **Peace** (accept **Peace** symbol; accept **Peace** sign)

(3) **This feature is the endpoint of the Peshwai [[PESH-wye]] Procession. This feature is represented by a goddess who rides on the mustachioed fish Makara. That goddess of this feature once threatened to drown the world (+) but was stopped by Shiva. This feature is central to the pilgrims of Kumbh Mela [[KOOM-bah MEH-lah]] who ritualistically (\*) bathe in its waters. For the points, name this Indian river, the most sacred in Hinduism.**

ANSWER: **Ganges** (or **Ganga**)